



Evaluation of The Physical Condition of Pencak Silat Athletes From The Macan Takeran Sacrament Competition Category

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Abstract

Martial arts is art defense self originating from Indonesia that is developing rapidly as well as demand mastery skills physical, technical, and tactical. For reach performance peak, athlete need undergo evaluation condition physique regularly. Although available various method test, observation at Sasana Macan Takeran show that evaluation physique Not yet Once done. In fact, at the event 6th Regent's Cup, many athlete experience fatigue in the third round. Therefore that, test physique required For identify deficiencies and measures readiness athletes, because condition optimal physical condition is very important success, especially in category match. Research This aim evaluate condition physique athlete martial arts martial arts category match at Sasana Macan Takeran. Research use approach descriptive quantitative with method surveys and instruments main in the form of tests and measurements. Subjects study consists of of the 17 athletes who regularly train and compete in the category match. Instrument covering nine test items, namely 20 m sprint, wall ball pass, push-up, sit up, Shut, Sit And Reach, IMT, vertical jump, and MFT. Data analyzed in a way quantitative using SPSS version 25. The results show that 3 athletes (18%) are categorized good, 11 (65%) moderate, 1 (6%) poor, and 2 (12%) very poor, with an average score of total 30.94 or in “medium” category.

Keywords: *Physical Condition, Pencak Silat, Competition*

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INTRODUCTION

Martial arts is art defense self native Indonesian who has recognized as inheritance culture not objects by UNESCO. Its development demand athlete For control skills physical, technical, and tactical. Success martial artist determined by the combination technique, tactics, strength physical and mental. There are two categories main in martial arts silat, namely competition and art (Kuswanto, 2016). In the category sparring, two martial artists each other face to face use equipment protective and distinguished with belt red and blue. Meanwhile that, category art consists of on art singles, doubles and teams.

In the Regency Magetan, Sasana Macan Takeran trained by Mas Teguh Wibowo, though Not yet licensed, has produce athlete achievers. This gym become focus research to

support performance athletes, in particular in face Magetan Regent Cup and Sports Week Province 2026. According to Akbar & Syahrul (2015), the factors determinant optimal performance includes physical, technical, mental, and confidence yourself. A structured training program, as well as role active coaches, athletes, and parents become factor important.

Condition physical requirements in category match covering flexibility, strength, agility, speed, power resistance, and power explosion. Evaluation condition physique important For adjust the exercise program and prevent injury (Aisyiyah, 2020). However, observations beginning show that at Sasana Macan Takeran evaluation the Not yet Once done, even though fatigue often happened in the final round match. Evaluation physique in a way periodically allows coach identify shortcomings, adjustments practice, and improve performance athlete.

Evaluation is the process of collecting data for support taking decision (Akbar & Syahrul, 2015). Study on evaluation athlete martial arts martial arts Still limited, so that important done study deep For support improvement achievement. Therefore that, research This aim For evaluate condition physique athlete martial arts Macan Takeran Martial Arts School category match and study connection theory fitness with results measurement physical. Title study This is “ *Evaluation Condition Physique Pencak Silat Athlete from Sasana Macan Takeran Competition Category.* ”

METHOD

Study This use approach descriptive purposeful For understand and describe in a way comprehensive condition physique athlete martial arts Silat at Sasana Macan Takeran, especially in the category match. The method used in study This is method survey, with technique data collection through tests and measurements. Research held on June 24, 2025, at Sasana Macan Takeran.

Population in study This covers all over athlete martial arts silat practitioners who practice at the gym namely, as many as 40 people. Retrieval sample done with technique *Purposive sampling* or sampling technique with certain considerations. The criteria in determining this sample are, Inclusion Criteria include Regularly attending training, Sasana Macan Takeran pencak silat athletes aged 15-20 years, Athletes who have competed at Sasana Macan Takeran, Male and female competition category of Sasana Macan Takeran pencak silat athletes. While Exclusion Criteria include Pencak silat athletes who are sick and Pencak silat athletes who are injured. Based on this technique, 17 athletes were obtained who met the

criteria and were willing to take a series of physical condition tests, consisting of 10 male athletes and 7 female athletes.

To collect data on the physical condition of pencak silat athletes at Sasana Macan Takeran, this study adopted several types of tests as its instruments. Based on the opinion of Lubis (2004: 152) the tests used to measure physical condition include: BMI, 20 M Run, Shuttle Run, Ball Wall Pass, Vertical Jump, Sit And Reach, Sit Up, Push Up, and MFT. The data obtained Then analyzed use approach quantitative with method statistics descriptive shaped percentage. Because the data collected in the form of numbers, then use analysis statistics chosen For increase efficiency and effectiveness data processing. This technique also allows presentation of data in a concise and easy understood. The entire data processing process is carried out with help device SPSS software version 25.

RESULTS AND DISCUSSION

Results

The data conversion from this study specifically relates to the physical condition of pencak silat athletes in the competing category. This conversion aims to simplify complex data, making it easier for readers and related parties to understand. This process ensures that this information is presented in a way that is easier to understand. To determine the grouping category, first it is necessary to know the average value (mean) is given the symbol M and the size of the standard deviation (SD) of the scores obtained. According to Sugiyono (2013: 123), the calculation of the average value and standard deviation is used to describe the distribution of data and determine the grouping category. The formula used to calculate both is as follows:

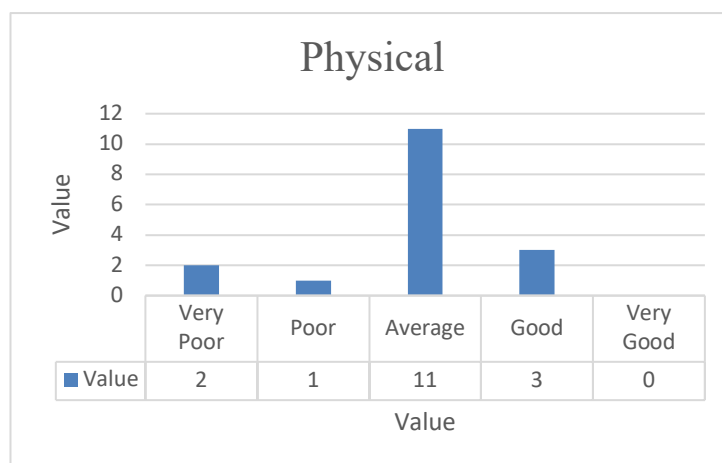
Table 1. Category Grouping Calculation

No	Category	Formula	Interval
1	Very good	$X \geq M + 1.5 \text{ SD}$	$X \geq 37.09$
2	Good	$M + 0.5 \text{ SD} \leq X \leq M + 1.5 \text{ SD}$	$32.99 \leq X \leq 37.09$
3	Currently	$M - 0.5 \text{ SD} \leq X \leq M + 0.5 \text{ SD}$	$28.89 \leq X \leq 32.99$
4	Not enough	$M - 1.5 \text{ SD} \leq X \leq M - 0.5 \text{ SD}$	$24.79 \leq X \leq 28.89$
5	Very less	$X \leq M - 1.5 \text{ SD}$	$X \leq 24.79$

Table 2. Calculation Results Statistics Descriptive Condition Physique Pencak Silat Athlete from Sasana Macan Takeran Match Category

Descriptive Statistics					
Condition Physique	N	Minimum	Maximum	Mean	Standard Deviation
	17	22	35	30.94	4,099

Based on the table presented above, can stated that N represents amount sample in studies these, which number 17. Regarding condition physique athlete martial arts martial arts in category competition at Sasana Macan Takeran, the minimum value recorded For variables the is 22, while mark maximum is 35. The average value (mean) of the data is 30.94, with standard deviation amounting to 4,099. In this case this, the author will serve distribution condition data frequency physical, as shown in the table above



Gambar 1. Frequency Graph Based on Physical Condition Category of Pencak Silat Athletes at Sasana Macan Takeran Competition Category

Based on the graph shown above, it can be observed that the distribution of athletes across the various categories is defined as follows: there are zero athletes classified in the Very Good category, three athletes categorized as Good, eleven athletes in the Average category, one athlete designated as Poor, and two athletes identified in the Very Poor category.

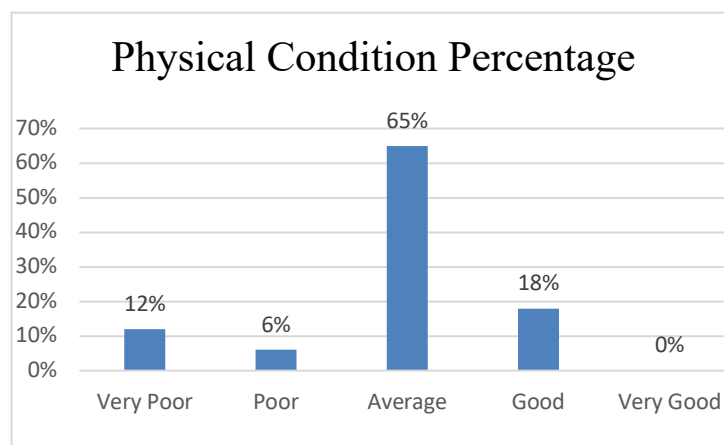


Figure 2. Percentage Chart of Physical Category of Pencak Silat Athletes at Sasana Macan Takeran Competition Category

Distribution category condition physique Pencak Silat athletes at the Training Center at Sassana Macan Takeran especially represented through percentage data. In specific, categorization show that 0% of athletes enter to in “Very Good” category, 18% were classified as “Good”, 65% were in “Medium” category, 6% are categorized as “Less”, and 12% identified in “Very Poor” category. In addition to the presentation based percentage, researchers also provide raw data before converted become percentage. Calculation This aim For give complete picture about level condition physique athletes at the Macan Takeran Sports Hall, as for the analysis statistics descriptive can explained more details in parts next. This :

Table 3. Calculation Statistics Descriptive Measurement Results Condition Physique Pencak Silat Athlete from Sasana Macan Takeran

	<i>Descriptive Statistics</i>				
	N	Minimum	Maximum	Mean	Standard Deviation
BMI	17	1	4	2.35	0.701
20M Run	17	1	4	2.82	0.882
Shuttle Run	17	3	5	3.76	0.664
Wall Ball Pass	17	1	3	2.29	0.587
Vertical Jump	17	3	5	3.82	0.528
Sit and Reach	17	2	5	3.59	0.712
Push Up	17	3	5	4.24	0.752
Sit Up	17	3	5	4.76	0.562
MFT	17	2	4	3.29	0.685

Based on results analysis statistics descriptive presented in the table above, part This give description general about test items condition physical, which consists of from nine component different assessments. Analysis This based on samples 17 Pencak Silat athletes.

Test items and statistical parameters is as following : 1.) BMI, minimum recorded score is 1, whereas score maximum is 4. The average score is 2.35, with standard deviation 0.701. 2.) 20 M run, minimum score is 1, and the score maximum is 4. The average score is 2.82, with standard deviation 0.882. 3.) *Shuttle Run*, minimum score obtained is 3, and the score maximum is 5. The average score is 3.76, with standard deviation 0.664. 4.) *Wall Ball Pass*, the minimum score is 1, and the score maximum is 3. The average score is 2.29, with standard deviation 0.587. 5.) *Vertical Jump*, the minimum score is 3, and the score maximum is 5. The average score is 3.82, with standard deviation 0.528. 6.) *Sit and Reach*, the minimum score is 2, and the score maximum is 5. The average score is 3.59, with standard deviation 0.712. 7.) *Push Up*, the minimum score is 3, and the score maximum is 5. The average score is 4.24, with standard deviation 0.752. 8.) *Sit Up*, the minimum score is 3, and the score maximum is 5. The average score is 4.76, with standard deviation 0.562. 9.) MFT, the minimum score is 2, and the score maximum is 4. The average score is 3.29, with standard deviation 0.685.

Discussion

Study This in a way special done to athlete martial arts silat that follows training at Macan Takeran Gym and including in category match. Collected data in study This especially related with condition physique athletes, which include various measurement related level fitness and readiness physique they, like strength, power endurance, agility, and speed. In order to evaluate level condition physique athlete martial arts silat practiced at Sasana Macan Takeran as well as For classify level condition physique they in a way systematic, used table conversion condition physical that makes it easier interpretation and understanding to various component condition physique the.

In addition, the approach This based on theory fitness physical as stated by Sukadi (2008: 45) who stated that success athlete in competition is greatly influenced by the level of fitness physical possession, as well as importance accurate assessment For designing an effective training program to improve performance athlete optimally. With Thus, the use of table conversion This expected capable give clear and objective picture about level readiness physique athletes, so that can become base in development of appropriate training programs with the needs of each athlete.

Based on results analysis statistics descriptive, average score of athletes is 30.94, which is included in "Medium" category according to criteria classification. This average score show level condition general physical satisfying among athlete in study this. However, in results analysis also shows variation in level condition physical. The minimum score recorded is 22,

which is categorized as “Very Poor” while score maximum is 35, which is categorized as “Good.”. This result show that, although There is a number of athlete with score more low, condition physique in a way overall from athlete martial arts silat at Sasana Macan Takeran category match including in “Medium” category.

Whereas for test items and their statistical parameters is as following : 1.) BMI, minimum recorded score is 1, whereas score maximum is 4. The average score is 2.35, with standard deviation 0.701. 2.) 20 M run, minimum score is 1, and the score maximum is 4. The average score is 2.82, with standard deviation 0.882. 3.) *Shuttle Run*, minimum score obtained is 3, and the score maximum is 5. The average score is 3.76, with standard deviation 0.664. 4.) *Wall Ball Pass*, the minimum score is 1, and the score maximum is 3. The average score is 2.29, with standard deviation 0.587. 5.) *Vertical Jump*, the minimum score is 3, and the score maximum is 5. The average score is 3.82, with standard deviation 0.528. 6.) *Sit and Reach*, the minimum score is 2, and the score maximum is 5. The average score is 3.59, with standard deviation 0.712. 7.) *Push Up*, the minimum score is 3, and the score maximum is 5. The average score is 4.24, with standard deviation 0.752. 8.) *Sit Up*, the minimum score is 3, and the score maximum is 5. The average score is 4.76, with standard deviation 0.562. 9.) MFT, the minimum score is 2, and the score maximum is 4. The average score is 3.29, with standard deviation 0.685.

Based on results analysis to the test items that have been done, can concluded that percentage success highest found in the Sit Up test, meanwhile For lowest percentage of test items obtained from Wall Ball Pass test. Based on the data and results research obtained, it is suggested to coach For compiling and designing training programs physical which is special customized with category condition the physique of each athlete martial arts silat, which includes very poor, poor, moderate, and good levels. Approach This considered very important and strategic Because aim For ensure that every athlete get proper and effective exercise in accordance with level his needs, so that can increase ability physique optimally. In addition, with implementation of a customized training program based on category condition physique mentioned, it is hoped that all over athletes at the Macan Takeran Gymnasium capable increase quality condition his physical in a way thorough and consistent, so they truly ready and able face various the match that will be come with performance best. With Thus, efforts This expected can support achievement maximum results and success athlete in match upcoming.

CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that the physical condition of pencak silat athletes at Sasana Macan Takeran in the competing category shows a diversity of physical condition levels among athletes. Specifically, of the total number of athletes studied, as many as 3 people or approximately 18% are in the good physical condition category, which indicates optimal physical readiness and ability to participate in the competition. On the other hand, there are 11 athletes or approximately 65% who are in the moderate physical condition category, which indicates that they have a sufficient level of fitness and physical readiness but still need to improve to achieve more optimal performance. In addition, there is 1 athlete (6%) who is in poor physical condition, and 2 athletes (12%) who show very poor physical condition, which indicates that some athletes still need special training and coaching programs to improve their physical condition optimally.

Therefore, when viewed from all athletes at Sasana Macan Takeran, the average physical condition score obtained from the assessment results shows a figure of 30.94. This figure is empirically included in the "Moderate" category based on the criteria that have been established in this study. This indicates that although there are some athletes who show a lower level of physical condition, in general the physical condition of athletes at Sasana Macan Takeran is still at a moderate level, which means that they have the potential and opportunity to improve their physical condition through appropriate and targeted training programs. Thus, it can be concluded that overall, the physical condition of pencak silat athletes at Sasana Macan Takeran generally shows a moderate level, which is the basis for coaches to design more specific and structured training programs to improve the quality of the athletes' overall physical condition.

ACKNOWLEDMENT

Thanks are extended to Sasana Macan Takeran for providing the author with a forum and permission to collect data so that this research can run smoothly.

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