

**STATISTICS SKILLS OF MALE ATHLETE VOLLEYBALL TEAM
YOGYAKARTA REGION TOWARDS
NATIONAL EVEN (PON) 2016**

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Abstract

Statistical data to be observed or recorded by these researchers will be used as study materials with a coach to support the preparation and implementation of a championship team towards the National Even. Research results obtained and carried out the study it can be concluded that the skills ability of the athlete's volleyball Yogyakarta Special Region prepared and also competed in the National Games in 2016 have the following capabilities: The ability Recive serve volleyball team in the championship volleyball at the National Games (PON) in West Java Less shows in categories which mean: 58.33%. While ideally the skills ability receives serving volleyball team should be above 80%. Passing Ability Top or Setup athlete's volleyball team in the Yogyakarta Special Region of PON indicates which category fairly average: 65%. While ideally the ability of the athlete in the event that is above 80%. Ability Smash volleyball team Yogyakarta Special Region championships National Games in 2016 in the category of less than average: 51%. The ideal is above 80%. Block ability volleyball team Daerah Istimewa Yogyakarta in 2016 in the category of self, which is the average: 51%. While ideally to block the ability of 60% ability Serve's volleyball team Daerah Istimewa Yogyakarta show less categories, namely the average 51.81%. While ideally ideal for serving ability is above 70%. The results were describe the most important factor is the psychological factor athlete, where athletes volleyball team Yogyakarta Special Region have less hours to play or try out and try in.

Keywords: Statistics, Volleyball Skills

INTRODUCTION

Technological developments in a volleyball game today is more advanced, this is evidenced by the many media or gadgets that are used in the process of training and competition or game. Some tools or gadgets that already exist do indirectly contribute significantly to the process of training and competition. Expectations of the development of technology in the game of volleyball are expected to further advance the development also volleyball in the world. Some countries are using technology in the process of training or during a match we can observe the results, so that our country should also adopt some of the technologies that can be applied in the volleyball national team and local estuary capability makes volleyball Indonesia par with other Asian countries such as Thailand, Japan, China, Qatar and Australia. The reality at this point in the area, namely statistics team, especially in the sports world has not been significantly exploited or used. In fact, if we see tremendous benefits should though statistics team must have a team to support valid data and appropriate analysis to see the ability of the team that is prepared to face the competition, namely when practicing.

At the time of the competition or match the benefits of statistics to help the team coach to see who will face an opponent's abilities to apply the tactics in the match. Importance of statistical benefit in a volleyball game is supposed to be followed up with the assistance or the need statistics team in contingent prepared to face either event PON, or other national events. In October 2016, this national event National Sports Week (PON) will be held in West Java, where each region would

represent a contingent that qualifies for the event Pre-PON. Volleyball team Yogyakarta Special Region in this regard yesterday's men's teams that qualify for Sports Week (PON) after facing tough teams in Pre-PON including Central Java, Jakarta and Banten. Results in a Pre-PON with a runner-up, the volleyball team Yogyakarta Special Region entitled to have a ticket to the National Games in West Java. Several obstacles already faced by the men's volleyball team Yogyakarta, in addition to not be a sport in the featured category and is funded by the Indonesian National Sports Committee DIY area, in addition to follow the championship of the National Sports Week each athlete has to pay 5.6 million to administrative costs and fees for in West Java.

Need to be addressed and also realized that in theory and reality that athletes should be given an appreciation for the power struggle and hard work in practice and also indirectly bring the good name of the area, have to spend for costs represent the area in the national event. It is highly inappropriate, it is necessary to change the system of sports in Yogyakarta. Last Achievements at the National Games in Riau men's volleyball team lost a large 8, which is the material then the team Yogyakarta Special Region is still dominated by young athletes who still less experience. In the year 2016, the material is pretty good team then carried to the target in the final then hopes to be realized, the support of the parties one team stats expected by the training team can be realized.

METHOD

Statistics

1.1 Understanding Statistics

a. Etymologically

The word is derived from the statistics the states is derived from the Latin meaning of the Word equation has stats that comes from the United Kingdom or from the Netherlands state said. At first the word "statistics" is defined as a collection of material information (data), whether tangible numbers (quantitative data) and that intangible number (important data and its usefulness to a country). However, in the development of it is limited only in the collection of the information materials in the form of numbers only Recha Seprina [1]

b. In terms of terminology

The statistics are sometimes given the notion as "statistical data" that is a collection of information that is material in the form of numbers or numbers with another term, statistics is a row or a set of numbers that shows information about a specific life activities branch. For example: statistics of agricultural statistics, population and education statistics. Thus the term with stats as quantitative data is numeric data that can give you an idea about the circumstances of the events or specific symptoms. The term statistics is also often interpreted as statistical activities. The term statistics is also sometimes intended or conceived notions as statistical methods that is certain ways that need to be taken in order to collect, compile or organize, present, analyze and provide interpretation against the set of material information which is a number such that the collection of material information which is a number that "speak" or can give sense and meaning. The term statistics, adults can also be given as the science of statistics. The science of statistics is the science that studies and develops the scientific stages that exist in the activity statistics.

Categorization Statistics

a. Descriptive statistics

Is the statistics of its work include level ways conduct, compile or organize, process, present and analyze numerical data in order to provide a regular, concise and clear about a symptom or a specific event.

b. Statistics Inferential

Are the statistics that provide rules or ways that can be used as a tool in order to try to draw conclusions that are common of a group of data has been compiled and processed?

The functions and uses of Statistics

a. Statistical Functions

The statistics function is as a tool to manipulate, analyses and concluded the results that have been achieved in the activities of the assessment. Statistics as a science can be distinguished into two groups namely: descriptive statistics and inferential. Based on statistical classification, statistical functions are:

- 1) Function of descriptive statistics is to be able to understand, describe, explains the event or data collected in a study and did not arrive at generalizations or conclusions regarding the taking of a whole population investigated.
- 2) Function inferential statistics is to predict and control. Statistics inferential this study's conclusions regarding the withdrawal of the whole or of the population based on data or symptoms and events that exist in a research.

b. Use of Statistics

- 1) Getting a good picture specifically or generally about an overview of symptoms, circumstances or events.
- 2) Follow the development or UPS and downs concerning symptoms, circumstances or events from time to time.
- 3) Doing the testing, if the symptoms are one different from the other symptoms or not, if there is a difference it is a meaningful differences or differences occur only by chance alone.
- 4) find out if one has anything to do with the other symptoms.
- 5) Compiled the report in the form of quantitative data with regular, concise and clear.
- 6) Draw conclusions logically, appropriately take decisions and steady.

3. Statistical Data

a. The sense of Statistical Data

Statistical data is the data that the form number or numbers but not all numbers statistical data due to be called statistical data that figure must meet certain requirements that had to be the numeral indicating a characteristic of a research that is both aggregative and reflects an activity in a specific field or number.

b. Categorization Statistics

- 1) Classifications of statistical data based on nature.

on terms of numbers, the nature of the statistical data can be distinguished into two groups namely continue data i.e. The figures are statistical data is row numbers which connect and discrete data that is statistically impossible-shaped fragments.

- 2) Classifications of statistical data based on how to compose its score

a. Nominal statistical data that make up the numbers based on the specific classification or categorization. Nominal data is also called data count, is said to be so because the data was obtained by calculating.

b. Data is also called ordinal data the statistical data sequence i.e. arranging numbers based on the order of position or rank.

c. Interval's Data is statistical data where there is the same distance between things that are investigate or questioned.

- 3) Classifications of statistical data based on the shape of the number

a. Single Data is statistical data that each number is a unit (one unit), in other words a single data is statistical data that the figures are not grouping

b. Data group is the statistical data that each unit consists of a group of numbers.

- 4) Classifications of statistical data based on the source

a. The primary Data is statistical data obtained or derived from first-hand.

b. Data secondary is statistical data obtained or derived from second hand.

- 5) Classification based on time of the collection.

- a. The Data is instantaneously statistical data that reflects the State at one time only.
- b. Time in a sequence statistical data that reflects the circumstances or developments about something from one time to another time in a sequence. This data is also known as the historical data.
- c. The nature of the Statistical Data
 - 1) Relative has a value of Statistical Data or the value false. The relative value of a digit or the number value is indicated by the number or the number itself.
 - 2) Statistical Data has the real value of a number or true value. The real value of a number is a certain area in a row number that is represented by the value of the relative.
 - 3) Statistical Data has a relatively lower limit, upper limit; lower limit upper limit is real and tangible.
 - 4) Statistical Data in the shape data value is the Middle group. What is meant by the middle value is located in the middle of a row of numbers.
 - 5) Statistical Data as numerical data in the process of its calculations do not use fractional system but uses a decimal system.
 - 6) Statistical Data as numerical data. In the process of counting cannot use certain rounding system. In this connection the need expressed that although in the rounding which is located behind the decimal sign is not always the same, but basically the rounding is done up to three digits behind the decimal numbers with a note: a. If after three digits behind the decimal sign there exists a number whose magnitude of 50 or less than 50 are considered then 0. b. If the number after the decimal sign in the back there is a number which the magnitude of 51 or more, then the number 51 or number greater than 51 are considered equal to one and the number 1 is added to the number of the number 3 which is located behind the decimal sign.

Statistics in Sports

Statistic is very useful for sports achievement. Passing data, we can measure the performance of the team against opponents. Conversely, the opponent can measure our performance through statistics. Because of the nature of open and could be mutually made, the game becomes more interesting. According to Jim Albert from Bowling State University and Ruud H. Sembing of the University of Groningen, between sports and statistics had a close relationship. Not only measure the performance, in fact, the statistics can also be used to make the match simulation (fantasy games). Using statistical data is a plus for the analysis of sports, TV commentator as well. Any journalists should have the ability to analyze the match with quantitative data.

Almost all of the best sports writers have the ability to play with statistics. The development of sports science makes positioning statistics higher. The role of Physiology and science of coaching are indeed important in the achievement. You will surely remember the Miami Heat, the NBA back to back champion in 2012 and 2013. The head coach of the Heat is not a great basketball in his day. However, he was a statistician at once video man. Yes, Erik Spoelstra, Heat coach who bleeds the Philippines from the mother, years into video man. As the video interpreter, Spoelstra have a lot of time studying the performance of players and opponents. He was also expert of analyzing because during college he played as point guard.

So when Pat Riley decided Spoelstra as coach replacement, Spoelstra has already had a deadly weapon that is not owned by LeBron James, Dwyane Wade, and Chris Bosh, i.e. the ability to analyze statistics. The Indiana Pacers also have a head coach who whiz read data: Frank Vogel. Don't be surprised if Vogel also became coach of the fastest rising in the 2012/13 season of the NBA with the Indiana Pacers brought to the top of the Eastern finals competition. How the use of statistics in Indonesia? In basketball a branch of the statistics already used but still in very small scale. Only a few are using statistical data to prepare for practice or games Miranda Devayani [2]

Statistics in towards 2016 PON volleyball

The role of statistics in the sport of volleyball today are very important, in which technological developments rapidly, teams that have large funds typically use help technology to support the work of coaches on the field during practice or matches or competitions. The result is

maximum performance can also be expected to coach because it is supported by a team of supporters in particular about the athletes capability and statistical data are also opposed to a regular partner. Specific statistics in the sport of volleyball of which contain:

a. Training Data:

- 1) Data serve receive
- 2) Data serve
- 3) Data Spike (smash)
- 4) Data defense (blocks and defend)

b. Data matches:

- 1) Data capabilities serve receive
- 2) Data server capabilities
- 3) Data capabilities of attack or attack (smash)
- 4) Data defense (blocks and defend)

Based on the data team stats will deliver analysis results linked the ability of both the team and the opposing team, so the coach has a valid basis picture data to determine the decisions taken. This research is a quantitative descriptive study, which examines the statistical capabilities male athlete PON volleyball Traning Camp Yogyakarta. According Suharsimi Arikunto [3] Descriptive research is research that is intended to investigate the circumstances, conditions, or other things that have been mentioned, the results are presented in the form of a research report. The method used in this study is a survey and data collection techniques assisting with the assessment rubric. According Sugiyono [4] Population is the generalization region consisting of: objects / subjects that have certain characteristics quality and defined by the researchers to learn and then drawn conclusions. This study uses research subject is men's volleyball team Traning Camp PON 2016 amounted to 12 players. According Suharsimi Arikunto [5] "The data is all the facts and figures that can be used as material to compile the information, while the information is the result of data processing that is used for a purpose".

Data collection techniques in this study using an instrument developed by researchers. (In Appendix)Once the necessary data is collected, we then analyze the data. According Sugiyono [6] Descriptive statistics are statistics used to analyze data in ways that describe or depict the data that has been collected as it is without making inferences or generalizations apply to the public. Data analysis techniques used in this research is by calculating the mean or mean or central tendency measurements, median, mode, and standard deviation. The explanation is as follows:1) The mean, median, and modes; 2) Table inclination variables. According to Saifuddin Azwar [7] to determine the category score components used norms as follows:

Table 1. Category Score

$X < (\mu - 1,0\sigma)$	Less
$(\mu - 1,0\sigma) \leq X < (\mu + 1,0\sigma)$	Avarage
$(\mu + 1,0\sigma) \leq X$	Good

Meanwhile, to clarify the frequency distribution data dissemination in the presentation of the data, it can be presented in the form of a graph or diagram, which diagram is based on the frequency data that has been shown in the frequency distribution table.

RESULTS AND DISCUSSION

RESULTS

Based on the results of data collection during the process of training and competition also obtained the following data:

Table 2. Data capabilities PON DIY volleyball athletes during the process of training and try out:

Name	Spike	Serve	Receive serve	Block	Set Up
Antonius Adi	20	50	0	50	80
OkkySetia	80	60	80	60	0
OkkyPuji	50	50	60	50	0
IbnuSudrajat	30	50	0	50	0
Ryan Rochmansyah	40	60	0	70	0
RinoViagustama	60	50	60	50	0
AnggaAfrilianto	50	70	60	50	0
Tri AgungAriswanda	0	0	80	0	0
Faisal Asmi	0	50	0	0	50
RahmatAfri	40	50	0	50	0
WahyuAryanto	40	50	0	50	0
Yoga Ermanda R	70	50	50	50	0

Chart 1. The ability DIY volleyball athletes in the training process:

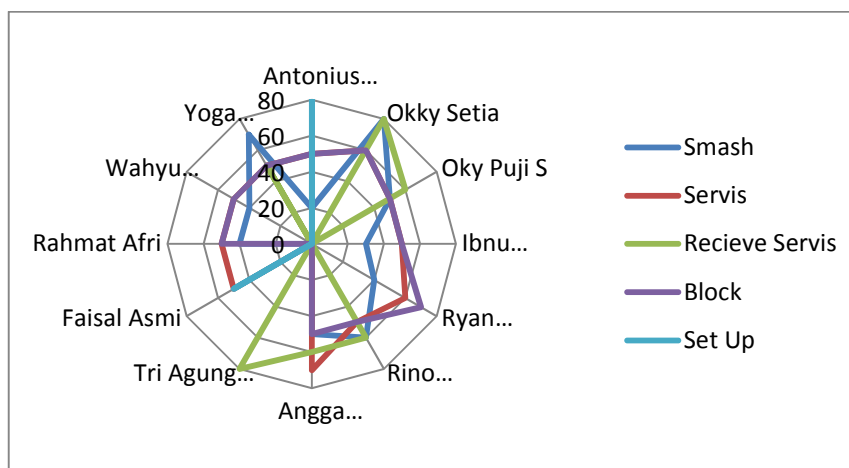
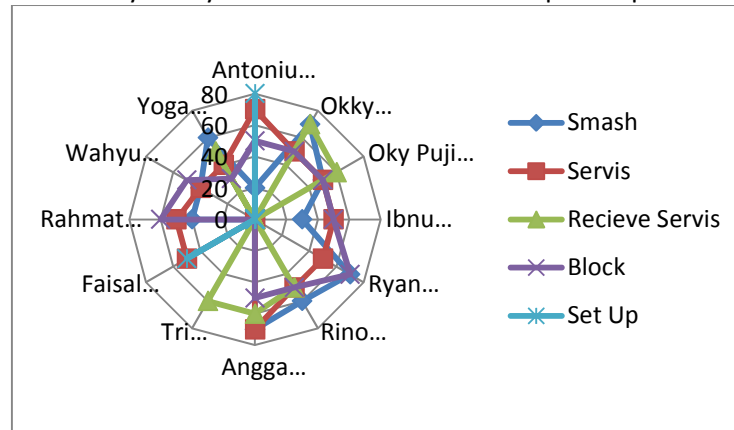


Table 3. The current data in the PON West Java Match 2016:

Name	Spike	Serve	Receive serve	Block	Set Up
Antonius AdiNugroho	20	70	0	50	80
OkkySetiaPrimadi	70	50	70	50	0
OkkyPujiSetiawan	50	50	60	50	0
IbnuSudrajat	30	50	0	50	0
Ryan Rochmansyah	70	50	0	70	0

RinoViagustama	60	50	50	50	0
AnggaAfrilianto	70	70	60	50	0
Tri AgungAriswanda	0	0	60	0	0
Faisal Asmi	0	50	0	0	50
RahmatAfriBayu	40	50	0	60	0
WahyuAryanto	40	40	0	50	0
Yoga Ermanda R	60	40	50	30	0

Chart 2. Ability volleyball athletes PON DIY Championship 2016 West Java:



DISCUSSION

Based on the research results obtained and carried out the study it can be concluded that the ability of volleyball athletes are prepared Yogyakarta Special Region and also competed in the National Games in 2016 have the following capabilities:

- 1) The ability of the Service Receive volleyball team in the championship volleyball at the National Games in West Java showed that the average in the category of Less: 58.33%. While ideally the ability receives servicing volleyball team should be above 80%.
- 2) The ability Passing Up or Setup athlete's volleyball team in the Yogyakarta Special Region of Yogyakarta Special Region PON indicates which category fairly average: 65%. While ideally the ability of the athlete in the event that is above 80%.
- 3) Ability Smash volleyball team Yogyakarta Special Region championships National Games in 2016 in the category of less than average: 51%. While the ideal above 80%.
- 4) Ability to Block's volleyball team Daerah Istimewa Yogyakarta in 2016 in the category of self, which is the average: 51%. While ideally to block the ability of 60%.
- 5) Serviceability volleyball team Daerah Istimewa Yogyakarta show less categories, namely the average 51.81%. While ideally ideal for servicing ability is above 70%.

Based on the above results, the results were mostly in the poor category and quite yet nothing in either category, this is because some of the most important factor is the psychological factor athlete, where athletes volleyball team Yogyakarta Special Region have less hours to play or try out and try in, This was evidenced by the ability of the service that is affected by myself a lot of

mistakes servicing. Another thing that affects the ability of the athlete is less intensive exercise is influenced by several athletes many who are already working and studying so that the training process less than the maximum.

CONCLUSION AND SUGGESTION

CONCLUSION

Description volleyball athlete's ability Yogyakarta Special Region prepared and also competed in the National Games in 2016 has the following capabilities:

- 1) The ability of the Service receives volleyball team in the championship volleyball at the National Games in West Java showed that the average in the category of less: 58.33%. While ideally the ability receives servicing volleyball team should be above 80%.
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SUGGESTION

- 1) For the stakeholders in this regard KONI Special Region of Yogyakarta should give more attention to the sport that need special attention both funds and readiness towards an event.
- 2) For Athletes should keep spirit of practicing and more receptive to the sports policy conditions in Yogyakarta were significantly less able to form systems with excellent sport.

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