



Physical Condition Of Wrestling Athletes In West Java On PON XX - Papua 2021

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ABSTRACT

This study aims to determine and describe the development of the aerobic and anaerobic capacity of West Java women's wrestling athletes to face PON XX – 2021 Papua. This research method uses a quantitative descriptive method. The population in this study were women's wrestling athletes from West Java at PON XX 2021 Papua. The sampling technique used was non-probability with the purposive sampling technique. The number of samples in this study was 6 wrestling athletes from West Java. Data analysis used category percentages and factor analysis with the help of SPSS 23 software for windows. The results of this study indicate the physical condition of female wrestling athletes on cardio resistance in the first test was 39.48 ml/kg/min (79%) and in the second it was 39.51ml/kg/min (79%). The anaerobic component in the first test was 25.18 seconds (75.5%) and in the second test, it was 25.78 seconds (73.7%). The upper body endurance component in the first test is 52.83 repetitions (81.3%), and on the second test 45.66 repetitions (71%). The component of abdominal muscle endurance in the first test is 38.83 repetitions (59.7%), and on the second test 32 repetitions (49.2%). The leg power component in the first test is 89%, and the second test of 85.1%. the agility component in the first test was 7.2 seconds (96.3%) and in the second test was 7.34 seconds (95.3%). The speed component in the first test was 3.81 seconds (86.7%) and in the second test was 3.77 seconds (87.6%). The flexibility component in the first test was 33.67 cm (112.2%), and in the second test was 41.33 cm (137.8%). Based on the factor analysis, the women's wrestling athlete from the West Java Regional National Sports Team at the Papua National Sports Week has a physical condition of 86.58%. In the first group, the percentage owned is 45.22% (speed). The second amount is 26.32% (cardio endurance and muscle endurance) Then the third amount is 15.04% (power, agility, flexibility). This study concludes that the overall components of the physical condition of the West Java women's wrestling athletes at the XX 2021 Papua PON are in the high category.

Keywords: *Physical Condition; Wrestling; Athlete of XX-PON PAPUA.*

INTRODUCTION

Sports achievement can not be separated from the element of physical condition. Before participating in a match or competition, an athlete must be able to achieve good physical condition and body strength to be ready to face various possibilities that occur during the match. The optimal physical condition can be achieved by doing regular and appropriate physical exercise to develop the athlete's physical abilities. Environmental

factors, diet (carbohydrate and water intake), and psychological factors can affect the performance of athletes. The meaning of physical condition in terminology means physical condition. These conditions can include before (initial ability), during and after experiencing a training process. Sports activities are activities that involve physical and mental elements from humans as implementing elements that can provide benefits for humans themselves and achieve certain goals (Sidik, 2008).

Physical ability in one of the sports, namely wrestling, that wrestling is an individual self-defence sport that aims to knock down opponents to get points and win. In a wrestling match, two categories of classes are competed, namely the Grego style and the freestyle. Freestyle wrestling is more active in all limbs to attack the opponent with the correct technique, while the Grego style is only allowed to be active from the hips to the head (Erawan et al., 2020).

Wrestling requires a fairly strong physique because wrestling is part of an anaerobic sport where the main role in this sport is the basic muscle strength of every movement performed. The formation of muscle strength can be used as a foundation to develop other components of physical condition so that several dominant components are formed according to the characteristics of wrestling. Components of physical condition in the dominant wrestling sport require physical components of arm power, leg power, flexibility, balance, speed and endurance (Erawan & Kusumah, 2019).

The creation of achievement is not only determined by the attitude of the athlete in competing but also the participation and preparation before the match, one of which is the accuracy in determining the dominant component in the sport. As previously discussed, wrestling has a special component or main component that becomes a priority in preparing for training so that the objectives of the exercise can be achieved according to their needs. With the design of an exercise program that is tailored to the needs of the branch, it can improve the performance or appearance of an athlete. To achieve the desired goal, the training program must be planned, structured and repeatedly built in a logical and tiered stage (Imanudin, 2014).

Regarding the topic in this study, namely the role of the physical condition of wrestling athletes to create high and sustainable achievements, the researchers aim to need evidence of scientific data about the condition of athletes, especially in the dominant physical component of the sport of wrestling, so that both athletes, parents and coaches get a reference for making training programs as well as developing and improving athlete performance both during training and during competition. The focus of the study in this

research is to focus on women's wrestling athletes from West Java who compete in the XX-2021 PON Papua. The selection of data sources in this study was based on the facts of achievement at the sporting event where the special medals for women's wrestling athletes from 6 (six) classes were contested, and the medals for women's wrestling athletes from West Java received 2 (two) gold medals and 1 (two) gold medals and 1 (two) gold medals. one) silver medal. Based on winning the medal, the researcher tried to study the identification of the physical condition of women's wrestling athletes in West Java.

METHOD

The type of research used is the type of quantitative research with the approach used in this study being a descriptive approach. The population of this research is all West Java athletes who are involved in Pelatda PON XX - 2021 as many as 11 athletes consisting of 5 male athletes and 6 female athletes. The sampling technique used is purposive sampling. The sample used as the object of research, in this case, all female wrestling athletes from West Java, was 6 people. The sample is part of the Regional Training Center in preparation for the XX-2021 PON multi-event which will be held in Papua. In general, these participants have different abilities, such as training age, physical and technical condition abilities, achievement achievements and of course anthropometrically (weight, height, BMI) and fat percentage. Likewise with biological age, in general, these participants are between the age of 20-35 years. The instruments used are as follows: Sit and Reach, Push Ups, Sit Ups, 20 meter Dash Test, The Triple Hop Jump Test, Shuttle Run 4 x 5m, and Balke Test. Data is presented through processing results using descriptive statistics.

RESULTS AND DISCUSSION

Results

The results of the initial data description of the physical condition of the West Java women's wrestling athletes PON Papua can be seen as follows:

Table 1.

Descriptive Initial Test Components of Physical Condition and Body Composition of Women's Wrestling Athletes of West Java Regional Police PON Papua

Component	Sub Component	N	Min	Max	Mean	Std
Body composition	BMI	6	22.6	26.7	24.8	1.51
	% fat level		27.6	33	30.5	2.24
	neck circumference		31	38	34.3	2.503
	Waist size		69	78	73.8	3.19

Component	Sub Component	N	Min	Max	Mean	Std
Physical condition	hip circumference		79	90	87.5	4.32
	cardio endurance		33.9	47	39.5	4.96
	Leg power		473	590	533.8	38.37
			448	566	513.8	42.65
	Muscular endurance		21	58	38.8	14.58
			42	70	52.8	10.07
	Speed		3.32	4.13	3.81	0.32
			21.5	27.8	25.2	2.56
Agility		6.18	7.98	7.27	0.68	
	Fleksibility		23	47	33.67	9.42

Based on table 1 regarding the description of the statistical data of the initial test components of physical condition and body composition, shows that each score owned by the components of physical condition and body composition shows the characteristics of these components. Next is the description of the final test data for the components of the physical condition of the women's wrestling athletes from the West Java Regional Police PON Papua which can be seen as follows:

Table 2.
 Descriptive Final Test Components of Physical Condition and Body Composition of Women's Wrestling Athletes of West Java Regional Police PON Papua

Component	Sub Component	N	Min	Max	Mean	Stdev
Body composition	BMI	6	21.4	25.9	23.88	1.59
	% fat level		26.2	32	29.38	2.25
	neck circumference		31	38	34.33	2.503
	Waist size		69	78	73.83	3.188
	hip circumference		78	89	86.3	4.274
Physical condition	cardio endurance		33.6	46.9	39.5	5.06
	Leg power		439	579	510.5	47.77
			388	523	468	48.54
	Muscular endurance		24	39	32	6.229
			38	60	45.67	8.66
	Speed		3.20	4.34	3.77	0.44
			21.51	29.58	25.78	3.13
	Agility		6.30	8.14	7.34	0.68
Fleksibility			34	56	41.3	9.29

Based on table 2 regarding the description of the statistical data on the components of physical condition and body composition, shows that each score owned by the components of physical condition and body composition shows the characteristics of these components. This can be seen by the changes in the scores of each sub-component of physical condition and body composition. As in the body composition component, the BMI score changes to the average score of 23.88, and then the percentage of fat content

has an average value of 29.38. Furthermore, on several components of physical condition/physical abilities, the average score of each sub-component has changed. The sub-component of cardio endurance (cardio endurance) has an average value of 39.5. Then the value of the difference in raw data on the components of physical condition and body composition can be seen in table 3 as follows.

Table 3.

Description of the Difference Score of Each Component of Physical Condition and Body Composition of Women's Wrestling Athletes of West Java Regional Educational Training PON Papua

Component	Sub Component	N	Min	Max	Mean	Stdev
Body composition	BMI	6	-1.3	-0.7	-0.9	0.27
	% fat level		-1.6	-0.8	-1.07	0.35
	neck circumference		0	0	0	0
	Waist size		0	0	0	0
	hip circumference		1	2	1.167	0.408
Physical condition	cardio endurance		-2.2	3.3	0.028	1.86
	Leg power		-61	-1	-23.33	21.7
			-92	3	-45.83	38.58
	Muscular endurance		-28	9	-6.83	14.9
			-19	2	-7.17	7.25
	Speed		-0.31	0.36	0.04	0.24
			-3.08	3.27	-6.017	2.31
	Agility		-0.44	0.4	-0.717	0.29
	Fleksibility		0	14	7.67	5.24

Based on table 3 the description of the difference in the score of each component of the physical condition and body composition of the West Java female wrestling athlete, PON Papua, shows that each score owned by several sub-components of physical condition and body composition has a varied score. To more easily find out the value of the raw score on the sub-components of physical condition and body composition by comparing the average score of each sub-component, it can be described in Figure 1 below.

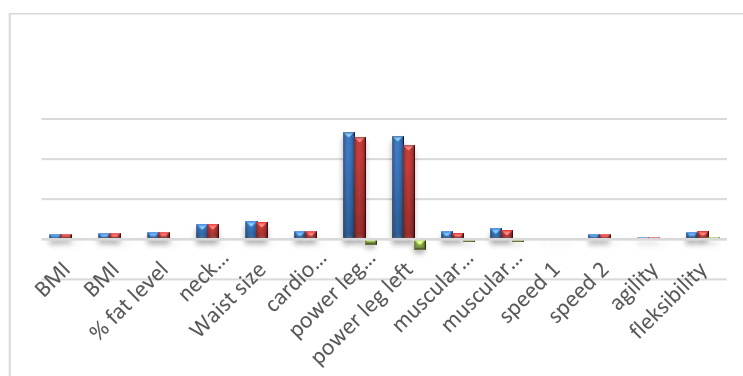


Figure 1.

Description of the Average Score of Raw Data Sub-Component Components of Physical Condition and Body Composition of West Java Wrestling Athletes PON Papua

Based on Figure 1 shows that of the several components of the physical condition and body composition, it shows some changes in each factor, it is adjusted to the unit of each component. The results of the description of the T-Score data for the components of the physical condition of the women's wrestling athletes from the West Java Regional Police PON Papua can be seen as follows:

Table 4.

Descriptive T-Score Preliminary Test Components of Physical Condition and Body Composition of Women's Wrestling Athletes of West Java PON Papua

Component	Sub Component	N	Min	Max	Mean	Stdev
Body composition	BMI	6	35.57	62.67	50	10
	% fat level		37.20	61.31	50	9.99
	neck circumference		36.68	64.65	49.9	10
	Waist size		34.84	63.07	50	10
	hip circumference		30.34	55.78	49.9	10
Physical condition	cardio endurance		35.49	57.25	49.9	9.99
	Leg power		34.15	64.64	50	9.99
			34.56	62.23	50	9.99
	Muscular endurance		36.85	62.23	50	10
			32.95	60.76	49.9	9.99
	Speed		39.90	65.21	50	9.99
			39.55	64.43	50	9.99
	Agility		39.54	66.12	50	9.99
Fleksibility		38.67	64.16	50	10	

Based on table 4 regarding the description of statistical data, the T-Score of the initial test component of the physical condition of the women's wrestling athlete from the West Java Regional Police PON Papua shows that each value of the sub-components of physical condition and body composition has an average value (mean) that is almost the same, namely equal to 50. Next is the description of the T-Score data for the final test of the physical condition of the women's wrestling athletes from the West Java Regional Police PON Papua, which can be seen as follows:

Table 5.

Descriptive T-Score Final Test Components of Physical Condition and Body Composition of Women's Wrestling Athletes of West Java Regional Police PON Papua

Component	Sub Component	N	Min	Max	Mean	Stdev
Body composition	BMI	6	34.4	62.7	50	10
	% fat level		35.8	61.6	49.9	10
	neck circumference		36.68	64.65	49.9	10
	Waist size		34.84	63.07	50	10
	hip circumference		30.5	56.24	50	10
Physical condition	cardio endurance		35.49	57.25	49.9	9.99
	Leg power		35.03	64.34	50	10
			33.52	61.33	50	9.99
			38.76	62.84	49.9	9.99

Component	Sub Component	N	Min	Max	Mean	Stdev
	Muscular endurance		33.46	58.85	49.9	9.99
	Speed		36.87	62.98	50	9.99
	Agility		37.87	63.63	50	10
	Flexibility		38.24	65.39	49.9	9.99
			42.1	65.79	49.9	10

Based on table 5 regarding the description of statistical data, T-Scores for the final physical abilities test or the physical condition of the women's wrestling athletes from the West Java Regional Police PON Papua show that each sub-component of physical condition and body composition shows significant changes as a result of the treatment given. A comprehensive description of the results of the T-Score test for each sub-component of physical condition and body composition can be seen in the image below.

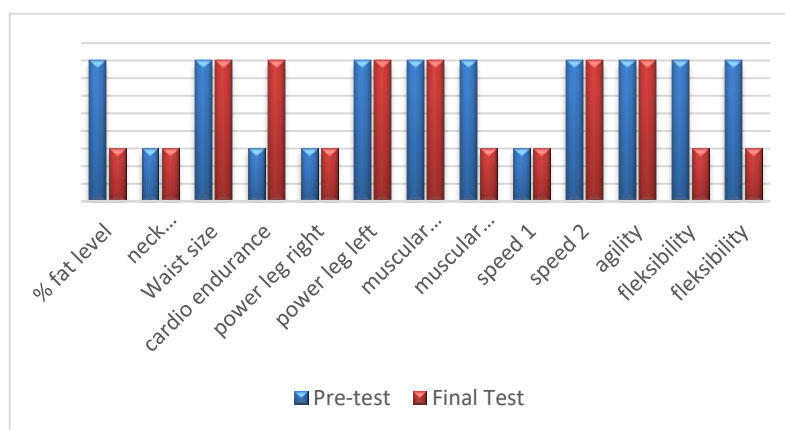


Figure 2.

Descriptive Average Score of Raw Data Sub-Component Components of Physical Condition and Body Composition of West Java Platda Wrestling Athletes PON Papua

Description of Research Results of Physical Condition Test for Women's Wrestling Athletes in West Java at PON XX 2021 Papua Based on Benchmark

Flexibility Component Physical Condition Test Results

Flexibility measurement is carried out using the sit and reach test, while the description of the test results can be seen in the following table:

Table 6.

Flexibility Test Results for West Java Women's Wrestling Athletes Based on Benchmark

No	Sample	Flexibility (Sit & Reach Test)				
		Test I	Test II	BM	%	%
1	AA	35	35	30	116.7	116.7
2	BB	23	34		76.7	113.3
3	CC	47	50		156.7	166.7
4	DD	29	37		96.7	123.3
5	EE	26	36		86.7	120.0
6	EF	42	56		140.0	186.7
Average		33.67	41.33		112.2	137.8

Flexibility is super important in wrestling. Being flexible will help athletes not only avoid throws and groundwork moves but can also go a long way toward avoiding injury. Especially back, hip and hamstring flexibility. Because most lower back, groin, knee, and ankle injuries occur due to tightness in these areas. The use of the Seat and Reach measurement in the first test achieved an average achievement of 33.67 cm (112.2%), then the second test became 41.33 cm (137.8%), an increase in flexibility ability along 7.67 cm. This means far beyond the benchmark set at 30 cm.

Speed Component Physical Condition Test Results

Measurement of speed or speed is carried out using a 20 m run, while the description of the test results can be seen in the following table:

Table 7.

Speed Test Results of West Java Women's Wrestling Athletes Based on Benchmark

No	Sample	Speed (run 20 meters)				
		I	II	BM	%	%
1	AA	3.32	3.2	3.3	99.4	103.1
2	BB	4.00	3.64	3.3	82.5	90.7
3	CC	4.03	4.34	3.3	81.9	76.0
4	DD	3.52	3.57	3.3	93.8	92.4
5	EE	3.84	3.61	3.3	85.9	91.4
6	EF	4.13	4.24	3.3	79.9	77.8
Average		3.81	3.77	3.3	86.7	87.6

Based on table 7, the speed ability increased by 0.04 seconds with an average initial ability of 3.81 seconds (86.7%) to an average final ability of 3.77 seconds (87.6%). The results found by the researcher referred to above and the results of the application of the physical condition program are useful for increasing speed in the 20-meter sprint. Speed is the most important asset of a martial arts athlete such as wrestling, especially to develop explosive speed to perform slamming techniques, and other tactics. So whatever the increase in speed occurs, it will be very meaningful for the athlete. The difference between 0.04 seconds is very meaningful for training efforts to increase speed. Achievement of 3.77 seconds or 117.4% against the benchmark was set at 3.3 seconds. So it can be seen that the results obtained are not as expected.

Agility Component Physical Condition Test Results

Measurement of agility or flexibility is carried out using a shuttle run 4 x 5m, while the description of the test results can be seen in the following table 8:

Table 8.

Results of Agility Tests for West Java Women's Wrestling Athletes Based on Benchmark

No	Sample	Agility (Suttle run 4x 5 m)				
		I	II	BM	%	%
1	AA	7.98	7.58	7	114.0	108.3
2	BB	6.80	6.95		97.1	99.3
3	CC	7.71	7.92		110.1	113.1
4	DD	6.18	6.3		88.3	90.0
5	EE	7.26	7.17		103.7	102.4
6	EF	7.70	8.14		110.0	116.3
Average		7.27	7.34		96.3	95.3

The ability of wrestlers to act and change quickly and effectively was measured by a 4 x 5-meter shuttle run, the first test achievement was 7.2 seconds (96.3%) and the second test was 7.34 seconds (95.3%). Although the achievement of this agility parameter since the initial test reached 96.3% of the set benchmarks, it indicates that the given physical condition training program has not been able to improve agility abilities. Agility training is an important component of some wrestling techniques. Agility is an important component that contributes to wrestlers showing optimal performance.

Test Results for Physical Condition of Leg Power Components

The measurement of leg power is carried out using triple hops, while the description of the test results can be seen in the following table:

Table 9.

Results of Leg Power Tests for West Java Women's Wrestling Athletes Based on Benchmark

No	Sample	Triple hop								
		Left I	Right I	Right II	Left II	BM	Right %	Left %	Right %	Left %
1	AA	520	535	510	505	600	86.7	89.2	85.00	84.17
2	BB	530	448	529	451		88.3	74.7	88.17	75.17
3	CC	540	520	479	452		90.0	86.7	79.83	75.33
4	DD	590	566	579	489		98.3	94.3	96.50	81.50
5	EE	550	534	527	523		91.7	89.0	87.83	87.17
6	EF	473	480	439	388		78.8	80.0	73.17	64.67
Average		534	514	511	468		89.0	85.6	85.08	78

Wrestling is an intermittent sport with high-intensity action, and a wrestling athlete's performance may be determined by several physical abilities, of which lower body muscle strength in the form of leg power is very important. During wrestling bouts, muscle strength and power have been linked to the performance and efficiency of wrestling techniques. Previous studies have shown that leg muscle power is a determinant of several techniques

performed in wrestling. The results of the study showed that the average leg power ability (left & right) had not yet reached the set parameters, the achievement of the first test was 89%, and the second test even decreased by 85.1%.

Physical Condition Test Results Abdominal Muscle Endurance Components

The measurement of leg power was carried out using the 60-second sit-ups test, while the description of the test results can be seen in the following table:

Table 10.

Abdominal Muscle Endurance Test Results for West Java Women's Wrestling Athletes Based on Benchmark

No	Sample	Abdominal Muscle Endurance (Sit Ups 60 seconds)				
		I	II	BM	%	%
1	AA	32	39	65	49.2	60.0
2	BB	27	26		41.5	40.0
3	CC	52	24		80.0	36.9
4	DD	58	37		89.2	56.9
5	EE	43	36		66.2	55.4
6	EF	21	30		32.3	46.2
Average		38.83	32.00		59.7	49.2

Abdominal or abdominal muscle endurance is an important marker of functional endurance and can also affect the performance of wrestling athletes. The analysis of the endurance of the abdominal muscles is the main challenge in supporting the standing position of the wrestlers, even providing an indicator of the ability to produce power repeatedly, because the abdominal muscles are a part of the body called the core muscles, meaning the part of the body that produces power. This muscle endurance was measured by working sit-ups for 60 seconds, the average result for the first test was 38.83 repetitions (59.7%), and the second test was 32 repetitions (49.2%). This means that the endurance ability of the abdominal muscles of wrestling athletes in West Java is still far from the benchmark set.

Test Results for Upper Body Muscle Endurance Components

Measurement of upper body muscle endurance is carried out using the push-up 60-second test, while the description of the test results can be seen in the following table:

Table 11.

Results of Upper Body Muscle Endurance Tests for West Java Women's Wrestling Athletes Based on Benchmark

No	Sample	Upper Body Muscle Endurance Push Ups 60 second				
		I	II	BM	%	%
1	AA	47	49	65	72.3	75.4
2	BB	58	39		89.2	60.0

No	Sample	Upper Body Muscle Endurance Push Ups 60 second				
		I	II	BM	%	%
3	CC	53	49		81.5	75.4
4	DD	70	60		107.7	92.3
5	EE	42	39		64.6	60.0
6	EF	47	38		72.3	58.5
Average		52.83	45.67		81.3	70.3

Initial contact between two wrestling athletes occurs through the technique of embracing or holding the opponent's body part, grip control is considered a key factor influencing the outcome of the fight as it allows the attack technique to be executed and hinders the opponent's ability to act. Therefore, it is important to increase your upper body endurance to increase your chances of success. To measure upper body endurance, a push-up test was used for 60 seconds, the average test results for the first test were 52.83 repetitions (81.3%), and for the second test 45.66 repetitions (71%). Similar to the test of abdominal muscle endurance, the ability of upper muscle endurance has decreased, and is far from the established benchmark.

Physical Condition Test Results Anaerobic Capacity Components

The measurement of anaerobic capacity is carried out using a 150-meter run, while the description of the test results can be seen in the following table:

Table 12.

Results of the Anaerobic Capacity Test of West Java Women's Wrestling Athletes Based on Benchmark

No	Sample	Anaerobic Capacity Run 150 m				
		I	II	BM	%	%
1	AA	22.52	23.5	19	84.4	80.9
2	BB	26.76	26.76		71.0	71.0
3	CC	25.95	28.75		73.2	66.1
4	DD	21.49	21.51		88.4	88.3
5	EE	27.85	24.58		68.2	77.3
6	EF	26.50	29.58		71.7	64.2
Average		25.18	25.78		75.5	73.7

Anaerobic is the dominant energy used during the match, but to have the anaerobic capacity, it must be based on good aerobic capacity. Aerobic capacity has a positive effect on anaerobic capacity. The ability to perform the technique repeatedly with short intervals requires excellent anaerobic capacity. Likewise, the 150-meter run test is a test that requires good anaerobic capacity. In the data analysis, there was a decrease, from the first test which took 25.18 (75.5%) seconds, and the second test 25.78 (73.7%) seconds, with the achievement of the benchmark with a travel time of 19 seconds.

Results of the Physical Condition Component Aerobic Capacity Test

The measurement of aerobic capacity is carried out using the Balke Test, while the description of the test results can be seen in the following table:

Table 13.
 Results of the Aerobic Capacity Test of West Java Women's Wrestling Athletes Based on Benchmark

No	Sample	Aerobic Capacity (Balke Test)				
		I	II	BM	%	%
1	AA	47	46.89	50	94.0	93.8
2	BB	39.6	40.18		79.2	80.4
3	CC	43.2	41.04		86.4	82.1
4	DD	38.2	41.50		76.4	83.0
5	EE	35	33.82		70.0	67.6
6	EF	33.9	33.64		67.8	67.3
Average		39.48	39.51		79.0	79.0

For optimal preparation of wrestling athletes, whose bouts are conducted one day from the preliminary to the final round, it requires at least 2 rounds, 3 minutes each, with a 30-second rest interval between rounds. After winning the match, there is an average break of 60 minutes, to get a complete recovery wrestling athletes must include developing aerobic exercise. The better the aerobic capacity, the faster it will return to its original/perfect condition. The results of the analysis achieved that the second test achievement was 39.51ml/kg/min (79%), almost no change from the first test 39.48 ml/kg/min (79%), compared to the benchmark set at 50 ml/kg/min which was considered very far lack of.

Discussion

Based on the description of the data in this study, it is known that Body Mass Index (BMI) and Body Fat Percentage (PLT) are widely used to define the pattern of weight growth or body weight, this becomes important for the sport of wrestling because the criteria for the category number of matches are determined by classification. weight. For BMI and PLT, the results of the tests carried out increased, for BMI from 89% to 92%, as well as PLT from 93% to 99% and each athlete approached the BMI of 22 kg/m² and PLT of 21%. That is, before the time of the match, the athletes have entered/closed to the weight specified in their respective numbers.

Flexibility is super important in wrestling. Being flexible will help athletes not only avoid throws and groundwork moves but can also go a long way toward avoiding injury. Especially back, hip and hamstring flexibility. Because most lower back, groin, knee, and

ankle injuries occur due to tightness in these areas. using the Seat and Reach measurement in the first test the average achievement was 33.66 cm, then on the second test was 41.33 cm, and there was an increase in flexibility ability along 7.67 cm. This means that it is far beyond the benchmark set at 30 cm, with a percentage of 132%.

When looking at the results of the data, the speed capability increases by 0.04 seconds (the average initial ability is 3.80 to the average final ability of 3.76 seconds. The results found by the researcher referred to above and the results of the application of the physical condition program are useful for increasing speed in sprint 20 meters. Speed is the most important asset of a martial arts athlete such as wrestling, especially to develop explosive speed to perform throw techniques and other tactics. So that regardless of the increase in speed, it will be very meaningful for the athlete. The difference between 0.04 seconds is very meaningful for business practice increases speed Accomplishment is 3.76 seconds or 89% against the benchmark set at 3.3 seconds.

The ability of wrestlers to act and change quickly and effectively is measured by a 4x5 meter shuttle run, the first test achievement is 7.21 seconds (96%), and the second test is 7.37 seconds (95%). Although the achievement of this agility parameter since the initial test reached 96% of the set benchmarks, it indicates that the given physical condition training program has not been able to improve agility abilities. Agility training is an important component of some wrestling techniques. Agility is an important component that contributes to wrestlers showing optimal performance.

Wrestling is an intermittent sport with high-intensity action, and a wrestling athlete's performance may be determined by several physical abilities, of which lower body muscle strength in the form of leg power is very important. During wrestling bouts, muscle strength and power have been linked to the performance and efficiency of wrestling techniques. Previous studies have shown that leg muscle power is a determinant of several techniques performed in wrestling. The results showed that the average leg power ability (left & right) had not yet reached the specified parameters, the achievement of test I was 87%, and test II decreased by 81.5% or an average jump of 489.25 cm.

Abdominal or abdominal muscle endurance is an important marker of functional endurance and can also affect the performance of wrestling athletes. The analysis of the endurance of the abdominal muscles is the main challenge in supporting the standing position of the wrestlers, even providing an indicator of the ability to produce power repeatedly. Because the abdominal muscles are part of the body called the core muscles, meaning the body parts that produce power. Muscle endurance was measured through sit-

ups for 60 seconds, the average result for the first test was 38.83 repetitions (57%), while the second test was 32 repetitions (49%). This means that the endurance ability of the abdominal muscles of West Java wrestling athletes is still far from the benchmark set.

Initial contact between two wrestling athletes occurs through the technique of embracing or holding the opponent's body part, grip control is considered a key factor influencing the outcome of the fight as it allows the attack technique to be executed and hinders the opponent's ability to act. Therefore, it is important to increase your upper body endurance to increase your chances of success. To measure upper body endurance, a push-up test was used for 60 seconds, the average test result for the I test was 52.83 repetitions (82%), and the second test was 45.66 repetitions (71%). Similar to the test of abdominal muscle endurance, the ability of upper muscle endurance has decreased, and is far from the established benchmark.

Anaerobic is the dominant energy used during the match, but to have the anaerobic capacity, it must be based on good aerobic capacity. Aerobic capacity has a positive effect on anaerobic capacity. The ability to perform the technique repeatedly with short intervals requires excellent anaerobic capacity. Likewise, the 150-meter run test is a test that requires good anaerobic capacity. In the data analysis, there was a decrease, from the first test which took 25.17 (75%) seconds, and the second test 25.78 (73%) seconds, with the achievement of the benchmark with a travel time of 19 seconds.

For optimal preparation of wrestling athletes, whose bouts are conducted one day from the preliminary to the final round, it requires at least 2 rounds, 3 minutes each, with a 30-second rest interval between rounds. After winning the match, there is an average rest break of 1 hour, to get a complete recovery the wrestling athlete must include the development of aerobic exercise. The better the aerobic capacity, the faster it will return to its original/perfect condition. The results of the analysis showed that the performance of the second test was 39.51ml/kg/min (79%), almost no change from the first test of 39.48 ml/kg/min (78.6%), compared to the benchmark set at 50 ml/kg/min which was considered very far lack of.

Furthermore, the results of the analysis test regarding the components of the physical condition of the West Java regional women's wrestling athletes at the Papua PON can be seen that the speed component that gives a high percentage is 45.22% of the physical condition of the women's wrestling athletes of the West Java regional government. Furthermore, several components of physical condition that can contribute to the women's wrestling athletes of the West Java Regional National Sports Committee at PON Papua

are components of cardio endurance and muscle endurance of 26.32% and other components of physical condition such as power, agility/agility, and flexibility of 15, 04%. The total percentage of the components of the physical condition of the West Java regional women's wrestling athletes is 86.58%. Based on these results, it can be discussed that wrestling is a sport that requires an optimal level of cardiorespiratory fitness to help maintain body condition during matches and to stimulate the recovery process quickly. Anaerobic strength and capacity, as well as maximal dynamic strength, isometric strength, explosive strength, and endurance strength, are closely related to high-level wrestling performance. However, flexibility levels do not appear to be one of the main fitness variables that help achieve high levels of wrestling success. Overall, to achieve a high level of wrestling performance, training should be directed towards developing anaerobic power and capacity, aerobic power, maximal dynamic and isometric strength, explosive strength, and strength endurance (Chaabene et al., 2016). In addition, a wrestler is required to be skilled in carrying out attacks as well as always being able to reduce the opponent's attack even at the right time to be able to take over the opponent's attack. For this reason, a wrestler must have excellent physical conditions, including power, flexibility, balance, speed, heart-lung endurance, and muscle and mental endurance (Nikooie et al., 2017).

The finding in this study is that one of the components of physical condition, namely speed, has a high percentage, and that's what causes that component not to be the main component in the sport of wrestling. Since there were no differences in sprint running and hamstring muscle extensibility observed by the researchers, the fitness component was not fully related to wrestling performance (García Pallarés et al., 2012).

Overall, regarding the components of the physical condition of the women's wrestling athletes from the West Java Regional National Sports Week at PON Papua, there is a high percentage because it is a high achievement that must be based on excellent physical condition. The athlete is said to have a component of excellent physical condition if he can do a training cycle and a series of matches with high intensity without causing significant fatigue. One of the parameters of the quality of the physical condition can be seen in the athlete's achievement (achievement) during tests and measurements of several components of his physical condition, leg power, abdominal and upper body muscle endurance, anaerobic capacity, and aerobic capacity. Furthermore, physical fitness training can be maintained or improved, both related to skills and general health. Where physical fitness is a measure of a person's physical ability in carrying out their daily tasks. The higher the degree of physical fitness, the higher the physical workability (Yudiana et al., 2012). In

addition, the components of building physical conditions that are important in achieving sports achievements consist of strength, endurance, speed, and agility. Physical condition contributes to the achievement of an achievement, but for high achievers, it is determined by tactics as well as the quality of excellent physical condition (Wen & Lin, 2012).

CONCLUSIONS AND SUGGESTIONS

Conclusion Based on the findings and discussion, the following conclusions can be drawn in general: The upper body muscle endurance category for female wrestling athletes in West Java is in a category far from the benchmark, then for muscle endurance, the abdominal muscles are in the category far from the benchmark. determined, the leg power category has not yet reached the set parameters, the athlete's speed category is not as expected, the flexibility category has increased, and the level of the athlete's circulatory-respiratory endurance category is very far from the stipulated provisions.

Suggestions for a coach must be able to establish a specific physical condition training program to increase aerobic and anaerobic capacity gradually, systematically, measurably, periodically, and adapted to the periodization of the training carried out in the sport of wrestling, but it must be ensured that the athlete already has a good basic physical condition. What is more important is the specific training norms based on the needs of the sport and individual athletes.

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