

Analysis of Dominant Physical Conditions of Futsal Academy Players in Semarang City

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ABSTRACT

The purpose of this research is to find out the dominant physique in futsal academy players in Semarang city. The target of this research is futsal academy players in Semarang City. This study is a quantitative descriptive. The independent variable is the Semarang City Futsal Academy. The population consists of futsal players from the Semarang Academy. The sampling technique used in this study is purposive sampling. The results showed the following Leg muscle strength had an average score of 48.39, with all (100%) athletes categorized as very poor. Agility had an average score of 18.45, with all (100%) athletes categorized as very poor. good. Endurance had an average score of 45.47, with all (100%) athletes categorized as good. Based on the above findings, it can be concluded that the dominant physical conditions of futsal academy players in Semarang City, as analyzed through a physical condition survey, generally fall into the moderate category.

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1. INTRODUCTION

Futsal is a dynamic sport because the ball rolls quickly from foot to foot, where the players are required to always move, and good skills are needed in high self-confidence, controlling the ball, and futsal is also widely loved by many people. Regular physical exercise can provide stimulation to the body's system. So that it can maintain health and fitness. Exercise also aims for recreation and to achieve an achievement. Good physical exercise is exercise that is done regularly by paying attention to the body's abilities, in accordance with the amount of exercise.

Physical condition is an important aspect in the sport of achievement in futsal games. Physical condition also affects the performance of athletes when competing, because physical condition is very much needed for the effectiveness of futsal games (Touran, 2017). Good physical condition is very important for someone who wants to exercise regularly. Good physical condition is very important for someone who wants to exercise regularly. The components of physical condition are strength, endurance, muscular power, speed, flexibility, coordination, balance, accuracy, and reaction (Zhannisa, 2018).

With good physical condition, a person can maximize performance and prevent possible injuries. The physical condition of the players plays an important role in determining the quality of their performance on the field. Every physical aspect is tested and explored as the players try to create an advantage for their team. The dominant physical condition of futsal can be explained as an optimal combination of several specific physical aspects that allow an athlete to perform at full ability during the match.

In the game of futsal, there is an understanding of the dominant physical condition. It is necessary to find out what forms of training are right to improve the quality of the player's condition.. The dominant physical condition components used by futsal are: To determine the dominant physical

condition, a basic estimate is needed to determine the right activity and the length of time needed for the sport.(Zainal, 2019). The dominant physical condition components used by futsal are explosive power (muscular power), strength, agility, endurance, and speed.(Saputra, 2019). The dominant physical conditions that futsal players must have are endurance, strength, and speed.(Charisma, 2020).

The title specifically mentions the research area, namely the physical condition of futsal players in Semarang City. This helps to limit the scope of the study and provides clarity to the reader about what to expect from the analysis. The clubs in Semarang City include PCKG Futsal Akademi Semarang, Venus Futsal Semarang, and Jatidiri Futsal Semarang.

Based on the results of interviews on January 31, 2024, with several coaches in Semarang City. The coach stated that there was no analysis data on physical conditions carried out in the clubs that had been observed by researchers. The coach has not focused on providing physical tests for the academy because the coach is too focused on senior players. Therefore, this study is the first study in the academy category conducted by futsal clubs in Semarang City.

Every athlete has different physical needs and abilities. Physical condition analysis can help in personalizing training programs for each individual, increasing effectiveness and providing more specific attention. The analyzed physical condition data can help in selecting players for a particular match or match strategy.

The researcher's interest in conducting this research was driven by several reasons rooted in the importance of a deep understanding of physical conditions in futsal. This research is also relevant in the context of developing a futsal academy in Semarang City. Through the analysis of the physical condition of the players, researchers can provide recommendations for improving training programs at the academy, which can produce players with better performance. Research on the dominant physical conditions in futsal academies in Semarang City is not only relevant but also has great potential to provide positive impacts, both practically and theoretically.

Unlike other studies that may have a smaller scope or focus on professional players, this study specifically targets the specific context of Semarang City and the population of players in the academy futsal. The purpose of this study was to determine the dominant physical conditions of futsal academy players in Semarang City.

2. METHODS

The method in this study uses quantitative descriptive research, namely, research that aims to find out and get a realistic picture of the condition of the research subject without intending to draw general conclusions. The method used is a survey with data collection techniques through tests and measurements. This study has variables identified as follows: Dependent variable: Dominant Physical Condition, and Independent variable: Semarang City Futsal Academy. The population is all research subjects in the study (Arikunto, 2006). The research population used in this study was Futsal Academy Players in Semarang City, while the research sample used purposive sampling with a total of 33 players who had met the criteria needed for this study.

The test instrument used in this study was speed using a 30-meter running test, Agility Using TestsIllinois Agility, Explosive Power Using the Standing Broad Jump Test, Endurance Using the Vo2max Test. Strength Using the Leg Back dynamometer Test. Data is presented in the form of tables and bar charts equipped with calculations of mean, mode, percentile, data spread calculations, average calculations, standard deviations, and percentages (Sugiyono, 2007). The technique of analyzing data using T-scores is to input the test results into the available form. After obtaining the percentage data, a classification is carried out to clarify the analysis process. Classifying the average (mean) and standard deviation obtained in this study. The mean and standard deviation results are used as scores.

3. RESULT AND DISCUSSION

Table 1. Statistical results of dominant physical conditions of futsal academy players in Semarang City

Physical Condition	N	Minimum	Maximum	Mean	Std. Deviation
Leg Muscle Strength	33	43 Kg	53 Kg	48.39 Kg	2.88 Kg
Running Speed	33	4.52 seconds	5.79 seconds	5.077 seconds	0.35 seconds
Agility	33	17.13 seconds	20.9 seconds	18.45 seconds	1.09 seconds
Explosive Power	33	1.65 m	2.72 m	2.26 m	0.27 m
Durability	33	40.2	54	45.47	3.78

From Table 1 above, it can be seen that the analysis of the dominant physical conditions of futsal academy players in the city of Semarang. The average value of the leg muscle strength component is 48.39, in the very poor category. The component Agility obtained an average value of 18.45, in the very poor category. The Running Speed component obtained an average value of 5.077,

in the poor category. The Running Speed component Explosive Power, has an average score of 2.26, in the very good category, and the Endurance component has an average score of 45.40 in the good category.

The statistical results of the research data using the T-score formula can be seen in the table below:

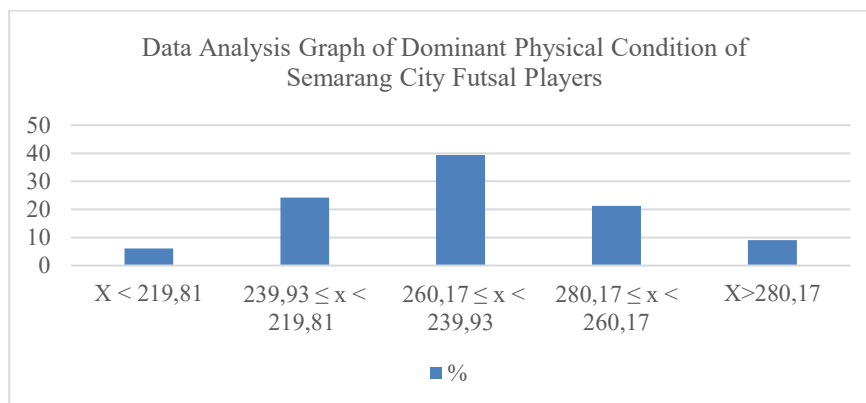
Table 2. Statistics of Physical Condition Data of Futsal Academy Students in Semarang City

Information	T-Score Value
Minimum	208.54
Maximum	294.43
Mean	249.99
Median	248.8
StDev	20.12

The results of the study, if described based on the established categories, can be seen in the table below:

Table 3. Description of Data Analysis of Dominant Physical Conditions of Futsal Players in Semarang City

Interval	Category	Frequency	%
$X > 280.17$	Very high	3	9.09
$280.17 \leq x < 260.17$	Tall	7	21.21
$260.17 \leq x < 239.93$	Currently	13	39.39
$239.93 \leq x < 219.81$	Low	8	24.24
$X < 219.81$	Very Low	2	6.06
Amount		33	100



Graph 1. Data Analysis of Dominant Physical Conditions of Futsal Players in Semarang City

Based on the research results above, a description of the Analysis of the Dominant Physical Conditions of Futsal Players in Semarang City was obtained, which were categorized as very high as many as 3 children (9.09%), categorized as high as many as 7 children (21.21%), categorized as moderate as many as 13 children (39.39%), categorized as low as many as 8 children (24.24%) and categorized as very poor as many as 2 children (6.06%).

Quality describes the effectiveness of the training itself, while continuity describes the seriousness and ability of an athlete in maintaining fitness and prime physical condition. In sports, training results must have a clear purpose, have training principles, and influence the sport being followed. The purpose of sports is to maintain and improve fitness (Rubianto Hadi, 2011). As explained previously, futsal requires athletes to be in good physical condition. In all human activities, both those that involve physical activities and those that have non-physical activities, a person's physical condition plays a very important role in the person's daily activities.

Prime physical condition greatly helps an athlete's performance on the field. Bad performance certainly has a negative impact on technical and tactical form. Every athlete certainly has very good personal techniques and good tactical abilities, but what is no less important is that fitness sometimes becomes an issue in the highest athletic competition in Indonesia in general. An athlete, no matter how good his tactics and techniques are, who is not based on good physical condition, will not achieve the same results as an athlete who has a strategy, technique, and, of course, good physique. (Justinus Laksana, 2011).

4. CONCLUSION

Based on the results of the study, the Analysis of Dominant Physical Conditions in Futsal Academy Players in Semarang City showed a very high category of 3 children (9.09%), 7 children (21.21%) in the high category, 13 children (39.39%) in the moderate category, 8 children (24.24%) in the low category and 2 children (6.06%) in the very poor category. From the explanation above, it can be concluded that the dominant physical condition of futsal academy players in Semarang City through data analysis regarding the analysis of dominant physical conditions in Futsal Academy Players in Semarang City is generally in the moderate category.

AUTHOR'S STATEMENT

In this research, the researcher has never published in other scientific articles/publications/articles and does not contain any elements of plagiarism, the researcher wrote this article consciously and without coercion from anywhere.

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