



The Level of Knowledge of Futsal Extracurricular Students at SMPN 11 Banjarbaru on Tactics and Strategies in Futsal Sports

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Abstract

This study aimed to analyze the level of knowledge of tactics and strategies among students participating in futsal extracurricular activities at SMPN 11 Banjarbaru. Understanding tactical and strategic concepts is essential because these aspects influence players' decision-making, positional awareness, and team performance during matches. This study employed a quantitative descriptive method with a survey approach. The population consisted of 42 students who participated in futsal extracurricular activities, and 15 students were selected as samples using purposive sampling based on active participation criteria. The research instrument was a questionnaire consisting of 47 true-false statements adapted from previous research, with a reliability coefficient of 0.982. The data were analyzed using descriptive percentage analysis. The results showed that one student was in the very low category, three students were in the low category, eight students were in the medium category, one student was in the high category, and two students were in the very high category. Overall, the level of knowledge of futsal tactics and strategies among students at SMPN 11 Banjarbaru was categorized as medium. These findings indicate that students have a basic understanding of futsal tactics and strategies, but their knowledge still needs to be strengthened through more structured, varied, and contextual training programs. The results of this study can serve as evaluation material for coaches and schools in improving the quality of futsal extracurricular coaching.

Keywords: Knowledge; Futsal; Tactics and Strategy.

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INTRODUCTION

Futsal has developed into one of the most popular sports among children, adolescents, and adults because it is accessible, dynamic, and relatively easy to organize in limited spaces. Its popularity is closely related to the increasing availability of futsal facilities in many communities, including school and urban environments. The growth of futsal facilities has encouraged wider public participation and has contributed to the development of futsal as both a recreational and competitive sport (Indrayogi et al., 2025). In the school context, futsal is not only viewed as a physical activity but also as an educational medium that supports students' physical development, social interaction, discipline, teamwork, and decision-making abilities.

Historically, futsal was introduced by Juan Carlos Ceriani in Montevideo, Uruguay, in 1930. Although it has similarities with football, futsal has distinctive characteristics, particularly in terms of field size, number of players, tempo of play, and technical demands. The game is played by two teams that attempt to score goals while preventing the opponent from doing the same. The team that scores more goals is declared the winner (Hera R, 2020). However, because futsal is played in a smaller area with faster transitions, players are required to demonstrate quick thinking, accurate passing, effective movement, and strong tactical awareness. These characteristics make futsal a sport that requires not only physical and technical competence but also cognitive readiness in reading the game situation.

Physical condition remains an important foundation in futsal performance. Players with good aerobic endurance are more capable of maintaining stable movement, concentration, and muscle performance throughout the match. Adequate aerobic capacity also enables players to repeatedly perform high-intensity movements, recover quickly, and sustain tactical discipline during attacking and defensive phases (Arifin et al., 2025). Nevertheless, physical ability alone is insufficient to ensure optimal performance. In futsal, players must also

understand how to position themselves, cooperate with teammates, respond to opponents' movements, and apply appropriate tactics according to match situations. Therefore, physical fitness, technical mastery, tactical understanding, and strategic planning should be developed in an integrated manner.

Among students, futsal is often preferred because it is familiar, enjoyable, and supported by accessible facilities in the school environment. The sport attracts students because it combines speed, skill, competition, and teamwork. Participation in futsal extracurricular activities can also strengthen students' discipline, physical condition, cooperation, and motivation to achieve both individual and team goals (Jeki et al., 2025). However, extracurricular futsal activities should not focus solely on playing experience or physical exercise. They should also provide structured learning experiences that help students understand the principles of tactics and strategies. Without sufficient knowledge of these aspects, students may be able to perform technical skills but may still struggle to make effective decisions during real match situations.

Tactics and strategies are essential elements in futsal because they determine how individual skills are organized into collective team performance. Strategy generally refers to a plan prepared before a match to face the opponent, while tactics refer to actions or decisions taken during the match according to the changing game situation. In sport, strategy can be understood as a broader framework designed before players enter the field, whereas tactics involve practical responses during play (Qatrunnada, 2021). This distinction is important because a team may have good strategic preparation but still require tactical intelligence from each player to adapt to unpredictable situations. Thus, successful futsal performance depends on the interaction between pre-planned strategies and situational tactical decisions.

The importance of tactics and strategies in futsal has been emphasized in several studies. Syafaruddin (2019) explains that strategy and tactics are vital components of futsal because team performance depends on the ability of players to understand game patterns and apply them effectively. Similarly, Indrayogi et al. (2025) state that quality futsal performance is influenced by the integration of individual ability and team strategy. Players who understand tactical concepts tend to demonstrate better game intelligence because they can choose appropriate actions, manage space, support teammates, and respond efficiently to opponents' movements. In this sense, tactical and strategic knowledge contributes to more effective play, allowing teams to achieve performance goals with more measured effort.

The need to improve students' knowledge of futsal tactics and strategies is also supported by previous research on extracurricular futsal participants. Ratnasari and Sofyan (2024) highlight the importance of identifying students' knowledge of futsal tactics and strategies as a basis for evaluating training quality. Similar findings were reported by Indrayogi et al. (2025), who examined knowledge of futsal tactics and strategies among extracurricular participants and showed that such knowledge is an important indicator of students' readiness to participate in structured futsal activities. Asrul (2023) also emphasized that the knowledge level of tactics and strategies among school futsal participants should be measured because it reflects how far students understand the principles required in actual gameplay. These studies indicate that tactical and strategic knowledge is not merely theoretical, but directly related to the quality of training and match performance.

In futsal, strategic understanding is especially important because of the limited playing area and the rapid transition between attacking and defending. Players must be able to adjust their position quickly, maintain defensive balance, create attacking opportunities, and apply collective movements under pressure. A narrow field requires players to make decisions in a short time, which means that tactical knowledge becomes a crucial part of performance. Asrul (2023) argues that coaches must master strategies to strengthen team performance because futsal requires fast transitions and adaptive positional readiness. Therefore, students who participate in futsal extracurricular activities need systematic guidance so that they do not only understand basic techniques but also recognize when and how those techniques should be applied in a tactical context.

Training programs that emphasize tactical and strategic understanding can also improve the quality of students' gameplay. Tuqya et al. (2025) explain that programs designed to improve knowledge of tactics and strategies are necessary to strengthen players' strategic thinking frameworks. Tactical-based training allows students to experience game-like

situations, understand movement patterns, and develop decision-making skills during matches. In addition, direct movement practice is important because it enables athletes to observe, imitate, and understand correct techniques in practical contexts (Amirudin et al., 2021). Therefore, tactical learning should be connected with field practice so that students can transform conceptual knowledge into effective performance.

SMP Negeri 11 Banjarbaru is one of the junior high schools located in Landasan Ulin Utara, Banjarbaru. Established in 2000, the school has achieved various accomplishments at the city, provincial, and national levels, including being recognized as a National Adiwiyata School in 2012 and an Independent Adiwiyata School in 2015. The school also supports students' development in both academic and non-academic fields. One form of this support is the implementation of extracurricular activities, including futsal, which provides opportunities for students to develop their interests, talents, physical abilities, and social skills. However, the extent to which futsal extracurricular participants understand tactics and strategies has not been clearly identified.

Based on this background, it is necessary to measure the level of knowledge of tactics and strategies among students who participate in futsal extracurricular activities at SMPN 11 Banjarbaru. This measurement is important because knowledge of tactics and strategies can serve as an indicator of students' cognitive readiness in playing futsal and as evaluation material for coaches and teachers. The results of this study are expected to provide useful information for improving extracurricular coaching programs, particularly in designing more structured, varied, and game-oriented tactical training. Therefore, the main objective of this study is to determine the level of knowledge of futsal tactics and strategies among students participating in extracurricular activities at SMPN 11 Banjarbaru.

METHOD

This study employed a quantitative descriptive method with a survey approach. A quantitative descriptive design is appropriate for describing research phenomena objectively through numerical data, allowing the researcher to present measurable information about the condition being studied (Waruwu et al., 2025). In research practice, the selected method must correspond to the problem, objectives, data characteristics, and analysis techniques used in the study. Descriptive and survey methods are commonly applied when researchers aim to identify, measure, and explain a particular condition without manipulating the research variables (Sari et al., 2022).

The population in this study consisted of students who actively participated in futsal extracurricular activities at SMPN 11 Banjarbaru. Population refers to the entire group of subjects or objects that possess certain characteristics relevant to the research focus (Yusuf, 2017; Hermina & Huda, 2024). Similarly, population can be understood as a generalization area selected by the researcher because it has specific qualities and characteristics from which conclusions can be drawn (Surahman et al., 2016; Ratnasari & Sofyan, 2024). Therefore, determining the population is an important stage in quantitative research because it provides a clear basis for selecting respondents and interpreting the findings (Subhaktiyasa, 2024).

The sample is a smaller part of the population that represents its characteristics. Sampling is conducted when researchers have limitations in terms of time, resources, or access to the entire population. However, the selected sample must still reflect the population so that the findings can be interpreted appropriately (Hermina & Huda, 2024). In this study, the population consisted of 42 students who were active members of the futsal extracurricular program at SMPN 11 Banjarbaru. From this population, 15 students were selected as research samples using purposive sampling. The sample was determined based on specific criteria, particularly students' active participation in futsal extracurricular activities, so that the selected respondents were considered relevant to the research objective of measuring knowledge of tactics and strategies in futsal.

The research instrument used in this study was a knowledge test designed to measure students' understanding of strategies and tactics in playing futsal. The instrument was arranged in the form of true-false statements consisting of positive and negative items. The strategy factor included indicators such as the definition of strategy, characteristics of strategy use, types of strategies, zone defense, man-to-man defense, the dominant role of strategy,

and forms of strategic activities. Meanwhile, the tactical factor included indicators such as the definition of tactics, characteristics of tactical use, types of tactics, tactical benefits, factors considered in tactics, levels of tactics, shooting, one-on-one situations, power play, the dominant role of tactics, and forms of tactical activities.

The instrument grid was used to ensure that each item corresponded to the aspects of knowledge measured in this study. In total, the questionnaire consisted of 47 items, including 37 positive statements and 10 negative statements. The distribution of items in each indicator is presented in Table 1.

Table 1. Research Instrument Grid

Variabel	Factor	Indicator	Item		Σ
			(+)	(-)	
Knowledge of Strategies and Tactics in Playing Futsal	Strategy	a. Definition of Strategy	1	2	2
		b. Characteristics of the use of the strategy	3	4	2
		c. Types of strategies	5, 6, 7	8, 9	5
		d. <i>Defense Zone</i>	10, 11, 12		3
		e. <i>Man-to-man defense</i>	13, 14		2
		f. Dominant role of strategy	15		1
		g. Form of strategic activities	16, 17, 18, 19	20	5
	Tactics	a. Definition of tactics	21	22	2
		b. Features of the use of tactics	23, 24		2
		c. Types of tactics	25, 26, 27	28	4
		d. Tactical benefits	29, 30, 31, 33, 34	32	6
		e. Factors to consider in tactics	35, 36, 37		3
		f. Levels in tactics	38, 39, 40		3
		g. <i>Shooting</i> (kick to goal)	41		1
		h. <i>One-on-one</i>	42		1
		i. <i>Power play</i>	43, 44		2
		j. The dominant role of tactics		45	1
		k. Form of tactical activities	46	47	2
Quantity			37	10	47

The instrument used in this study was adapted from the research conducted by Qatrunnada (2021). The instrument consisted of 47 valid statements with a reliability coefficient of 0.982, indicating a very high level of reliability. This instrument was considered relevant because it was specifically designed to measure knowledge of tactics and strategies in futsal. Therefore, it was appropriate to be applied to students participating in futsal extracurricular activities at SMPN 11 Banjarbaru.

Data were collected using a questionnaire in the form of an objective true-false test. Each item was designed to assess respondents' understanding of strategic and tactical concepts in futsal. The questionnaire was administered to the selected research sample, namely 15 students who actively participated in futsal extracurricular activities. Through this instrument, students' knowledge could be measured systematically and converted into numerical scores for further analysis.

The data analysis technique used in this study was descriptive percentage analysis supported by frequency distribution. Frequency distribution is used to organize data based on numerical values or categories so that the distribution of respondents' scores can be interpreted more clearly. In this study, the frequency distribution was used to classify students' knowledge levels into several categories, while the percentage analysis was applied to determine the proportion of students in each category (Wahab et al., 2021). The stages of data analysis are described as follows:

1. Penskoran Data
 - Correct answer = 1
 - Incorrect answer = 0
2. Calculating the Total Score The total score is obtained from the number of correct answers of each respondent.
3. Calculating Mean Grade Mean is used to find out the average value of students' level of knowledge.
4. Calculating Standard Deviation (SD) Standard deviation is used to determine the spread of data.
5. Defining Assessment Categories Category determinations use the following norms:
 - Very High : $X > M + 1.5 \text{ SD}$
 - Height : $M + 0.5 \text{ SD} < X \leq M + 1.5 \text{ SD}$
 - Medium : $M - 0.5 \text{ SD} < X \leq M + 0.5 \text{ SD}$
 - Low : $M - 1.5 \text{ SD} < X \leq M - 0.5 \text{ SD}$
 - Ultra Low : $X \leq M - 1.5 \text{ SD}$
6. Calculate the percentage of the formula used:

$$P = \frac{F}{N} \times 100\%$$

$$P = \frac{F}{N} \times 100\%$$
 Remarks: P = Percentage F = Frequency N = Number of respondents
 The interpretation of the calculated data is then interpreted in the form of tables and diagrams for easy analysis.

RESULTS AND DISCUSSION

Results

Based on the results of the knowledge test consisting of 47 true-false items, this study measured students' knowledge of two main aspects of futsal: strategy and tactics. The data obtained from 15 futsal extracurricular participants at SMPN 11 Banjarbaru were analyzed using descriptive statistics and frequency distribution. The descriptive statistical results are presented in Table 2.

Table 2. Quantitative Descriptive Description

Statistical Component	Score
Mean	34
Standard Error	0,92
Median	34
Mode	35
Standard Deviation	3,57
M - 1,5SD	29
M - 0.5SD	32
M + 0,5SD	36
M + 1,5SD	39

Table 2 shows that the students' mean knowledge score was 34, with a median score of 34 and a mode of 35. The standard deviation was 3.57, indicating that the students' scores were moderately distributed around the mean. Based on the mean and standard deviation, the knowledge scores were classified into five categories: very low, low, medium, high, and very high. The distribution of students in each category is presented in Table 3.

Table 3. Distribution of Students' Knowledge Test Results

Category	Frequency	Percentage
Very Low	1	6.67%
Low	3	20.00%
Medium	8	53.33%
High	1	6.67%
Very High	2	13.33%
Total	15	100.00%

The results show that students' knowledge of futsal tactics and strategies varied across categories. One student, or 6.67%, was in the very low category, while three students, or

20.00%, were in the low category. The majority of students, namely eight students or 53.33%, were in the medium category. Furthermore, one student, or 6.67%, was categorized as high, and two students, or 13.33%, were categorized as very high. These findings indicate that the overall level of knowledge of futsal tactics and strategies among extracurricular participants at SMPN 11 Banjarbaru was in the medium category. A visual representation of the distribution of students' knowledge levels is presented in Figure 1.



Figure 1. Students' Knowledge Level of Futsal Tactics and Strategies

Discussion

The findings of this study indicate that the level of knowledge of futsal tactics and strategies among extracurricular students at SMPN 11 Banjarbaru was generally in the medium category. Based on the results of the knowledge test, one student was classified in the very low category, three students in the low category, eight students in the medium category, one student in the high category, and two students in the very high category. This distribution shows that most students have developed a basic understanding of tactical and strategic concepts in futsal, although their knowledge has not yet reached an optimal level. The dominance of the medium category suggests that students are familiar with several fundamental aspects of futsal tactics and strategies, but they may still experience difficulty in understanding more complex concepts, such as defensive organization, attacking patterns, transition play, power play, and decision-making in dynamic match situations.

Knowledge is an important cognitive foundation in sports participation because it influences how players understand, interpret, and respond to game situations. In futsal, knowledge is not limited to knowing the rules or basic techniques; it also includes the ability to recognize tactical situations, understand team strategies, anticipate opponents' movements, and make appropriate decisions during play. Students who have sufficient knowledge of tactics and strategies are more likely to understand when to pass, move, defend, create space, or support teammates. Therefore, tactical and strategic knowledge contributes directly to playing intelligence and team performance. This is consistent with the view that quality futsal performance depends on the integration of individual ability and team strategy, where players who understand tactics can play more effectively and efficiently (Indrayogi et al., 2025).

The medium category found in this study reflects that the extracurricular futsal participants at SMPN 11 Banjarbaru already possess an initial foundation of knowledge, but this foundation still requires systematic development. In school extracurricular settings, students often learn futsal through direct participation in games and repeated technical drills. This approach can improve basic skills, such as passing, dribbling, shooting, and ball control. However, if training is not accompanied by tactical explanation and strategic simulation, students may become technically active but cognitively unprepared to manage game situations. Futsal is a sport with rapid transitions, limited playing space, and high pressure from opponents. These characteristics require players to think quickly and act collectively. Thus, the knowledge of tactics and strategies should be developed alongside technical and physical training.

The findings also support previous studies that emphasize the importance of measuring tactical and strategic knowledge among futsal extracurricular participants. Research on futsal knowledge has shown that students' understanding of tactics and strategies is an important

indicator for evaluating the quality of training programs (Ratnasari & Sofyan, 2024). Similarly, Indrayogi et al. (2025) found that tactical and strategic knowledge is necessary for extracurricular players because it helps them understand game patterns and perform more effectively during matches. The present study strengthens this argument by showing that although most students are not in the low category, their knowledge is still concentrated at the medium level. This means that training programs at the school level should not only maintain existing activities but also improve the quality of tactical learning.

Strategy in futsal can be understood as a planned framework prepared before a match to achieve team objectives. It includes the selection of playing systems, defensive patterns, attacking approaches, player positioning, and responses to the strengths and weaknesses of opponents. Qatrunnada (2021) explains that strategy refers to a plan prepared before competition, while tactics are more closely related to actions taken during the match. This distinction is important in futsal because players must understand both the overall team plan and the practical actions required in specific situations. A player may know the general strategy, but without tactical awareness, the strategy may not be implemented effectively during the game. Therefore, student-athletes need to understand not only what the coach plans, but also why and how the plan should be executed on the court.

The importance of strategy and tactics becomes more evident when considering the characteristics of futsal. Compared with football, futsal is played on a smaller field with fewer players, creating frequent transitions between attacking and defending. Every mistake in positioning, passing, or decision-making can immediately create opportunities for the opponent. Asrul (2023) states that strategy is a crucial instrument for coaches because futsal requires players to have adaptive positional readiness and the ability to shift quickly from attack to defense. This condition explains why students' tactical and strategic knowledge must be strengthened. If students only rely on physical ability and technical skill, they may struggle when facing organized opponents who apply structured defensive and attacking patterns.

The results of this study also indicate the need for more varied and contextual tactical training. Tuqya et al. (2025) emphasize that systematic programs to improve understanding of futsal tactics and strategies are necessary to strengthen players' strategic thinking. Tactical learning should be designed through game-based activities, small-sided games, situational drills, and match simulations. Through these activities, students can learn how to apply concepts such as zone defense, man-to-man defense, attacking movement, shooting decisions, one-on-one play, and power play in real game contexts. This kind of training helps students connect theoretical knowledge with practical performance. Without contextual practice, students may be able to answer questions about tactics but may still fail to apply them effectively during matches.

In addition to tactical learning, physical condition remains an essential supporting factor in futsal performance. Aerobic endurance allows players to maintain movement intensity, concentration, and technical execution throughout the match (Arifin et al., 2025). Students with good physical condition are more capable of carrying out tactical instructions consistently, especially during high-intensity transitions. However, physical fitness should not replace tactical understanding. Instead, both should complement each other. A physically strong player who lacks tactical knowledge may make poor decisions, while a tactically knowledgeable player with inadequate fitness may struggle to implement tactical actions throughout the match. Therefore, extracurricular futsal training should integrate physical conditioning, technical mastery, and tactical-strategic learning.

The medium level of knowledge found in this study may also be related to the common pattern of extracurricular training in schools, where practice sessions often emphasize physical activity and enjoyment rather than structured tactical instruction. Futsal is indeed attractive to students because it is fast, competitive, and enjoyable. It can also support discipline, teamwork, and physical development (Jeki et al., 2025). However, to achieve educational and performance objectives, extracurricular futsal should be managed as a structured coaching program. Coaches and physical education teachers need to provide explanations, demonstrations, feedback, and evaluations related to tactical and strategic aspects. Direct movement practice is also important because athletes can better understand correct techniques and movement patterns when they observe and perform them directly (Amirudin et al., 2021).

Overall, the findings suggest that futsal extracurricular students at SMPN 11 Banjarbaru have a sufficient but still developing level of knowledge regarding tactics and strategies. This condition should be interpreted positively because students already possess a foundation that can be improved through appropriate coaching. However, the presence of students in the low and very low categories indicates that not all participants have the same level of understanding. Coaches should therefore provide differentiated guidance, ensuring that students with lower knowledge receive additional explanation and practice, while students with higher knowledge are encouraged to develop leadership and tactical communication during games. By improving the structure and variety of tactical training, the school can help students develop not only technical skills and physical fitness but also game intelligence, decision-making ability, and strategic awareness. These aspects are essential for improving the quality of futsal performance in school extracurricular programs.

CONCLUSION

The results of this study indicate that the level of knowledge of tactics and strategies among futsal extracurricular students at SMPN 11 Banjarbaru is generally categorized as moderate. Most students have understood the basic concepts of futsal tactics and strategies, including several aspects of game planning, player positioning, defensive patterns, and tactical decision-making. However, their understanding is not yet optimal, particularly in applying tactical and strategic concepts in real match situations. These findings show that students' knowledge still needs to be strengthened through more systematic, contextual, and continuous learning during extracurricular training. Therefore, knowledge of tactics and strategies should be developed alongside technical skills and physical conditioning so that students can improve not only their playing ability but also their game intelligence.

RECOMMENDATIONS

Based on the findings of this study, futsal coaches and physical education teachers are recommended to design more structured and varied training programs that emphasize tactical and strategic understanding. Training activities should include game simulations, small-sided games, defensive and attacking pattern drills, positional exercises, and match analysis so that students can apply tactical concepts directly in practical situations. Students are also encouraged to actively learn and discuss futsal tactics and strategies, not only during training sessions but also through observation of matches and reflection on their own performance. For the school, the results of this study can be used as evaluation material to improve the quality of extracurricular coaching programs. Future researchers are advised to involve a larger sample and examine other factors, such as technical ability, physical condition, motivation, and training intensity, to obtain a more comprehensive understanding of futsal extracurricular development.

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