Description of Athlete Physical Conditions of Sports at Volleyball and Basketball Ball Games at Learning Education and Training Center (PPLP) Dispora Riau Province in 2018

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Abstract: The purpose of this study was to find out the description of the physical condition of volleyball athletes and basketball of students education and training center (PPLP) in the Province of Riau Province in 2018, and to find out the differences in physical conditions of volleyball athletes, basketball students education and training centers (PPLP) Riau Province Dispora in 2018. The type of this research is Quantitative Descriptive, where this study will clearly illustrate the PPLP test data from the Riau Province Physical Conditions team. Based on the results and discussion, it can be concluded that the results of the physical condition data of PPLP Volleyball athletes and PPLP basketball in Riau Province in 2018 are as follows: Physical condition of PPLP Volleyball Women's athletes in Riau Province in 2018 are in good category with a percentage of 12.5%, medium category which is 3 people with a percentage of 37.5%, the less category which is 3 people with a percentage of 37.5, and the category is very less which is 1 person with a percentage of 12.5%. While the physical condition of PPLP Women's Basketball athletes in Riau Province in 2018 is in the good category which is 1 person with a percentage of 20%, there are medium categories of 2 people with a percentage of 40%, the less category which is 2 people with a percentage of 40%, while there is no very less category. Thus, the condition of PPLP Women's Basketball Ball athletes is better than the condition of PPLP Women's Volleyball athletes

Keywords: Physical Conditions, Volleyball, Basketball, PPLP

1. Introduction

Sports achievement has always been a reference to the success of an exercise in every sport. One of the keys to improving an athlete's performance and ability is to do good exercises every day. The sports branch that needs to be improved is volleyball and basketball. The problem of increasing achievement in the field of sports as a target to be achieved in coaching and development in Indonesia will take a long time. There are four kinds of completeness that must be possessed if someone will achieve a maximum achievement, namely: 1. Physical build-up, 2. Technical build-up, 3. Mental build-up, 4. The Maturity of champions (M. Sajoto, 1995: 7).

Exercise is the most important factor in achieving optimal performance. It is less appropriate if there is an opinion saying that the athlete was born but the athlete was formed with the right training program. Exercises begin at an early age and must be carried out continuously until

they reach the peak of their achievements in the sports they are engaged in, and then improved performance building. Thus early sports coaching are very important so that later athletes can achieve success.

Sports branches that need to be improved are volleyball and basketball. Volleyball and basketball games are a type of team sports that use large balls, require a certain size field, and are played in groups (teams). Volleyball and basketball games when played by players are very much in need of a strong immune system when playing for a long time, and require power in the leg muscles when jumping to smash the ball (Faruq, 2008: 20-21). Given that volleyball and basketball are the types of sports that rely heavily on physical, the physical condition of the player is very important in supporting game activities. Physical conditions greatly affect optimal achievement. Physical conditions are a complete unity of components that cannot be separated, both their enhancement and their maintenance. Components of the physical condition include Agility, Balance, Strength, Coordination, Endurance, Flexibility, and speed of motion-reaction (speed).

Volleyball and basketball games are not only a spectacle of competition but also as entertainment for the community, both those who do it and those who see it. Volleyball is very often coloring national holidays and other programs. Hopefully not only be a sport that is entertaining but also meaningful and enhances the nation's reputation among the world community.

The Basketball game is a habit-based exercise, meaning that to be a good basketball player is very necessary to practice or play repeatedly or continuously in order to get the techniques, tactics and prime conditions in a good game. To be a good player needs to master the fundamentals (the basics of technique, tactics, and strategy) from this basketball game (EngkosKosasaih, 1993: 201). There are three ways to move the ball in a basketball game which is the basic technique of the game itself, namely dribbling, passing and shooting. These three types of techniques are much related and determine the game itself, because the components are interconnected. In these three types of techniques, there must also be some good physical conditions. To be able to play good basketball, components that must be fulfilled, such as speed, accuracy, coordination, reaction time and shoulder arm explosive power, which are a combination of strength and speed of hand movements, produce accurate shooting.

Basketball is a complex movement game that is a combination of road, run and jump and elements of strength, speed, accuracy, flexibility and a combination of the components of the physical condition. To be a good basketball player, you have to master the basic techniques of playing basketball, because the better a player is in herding, shooting, and passing, the better the possibility of success, this must also be supported by good physical conditions.

Victory cannot be achieved individually in team games, besides that each individual or player must have good physical condition, mental and good basic techniques as well. To get the good physical condition, superior mental and basic techniques need to be organized regularly and programmed. According to EngkosKosasih (1993: 232), several important soccer game techniques that need to be trained include 1. Technique for kicking a ball, 2. Stopping and controlling the ball, 3. Techniques of carrying or dribbling, 4. Technique movement (cheats), 5. The technique of throwing a ball (copying a ball), 6.The technique of throwing a ball into

(throw in). To get a victory in playing football the technique above must be owned by a soccer player.

Joseph A, Luxbacher (2011: 105) said that the main goal in each attack is to score goals. To score a goal on the opponent's goal is certainly not easy because there are so many disturbances that will be faced by a player. Therefore a player must have shooting skills under game pressure which is limited by game time, physical exhaustion and aggressive opponents. One of the important things to support the success of scoring an opponent's goal in football is a good physical condition. Physical conditions are a complete unity of components that cannot be separated just like both improvement and maintenance. Among these physical conditions are strength, endurance (muscular power), speed, flexibility, agility, coordination, accuracy, and reaction (Sajoto, 1995: 8-9).

Student sports education and training center (PPLP) as a forum for education and training of gifted student-athletes is a form of training implementation system to reach outstanding athletes. The formation of the Student Sports Education and Training Center (PPLP) aims to have potential and outstanding student-athletes, so that to be able to be fostered centrally so that the training process for athletes will be more intensive and the development of academic education is not left behind. One of the provinces that are currently conducting training for its students to further improve sports achievements is Riau Province. PPLP (Center for Student Education and Training (PPLP) of Riau Province is a forum for athlete coaching at the student level placed in Pekanbaru.

The main reason why coaching must be sustainable because coaching and participation activities are cut off or back and forth in the coaching process that will not result in progress in achievement. Furthermore, through a sustainable program and continuing, the process of coaching like this makes the basis for training to succeed. Student-athletes at the Student Sports Education and Training Center (PPLP) who carry out physical training exercises still lack the use of modern burden tools. Student-athletes at the Student Sports Education and Training Center (PPLP) are still given a lot of modified exercises. The formation of the Student Sports Education and Training Center (PPLP) is one place in an effort to improve the quality of engineering as well as the physical condition of athletes who are planned continuously. Physical exercise that is carried out regularly, systematically and continuously, and is outlined in an exercise program will significantly improve physical abilities. Physical training is a conscious and programmed effort to foster the basic functional qualities of athletes to a higher level, so as to achieve optimal performance. Components of basic physical conditions consist of strength, speed, explosive power, flexibility, agility, balance, endurance, reaction, accuracy, coordination. It was further explained that physical conditions are closely related to an athletic ability to achieve performance (Center for the Study and Development of Sports Science and Technology, 1999: 5).

The process of training physical conditions have been done carefully, repeatedly with increasing training load allows one's physical freshness to become more skilled, strong and efficient in its movements. Lutan, et al (1991: 111) said that: "an athlete who follows an intensive physical

exercise program for 6-8 weeks before the season will have much better strength, flexibility, and endurance during the season." component development of the best physical condition also helps an athlete to be able to follow the next training in an effort to achieve the highest achievement. However, in the case of the training carried out by the trainer before the match day, it still shows the obstacles so that coaching from the physical aspect is not optimal. Even this physical condition factor doesn't seem to get more attention. This is one of the causes so that achievements have not shown good results in accordance with what is expected. The trainer has not implemented the actual training method optimally, or in the sense that the training system needs to be improved, not maintaining what has been done so that the results to be achieved cannot be achieved. At first, to be accepted as a student-athlete at the Student Sports Education and Training Center (PPLP) was not easy. Because it requires a process in recruitment using a variety of benchmarks, so those prospective athletes who enter and are accepted as student-athletes at the Student Sports Education and Training Center (PPLP) are truly produced from a tight competitor level, rigorous selection and obtained through planned competition, regular and sustainable.

Physical exercise that is carried out regularly, systematically and continuously, and is outlined in an exercise program will significantly improve physical abilities. Physical training is a conscious and programmed effort to foster the basic functional qualities of athletes to a higher level, so as to achieve optimal performance. Components of basic physical conditions consist of strength, speed, explosive power, flexibility, agility, balance, endurance, reaction, accuracy, coordination. It was further explained that physical conditions are closely related to an athlete's ability to achieve performance. (Center for the Study and Development of Sports Science and Technology, 1999: 5).

2.Methodology

The type of research was Quantitative Descriptive, where this study will clearly describe the PPLP test data from the Riau Province Physical Conditions team. The population was the whole subject of the study (Arikunto, 2002: 108) and in this study, the population was all volleyball athletes and PPLP basketball in Riau Province which consists of 13 athletes. The sampling technique used a total sampling technique which was the technique of determining the sample. This role was used if all members of the population are used as samples, and if there are many populations below 100 (Arikunto, 2012: 126), so in this study, the number of samples was 13 athletes. To obtain data for this study, researchers used physical conditions. Data obtained from the comparison of the three groups will be processed using statistical analysis techniques. To prove whether the hypothesis given in this study can be accepted or rejected. Data analysis used in this case was an analysis of comparative data. Data analysis in this study was percentage descriptive analysis. This method was used to discuss the results of research that are still in the form of quantitative data to obtain an overview of the research results. Data analysis in this study was percentage descriptive analysis. This method was used to discuss the results of

research that are still in the form of quantitative data in order to obtain an overview of the research results.

Table 1. Norms for Assessment of Physical Conditions

No	Interval	Category
1	M + 1,5 S<X	Very good
2	M + 0,5 S<X ≤ M +1,5S	Good
3	M -0,5 S<X ≤ M +0,5S	Fairly
4	M -1,5 S<X ≤ M -0,5S	Not good
5	X ≤ M -1,5 S	Bad

Description:
M :*mean*
X : score
S :*standard deviation*

3.Result and Discussion

Subjects in this study were athletes of Volleyball and PPLP Basketball in Riau Province in 2018 totaling 13 athletes with details of 8 female athletes of PPLP Volleyball, and 5 female athletes of PPLP Basketball. Data on physical conditions in this study consisted of Sit and Reach, Sit-Up 2 minutes, Push-Up 1 minute, Illinois Agility Run, Vertical Jump, Throw Medicine Ball, Bleep Test, and Running 300 Meters, Squat Jump 2 Minutes, and Sprint 20 Meters.
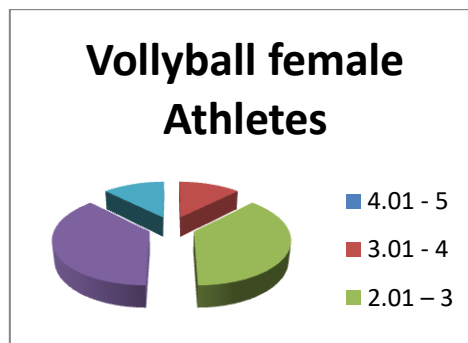

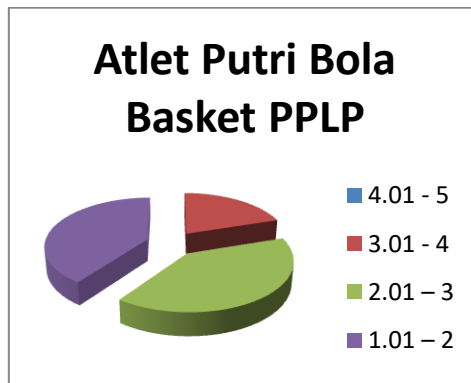**Figure1.Graph of volleyball female athletes of PPLP**

Figure 2. Histogram of female basketball athlete of PPLP

In detail, the physical condition of Silat PPLP and PPLM Riau Province athletes in 2018, as follows:

Sit and Reach
Data analysis for female athletes in Riau Province PPLP Volleyball Ball in 2018 obtained that the lowest score (minimum) 1, the highest score (maximum) 3, and the mean (mean) 2,125, standard deviation (SD) 0.83. Data analysis for female athletes in Riau Province PPLP Basketball in 2018 obtained that the lowest score (minimum) 1, highest score (maximum) 2, mean (mean) 1.6, standard deviation (SD) 0.547

Table 1.Data analysis for female athletes in Riau Province PPLP Volleyball Ball

STATISTIC	Post-Test
Sample	8
Mean	2,125
Standard Deviation	0.83
Minimum	1
Maximum	3

Table 2.Data analysis for female athletes in Riau Province PPLP Basketball

STATISTIC	Post-Test
Sample	5
Mean	1.6
Standard Deviation	0.547
Minimum	1
Maximum	2

Sit Up

Analysis of the data of Riau Province PPLP Volleyball female athletes in 2018 obtained that the lowest score (minimum) is 1, the highest score (maximum) is 3, and average (mean) is 1,375 with standard deviation (SD) of 0.744. Data analysis of Riau Province PPLP Basketball Ball female athletes in 2018 obtained that the lowest score (minimum) is 1, highest score (maximum) is 1, and mean (mean) is 1 with standard deviation (SD) of 0.

Table 3.Data analysis for female athletes in Riau Province PPLP Volleyball Ball

STATISTIC	Post-Test
Sample	8
Mean	1,375
Standard Deviation	0.744
Minimum	1
Maximum	3

Table 4.Data analysis for female athletes in Riau Province PPLP Basketball

STATISTIC	Post-Test
Sample	5
Mean	1
Standard Deviation	0
Minimum	1
Maximum	1

Push Up

Analysis of the data for the Riau Province PPLP Volleyball in 2018 obtained that the lowest score (minimum) is 1, the highest score (maximum) is 2, the mean (mean) is 0.875 with the standard deviation (SD) of 0.640. Whilst, data analysis of Riau Province PPLP Basketball Ball female athletes in 2018 obtained that the lowest score (minimum) is 1, highest score (maximum) is 3, mean (mean) is 2with standard deviation (SD) of 1.

Table 5.Data analysis for female athletes in Riau Province PPLP Volleyball Ball

STATISTIC	Post-Test
Sample	8
Mean	0.875
Standard Deviation	0.640
Minimum	1
Maximum	2

Table 6.Data analysis for female athletes in Riau Province PPLP Basketball

STATISTIC	Post-Test
Sample	5
Mean	2
Standard Deviation	1
Minimum	1
Maximum	3

Ilinois Agility Run

Whilst, data analysis for Princess PPLP Volleyball of Riau Province in 2018 obtained that the lowest score (minimum) is 2, the highest score (maximum) is 5 with a mean of 2.87 and standard deviation (SD) of 0.991. Furthermore, for Basketball Ball female athlete in 2018 obtained that the lowest score (minimum) is 3, the highest score (maximum) is 5, and meanis 3.6 standard deviation (SD) of 0.894.

Table 7.Data analysis for female athletes in Riau Province PPLP Volleyball Ball

STATISTIC	Post-Test
Sample	8
Mean	2.87
Standard Deviation	0.991
Minimum	2
Maximum	5

Table 8.Data analysis for female athletes in Riau Province PPLP Basketball

STATISTIC	Post-Test
Sample	5
Mean	3.6
Standard Deviation	0.894
Minimum	3
Maximum	5

Vertical Jump

For the Volleyball female athletes of Riau Province in 2018, the lowest score (minimum) is 3, the highest score (maximum) is 4 with a mean of 3.87 and standard deviation (SD) of 0.353. Whilst for female Basketball Ball athletes the lowest score (minimum) is 3, the highest score (maximum) is 4 with mean (mean) of 3.20 and standard deviation (SD) of 0.447.

Table 9.Data analysis for female athletes in Riau Province PPLP Volleyball Ball

STATISTIC	Post-Test
Sample	8
Mean	3.87
Standard Deviation	0.353
Minimum	3
Maximum	4

Table 10.Data analysis for female athletes in Riau Province PPLP Basketball

STATISTIC	Post-Test
Sample	5
Mean	3.20
Standard Deviation	0.447
Minimum	3
Maximum	4

Bleep Test

Data analysis showed that the lowest score (minimum) is 1 and the highest score (maximum) is 4 with the mean of 2.25 and the standard deviation (SD) of 0.886. These data are for Basketball female athletes of Riau Province PPLP in 2018. Whilst for Vollyball female athletes, it is obtained that the lowest score (minimum) is 2, the highest score (maximum) is 5 with a mean of 3.20 and standard deviation (SD) of 1.09.

Table 11.Data analysis for female athletes in Riau Province PPLP Volleyball Ball

STATISTIC	Post-Test
Sample	8
Mean	2.25
Standard Deviation	0.886
Minimum	1
Maximum	4

Table 12.Data analysis for female athletes in Riau Province PPLP Basketball

STATISTIC	Post-Test
Sample	5
Mean	3.20

Standard Deviation	1.09
Minimum	2
Maximum	5

Running 300 meters.

Data analysis for this running 300 m: the lowest score (minimum) is 1 and the highest score (maximum) is 1 with a mean of 1 and standard deviation (SD) of 0 (female Volleyball). Whilst for female Basketball as following: the lowest score (minimum) is 1 and the highest score (maximum) is 1 witha mean of 1 and standard deviation (SD) of 0.

Table 13.Data analysis for female athletes in Riau Province PPLP Volleyball Ball

STATISTIC	*Post-Test*
Sample	8
Mean	1
Standard Deviation	0
Minimum	1
Maximum	1

Table 14.Data analysis for female athletes in Riau Province PPLP Basketball

STATISTIC	*Post-Test*
Sample	5
Mean	1
Standard Deviation	0
Minimum	1
Maximum	1

20m sprint

For the female Volleyball athletes, the lowest score (minimum) is 3 and highest score (maximum) is 5 witha mean of 3.62 anda standard deviation of 0.916. For the female Basketball athletes, the lowest score (minimum) is 3, highest score (maximum) is 4 witha mean of 3.40 and standard deviation (SD) of 0.547.

Table 15.Data analysis for female athletes in Riau Province PPLP Volleyball Ball

STATISTIC	*Post-Test*
Sample	8
Mean	3.62

Standard Deviation	0.916
Minimum	3
Maximum	5

Table 16.Data analysis for female athletes in Riau Province PPLP Basketball

STATISTIC	*Post-Test*
Sample	5
Mean	3.40
Standard Deviation	0.547
Minimum	3
Maximum	4

Squat Jump

For the female Volleyball athletes, the lowest score (minimum) is 2, the highest score (maximum) is 5 with the mean of 3.87 and the standard deviation (SD) of 1.24. For the female Basketball athletes, the lowest score (minimum) is4 and the highest score (maximum) is 5 witha mean of 4.80 and standard deviation (SD) of 0.447.

Table 17.Data analysis for female athletes in Riau Province PPLP Volleyball Ball

STATISTIC	*Post-Test*
Sample	8
Mean	3.87
Standard Deviation	1.24
Minimum	2
Maximum	5

Table 18.Data analysis for female athletes in Riau Province PPLP Basketball

STATISTIC	*Post-Test*
Sample	5
Mean	4.80
Standard Deviation	0.447
Minimum	4
Maximum	5

4. Conclusion

Based on the results and discussion it can be concluded that the results of the physical condition data of PPLP Volleyball athletes and PPLP basketball in Riau Province in 2018 are as follows: Physical condition of PPLP Volleyball Women's athletes in Riau Province in 2018 are in GOOD category with a percentage of 12.5%, ENOUGH category is 3 people with a percentage of 37.5%, the LESS category there are 3 people with a percentage of 37.5, and the category is VERY LESS there is 1 person with a percentage of 12.5%. While the physical condition of PPLP Women's Basketball athletes in Riau Province in 2018 is in the GOOD category there is 1 person with a percentage of 20%, there are enough categories of 2 people with a percentage of 40%, the LESS category there are 2 people with a percentage of 40%, while the category is VERY LESS there is no . Thus, the condition of PPLP Women's Basketball Ball athletes is better than the condition of PPLP Women's Volleyball athletes.

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