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Biomotor profile of SSB Kalasan Yogyakarta football players

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Abstract

This research aims to find out the biomotor profile of SSB Kalasan (Kalasan Football School) players aged 10-12 years old.

This research was a descriptive study with a quantitative approach. The research variable was the biomotor profile of SSB Kalasan players aged 10-12 in 2021. The research sample was SSB Kalasan team players aged 10-12. The data collection technique used the survey method techniques with measurement test techniques.

The results of this research indicate that the biomotor profile of SSB Kalasan players aged 10-12 in 2022 is as follows: (1) The speed of the players of SSB Kalasan with the largest percentage (65%) is in the Very Good category. (2) The agility of the players of SSB Kalasan aged 10-12 can be categorized as Good with the presentation obtained at 55%. (3) Strength of abdominal muscles (sit-ups) of the players of SSB Kalasan with a percentage of 55% is in the Good category. (4) The flexibility of SSB Kalasan football players is at 70% and it is in the Poor category. (5) The results of the vertical jump test, power/explosive power of the leg muscles of SSB Kalasan football players is at 30% in the Moderate and Poor categories. (6) The results of the endurance test aspects of the Middle Distance test of 600 meters of SSB Kalasan football players are at 55% or in the poor category.

Keywords: Biomotor Profile, SSB Kalasan, football players, poor category, techniques, jump test

Introduction

Football is a component of overall education that prioritizes physical activity and fun elements and is widely enjoyed by the community (Irianto, 2011) ^[3]. (Susanto & Lismadiana, 2016) ^[11] Football is a team game played by two teams, each team consisting of 11 players, the goal is to score as many goals as possible. Opponent's goal and try to thwart the opponent's attack to keep the ball from entering the goal. Football offers beauty in every corner both from the training and match side, playing football must also have physical, technical, strategic and mental skills (*Et al* Festiawan, 2019) ^[12]. The main requirement to achieve high and proud achievements all the time, in achieving skills it takes a long and measurable time, support from various groups and especially the will to be able to make achievements what is done is individual responsibility as an athlete. Responsibility as management in the process of carrying out long-term soccer sports coaching (Setyaningum & Anwar, 2016) ^[13]. Sucipto, *et al* (2000:7) ^[15] in Anwar (2013:1) ^[14] to put forward that the game of football is almost entirely played using foot, except goalkeepers are allowed to use their hands in the penalty area. This game can be played outdoors or indoors. In addition to good physical fitness, all soccer players must know and master the basic techniques play football the ball that both related to the skills of the players in kicking the ball, passing the ball, heading the ball, and shooting the ball into the goal to score a goal. The technique of playing soccer is a very complex movement. "The complexity of skills in playing soccer is dribbling the ball, kicking the ball, grabbing the ball, heading the ball, throwing, and catching the ball" Sucipto, *et al.* (2000:12) ^[15]. In order to be able to do some of these techniques well, each player needs to have good physical condition to support performance in doing sport which in persevere. In football, if you want to achieve success, of course you have to be supported by good physical condition so that your technical, tactical and mental abilities will be easier to achieve. Football athletes who have good physical condition naturally will very useful for achieving achievements.

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To get good physical abilities, the biomotor skills of soccer players must be at a good level as well to support athletes in playing soccer.

According to Sukadiyanto. (2011:57) ^[16] Biomotor is the ability of human movement that is influenced by the condition of the internal organ system. The internal organ system in question is the neuromuscular, respiratory, digestive, circulatory, energy, bone and joint systems. The basic components of an athlete's biomotor include strength, speed, endurance, coordination, flexibility. There are other components which are a combination of several components to form their own terminology, including power and agility.

Player football ball having a good level of biomotor skills has a great opportunity to achieve success. In order to be able to identify good and inadequate biomotor skills, it is necessary to conduct a biomotor skills test. If there are football athletes who do not have good biomotor skills, enough then training can be carried out immediately in an effort to support athletes to improve their skills biomotor Which Good.

The problem that found based on field observations during the period of 6 meetings, the performance of the SBB Kalasan Yogyakarta players was very good in ball control, technique, and tactics in the early minutes of the game. However, in the final minutes of the game, the physical condition of the players decreased so that they easily lost focus. The decrease in the physical condition of the players was due to the physical training program not being carried out systematically, regularly and in a planned manner. To improve the physical condition needed to support sports activities, it is necessary create a systematic, regular and neatly planned physical exercise program.

Based on interview results with the trainer found that on team SBB Kalasan Yogyakarta football team 's achievements in several matches have not been maximized, there is no planned training program and measurable according to the needs player SSB Kalasan. Facilities and infrastructure For SSB Kalasan is also inadequate, thus hampering in maximizing exercise football ball. Based on the description contained on observation in above then researcher take the problem in form research on Profile capabilities Biomotor Football Kalasan High School

Method Study

Type Study

Descriptive research method quantitative approach can be interpreted as a research method based on the philosophy of positivism, used to research a certain population or sample, data collection using research instruments, data analysis is quantitative. /statistics aiming to test the hypothesis that has been set. This study uses a descriptive quantitative approach method. The method used is a survey with data collection techniques using tests and measurements.

Time and Research Place

The research was conducted in Yogyakarta City, Sleman Regency, and Special Region of Yogyakarta Province. Data collection was carried out in field Lord Ronggo Kalasan. Research entitled Biomotor Profile of SSB Kalasan Players Aged 10-12 Years. Data collection was carried out on January 12, 2022 with amount player as much as 20 SSB Kalasan players in the 10-12 year age group.

Target/Subject Study

Population in this study is all over student player SSB team Kalasan. Sample in study. This is player SSB Kalasan team

age 10-12 years.

Procedure

Before doing the test the players are led first to do warm up really seriously to prevent when the test takes place so that no player whose physical condition is not ready to do the test so that they get injured. Then given an explanation of the instructions in doing the test. Each test item is done 3 times and only the best value or result is taken. The test taker does the test sequentially, after the first turn is finished, the second test is started again, doing the test starting from the beginning.

Data, Instrument and Data collection technique

The data collection technique in this study was a survey method with a measurement test technique, namely: 40 Meter *sprint test*, *shuttle run*, *sit-up*, *sit and reach*, *vertical jump*, *middle distance running 600 meters*.

The instruments used in data collection in this study were the 40 meter *sprint test*, *shuttle run*, *sit-up*, *sit and reach*, *vertical jump*, *middle distance running 600 meters*.

Technique Analysis Data

This research is a descriptive research which aims to find out how biomotor profile player club SSB Kalasan Age 10-12 years. As for the analysis technique data. Which used is a descriptive statistical technique for data analysis used from this study uses quantitative descriptive analysis techniques with percentages.

After knowing the player's biomotor profile club SSB Kalasan age 10-12 years, which is included in the categories of very good, good, average, lacking, very lacking, then it will be possible to determine how big the percentage is.

Research Results and Discussion

Results

Based on research that carried out on each test component, the data obtained was as follows following:

1. Test *Sprint* 40 meters

Based on the biomotor speed ability test of SSB Kalasan soccer players, the results of the 40-meter *sprint test* on 20 players were as follows

Table 1: Description results 40 meter *sprint test* research

Normal	Kategori	Frekuensi	%
S.D-6.3"	Baik sekali	13	65%
6.4"-6.9"	Baik	6	30%
7.0"-7.7"	Sedang	1	5%
7.8"-8.8"	Kurang	0	0%
8.9"- etc.	Not enough very	0	0%

Based on the table above, data was obtained on the speed biomotor component capabilities of the 10-12 year old Kalasan SSB Club Football players. 13 person (65%) in category Good Very, 6 person (30%) in the Good category, and 1 person (5%) in the moderate category. Meanwhile, in the Less category, there are no players in that category or as big as (0%). On category There is also very little, not a single player who falls into this category or (0%).

2. Test *Shuttle Run*

Based on results research capability biomotor agility using *shuttle run* test as many as 20 person player football SSB Kalasan obtained test result data which can be described in a table as follows: Table 2. Description of Research Results.

Test Shuttle Run

Based on the table above, we can obtain the results of the biomotor agility test (Shuttle Run Test) for players. SSB Kalasan football for ages 10-12 years from a total of 20 players, as much as 2 person (10%) is at on category Good very, 11 person (55%) is at on category Good, 5 person (25%) are in the Moderate category, 2 people (10%) are in the category Less, and 0 people (0%) are in the Very Less category.

Table 2: Description sit-up research results

Normal	Category	Frequency	%
< 12..10"	Good very	2	10%
12.11"-13.53"	Good	11	55%
13.54-14.96	Currently	5	25%
14.97-16.39	Not enough	2	10%
16.40 >	Not enough very	0	0%
Amount		20	100%

3. Sit-Up

Based on results Biomotor strength test research using the sit-up test for players SSB Kalasan Football Team Age 10-12 consisting of 20 players can be described in the following table.

Table 3: Description of sit and reach research results

Normal	Category	Frequency	%
23 to the top	Good very	0	0%
18-22	Good	11	55%
12-17	Currently	7	35%
04-11	Not enough	2	10%
0-03	Not enough very	0	0%
Amount		20	100%

Based on the table above, data on the results of the biomotor ability test can be obtained. Muscle strength aspect of *the sit-up test* for football players SSB Kalasan Age 10-12 years old, 11 people (55%) are in the Good category, 7 people (35%) are in the Currently, 2 person (10%) is at on in the poor category, 0 people (0%) are in the Very Good category, and also 0 people (0%) are in the Very Poor category.

4. Sit and Reach

Based on results study test ability biomotor Flexibility (Sit and Reach) for soccer player Club Kalasan High School Age 10-12 as many as 20 players can be described in the following Table.

Table 4: Description of *sit and reach* research results

Normal	Category	Frequency	%
16.5	Good very	0	0%
15.0	Good	11	0%
13.0	Currently	7	10%
11.05	Not enough	2	20%
9.5	Not enough very	0	70%
Amount		20	100%

Based on the table above, we can obtain data on the results of the biomotor flexibility ability test for the Sit and Reach aspect of the Kalsan SSB Club Football players aged 10-12 years. year as much as 0 people (0%) are in the Very Good category, 0 people (0%) are in the Good category, 2 person (10%) is at on Medium category, 4 people (20%) are on category Not enough, and 14 people (70%) were in the Very Less category.

5. Vertical Jump

Based on results Research on biomotor power ability using the Vertical Jump test of players football SSB the caldera 20 players aged 10-12 years can be described and seen in the following Table.

Table 5: Description of research results test *vertical jump*

Normal	Kategori	Frekuensi	%
46cm keatas	Baik sekali	1	5%
38-45cm	Baik	5	25%
31-37cm	Sedang	6	30%
24-30cm	Kurang	6	30%
23cm kebawah	Kurang sekali	2	10%
Jumlah		20	100%

Based on the table above, we can obtain the test results data for the strength component aspect of *the vertical jump test* for SBB Kalsan Club Football players aged 10-12 years old. 1 person (5%) is at on category Very good, 5 people (25%) are in the Good category, 6 people (30%) are in the Good category Medium, 6 person (30%) are in the Less category, and 2 people (10%) is at on category Not enough.

6. Middle Distance Running 600 Meter

Endurance biomotor ability test using the *600 meter middle distance running test* for players SBB Kalasan Football Age 10-12 years as many as 20 The players can be described and in the following table

Table 6: Description of research results middle distance 600 meter

Normal	Kategori	Frekuensi	%
s.d-2.09"	Baik sekali	0	0%
2.10"-2.30"	Baik	1	5%
2.31"-2.45"	Sedang	6	30%
2.46"-3.44"	Kurang	11	55%
3.45"-dsr	Kurang sekali	2	10%
Jumlah		20	100%

Based on the table above, we can obtain data on the results of the ability test bio motor power stand

Middle Distance 600 Meter test aspect for SBB Kalsan Football players aged 10-12 years as many as 0 person (0%) is at on category Good very, 1 person (10%) is at in the Good category, 6 people (30%) are in the Medium category, 11 people (55%) are in the Poor category, and 2 people (10%) are in the Very Poor category.

Discussion

Based on results research on the Biomotor Profile of SSB Kalasan Players in 2022, Data taken for group age 10-12 years, using biomotor tests and measurements, and the results of each test item have been obtained and can be explained as follows:

- Based on the results of the 40 m sprint test, the speed of the SSB Kalasan Soccer players aged 10-12 years mostly falls into the very good category as many as 13 players or 65% of the total frequency. Biomotor for speed is very good but still needs to be improved by training the speed component so that can improve players so they can develop and achieve, but this must also be balanced with training endurance and strength as described in the study theory. In the sport of football, speed plays an important role, the ability to attack to direction defense against in a way fast will very help a team to achieve victory in a football match. If the players can improve the quality of

their speed of movement and reaction, then there will be a positive impact on performance during training and competition. Coaches must also pay attention to this speed component in order to support the development of the players' achievements, so that it is expected to reach the peak of their achievements in the future, examples of speed training are 10-meter sprint training, 30-meter sprint training, and others.

- Based on the results of the 4x5 meter shuttle run test, the agility of football players SSB Kalasan Age 10-12 years old mostly fall into the Good category as many as 11 children or 55% of the total frequency. Coaches are expected to be able to improve the quality of agility of all players to a better category in order to support player performance towards peak achievement in the future. Examples of Agility exercises that we can apply in training programs namely Zig-Zag Run, Back and forth Run, Shuttle Run, and others. Agility is a factor important for Football players and very functional during a match, for example to pass an opponent when the player is bring ball Forattack the opponent's defense. This is in accordance with Bahrudin's explanation (2008:84) which states that Agility is a person's ability to change direction quickly and precisely when moving without losing balance. This ability is very necessary in many sports that require coefficients.
- Based on the results of the sit up test, the strength of the abdominal muscles of the football players SSB Kalasan Age 10-12 years old mostly fall into the good category, namely 11 players or 55% of the total frequency. It is a concern especially for coaches to further improve muscle strength training so that it can enter the very good category and support the performance of players towards peak achievement in the future. Examples of strength training muscles that can be included in the exercise program are Sit-Ups, Push-Ups, Squat Jumps, Planks, and others. Strength muscle stomach for a football player is very important, because in football is A sport which very vulnerable to physical contact with opponents. The discussion was supported by Giriwijoyo and Sidik (2012: 111) states that physiologically, strength is a neuromuscular ability (muscles and nerve) For overcome prisoner burden outside And internal load.
- Based on the results of the sit and reach test, the flexibility of football players SSB Kalasan Age 10-12 years old mostly fall into the Very Less category, namely 14 players with a percentage of 70% from total frequency. From the data that has been obtained, it shows that special attention is needed in biomotor flexibility because SSB Kalasan players aged 10-12 years are still very lacking in meeting flexibility standards. It is hoped that coaches can make this a notes important for to try to improve the flexibility of SSB Kalasan players. Because flexibility is very important for SSB Kalasan players to minimize the risk of injury. A player who has good flexibility can avoid the possibility of physical injury and allows the player to perform movements with a wide range of joint motion wide. This is supported by Sukadiyanto's explanation (2011:137) which states that flexibility is a very important component for carrying out movement activities, besides that flexibility is also useful for reducing the risk of injury. In general overall results flexibility test is still far from hope researcher. Due to Flexibility is directly related to the condition of bones and joints and other general factors, so this must be

improved in program training so that players can develop and achieve.

- Based on the results of the Power test with the Vertical jump test aspect, the power of SSB Kalasan Soccer players aged 10-12 years is mostly in the Medium and less category, namely 6 players with a percentage of 30% of the total frequency. In the data results that have been obtained, there are still many SSB Kalasan players who need to be improved. It is an important note for coaches to increase the power of each player so that players can develop, because in soccer power is one of the important aspects that every soccer player must have.
- Based on the results of the Endurance test of the Middle Distance 600 Meter test aspect of SSB Kalasan Soccer players aged 10-12 years. 11 players with a percentage of 55% are in the less category with the results of the data that has been obtained. Show that need special attention from the coach in improving the endurance of the SSB Kalasan players aged 10-12 years. The training program which includes planned endurance training is very good for help increase the endurance of the SSB Kalasan players so that can develop and achieve. The aspect of endurance is one of the important components for every soccer player. Because soccer players must have strong endurance to support other component aspects.

Conclusion and Suggestion

Conclusion

The results of the research and discussion on the Biomotor Profile of SSB Kalasan Club Players Aged 10-12 Years 2022 can be concluded as follows:

- The speed of SSB Kalasan soccer players with the largest percentage (65%) is in the very good category so that the speed of SSB Kalasan players can be categorized as very good.
- The agility of SSB Kalasan soccer players aged 10-12 years is categorized as good with a presentation obtained of (55%).
- The strength of the abdominal muscles (Sit-Up) of SSB Kalasan soccer players aged 10-12 years is categorized as Good, with data obtained from 11 players with a percentage of (55%) on category Good.
- Player flexibility ball SSB Kalasan age 10-12 as many as 14 people (70%) is in the less category once.
- Results of the Vertical Jump test, power/explosive strength of the leg muscles of SSB Kalasan football players aged 10-12 part big is at in the Medium and Less category, namely 6 players with a percentage of 30% in the Medium and Less category.
- The results of the endurance test for the middle distance 600 meter aspect of the Kalasan SSB soccer players aged 10-12 years, as many as 11 players (55%) are in the category not enough.

Suggestion

Based on the conclusions above, there are several suggestions that the author can convey, that is:

- For players who have biomotor conditions which is still less than expected by players do good and planned training in improving the player's biomotor.
- For coach, For provide an appropriate training program so that players can improve their lacking biomotor skills and the coach provides direction to players to be disciplined in following training so that every aspect of the player's biomotor skills can develop so that they can

achieve.

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