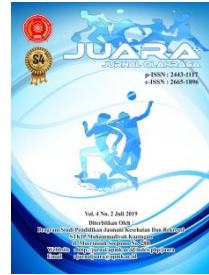




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CONTRIBUTION OF WRIST FLEXIBILITY AND ARM MUSCLE POWER TO SHOOTING RESULTS IN HANDBALL AT PELATDA DKI JAKARTA ATHLETES

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Abstract

The purpose of this study was to obtain information about the Contribution of Wrist Flexibility and Arm Muscle Power to Shooting Results in Handball Games in PELATDA DKI Jakarta Athletes. The method used is descriptive method. The study population was PELATDA DKI Jakarta athletes of 20 people using a total sampling technique of 20 people. The data collection technique was by carrying out arm muscle power tests using a medicine ball, wrist flexibility tests using a goniometer and shooting tests on the right and left sides. The data analysis used was multiple linear regression analysis with the SPSS 25 program. The results showed that there was a contribution of arm muscle power to shooting Handball in PELATDA DKI Jakarta Athletes of 0.793, which means that this contribution has a strong relationship, then the contribution of wrist flexibility to shooting Handball for PELATDA DKI Jakarta Athletes was 0.619 which means that this contribution also has a strong relationship and a more dominant contribution, namely arm muscle power compared to the contribution of wrist flexibility to shooting Handball for PELATDA DKI Jakarta Athletes.

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INTRODUCTION

Sport is a powerful tool for improving physical fitness, but an even more powerful tool for building social capital, and perhaps the most effective system we have, outside the family, for providing young people with role models and mentors. -positive adult mentors and opportunities for positive development.

In the practice Although sport cannot be a cure-all for all problems in society, or a priority compared to basic living needs in a struggling society, sport can provide many positive influences and be a valuable tool in the development of sport .

Sport is a form of planned and structured physical activity that involves repetitive body movements and is aimed at improving physical fitness. Exercise is a basic need in everyday life because it can increase a person's endurance. Exercise can be started from an early age to old age and can be done every day. According to Janpurba (2011), if someone does exercise regularly they will be able to increase their muscle mass, because this exercise can stimulate muscle cells to grow bigger and muscle cells that were previously at rest will return to being active again.

In the handball game , shooting is one of the things technique main in

handball game , therefore That This become technique The main thing that athletes do for the team Can win .

Shooting or Shooting is a form of throwing motion aimed at putting the ball into the goal. To be successful, the throw must be powerful and have explosive power , meaning that it directs all the speed and power in a very short time so as to produce a fast ball movement. Shooting the ball must be done with serious effort so as to produce different adjusted body attitudes. The most interesting thing is the execution of the flying shot which requires a three-step rhythm.

Flexibility or normal known with Flexibility is the ability to perform movements within the range of motion of a joint. People who have good flexibility will have a wide range of motion in their joints, this will also have an impact on the quality of a skill. Good wrist flexibility will provide good quality skills as in handball *shooting* shooting in handball is a throw which is fast and strong. This means that the components of the physical condition are identical to the characteristics of the throw These are strength and speed. Power is strength that is exerted quickly . Harsono (2016) said Power is ability muscle For deploy strength maximum in Very fast time . Has

muscle power arm with Good will possible good results on a smash hit .

Shooting or shoot is fast and powerful throw . It means that component condition identical physique The same with characteristics from throw the is strength and speed . Power is exercised power with fast . Harsono (2016) said Power is ability muscle For deploy strength maximum in very fast time . Has muscle power arm with Good will possible good results on a smash hit .

METHOD

Type of research used is a type of qualitative research . Because this research method is the most productive, because if the research is carried out well it can answer the actual hypothesis.

Sample from study This is all over PELATDA DKI Jakarta athlete with using total sampling, the data collection process was carried out at GOR UNJ and in months August 2023

RESULTS AND DISCUSSION

The results of this research are to determine the contribution between arm muscle power and wrist flexibility on the results of smash hits. From the results of these calculations, the amount of arm

muscle power support for shooting results is 57.76% and the correlation level is in the high category of 0.76, wrist flexibility support for shooting results. 17.64% and the correlation level is 0.42 , including the sufficient category. Meanwhile, it supports wrist flexibility and shooting arm muscle power 75.40% and the correlation level is 0.80, including the high category , to determine the correlation and contribution of wrist flexibility and arm muscle power. Regarding Shooting Results in Handball Games for PELATDA DKI Jakarta Athletes as follows :

research results data table

No	Arm power score	Wrist flexibility score	Y score (T-score) from handball shooting
1	4.1	77	128
2	2.5	60	91
3	3.81	63	96
4	3.7	60	105
5	3.1	70	91
6	4.1	75	104
7	4.1	68	120
8	3,8	64	97
9	4,1	72	128
10	3,5	70	107
11	4,2	70,5	110
12	2,8	60	83
13	2,9	68	95
14	4,1	64,2	103
15	3,4	72	106
16	3,6	62	94
17	3,9	65	93

18	2,9	73	94
19	3,4	70	91
20	3	75	90

From the results data research , after calculating about average (mean) and standard values deviation from every item test namely : muscle power test arms , flexibility wrist hands , and shooting. The result can seen in the table following :

Data Tables The calculation results Average and Standard Deviation from Every one Test

N o	i n s t r u c t i o n	Avera ge	Standard deviation
1	Power	3	0
2	Muscle Arm	.	.
3	Flexibility	5	5
	Wrist Hand	5	3
	shooting	6	5
		7	.
		.	4
		9	1
		1	2
		0	.
		1	5
		.	.
		3	.

Testing condition analysis

For To test the correlation value of the test results is meaningful, it is necessary to test the fourth correlation The test items in this study are: arm muscle power with shooting results , wrist flexibility with shooting results , arm muscle power with wrist flexibility, and the correlation between arm muscle power and wrist flexibility. with shooting results . The results of the correlation calculation of the four test item variables can be seen in table 3 below.

N o	Test Item s	Ma rk	Cate gory	t- cou nt	t- tab le	Concl usion
1	Arm musc le powe r (X ₁) with shoot ing result s (Y)	0.7 6	Tall	4.9 5	2.1	Signifi cant
2	Wrist flexib ility (X ₂) with shoot ing result s (Y)	0.7 2	Tall	4.9 2	2.1	Signifi cant
3	Arm musc le powe r (X ₁) with wrist flexib	0.4 2	Enou gh	1.0 5	2.1	Not signifi cant

ility (X2)									
Arm musc le powe r (X1), wrist flexib ility (X2) with shoot ing result s (Y)	0.8	Tall	16	3.5 9	Not signifi cant				

CONCLUSION

In accordance with calculation and analysis of the data obtained from muscle power test arms , flexibility wrist hand and test shooting, then writer can take conclusion as following :

1. There is significant contribution to muscle power arm to Shooting Results in Handball Games for PELATDA DKI Jakarta Athletes .
2. There is meaningful contribution between flexibility wrist hand on Shooting in Handball Games among PELATDA DKI Jakarta Athletes .
3. There is meaningful contribution between flexibility wrist hands and arm power on Shooting in Handball Games among PELATDA DKI Jakarta Athletes

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