The Effect of Five-way Hoops Target Exercise Training on Basketball Ability of Basketball Extracurricular Participants at SMK Negeri 3 Yogyakarta

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Keywords: Basketball, Skill Shooting, Exercise, A Set of Five-Way Hoop Target.

Abstract: In basketball, shooting is very decisive in scoring points. Therefore, in basketball the shooting ability must be improved properly. This research is a type of experimental research which aims at determining the effect of five-way hoops target on the basketball shooting abilities of basketball extracurricular participants. This research was conducted at SMK Negeri 3 Yogyakarta, using a sample of 14 male extracurricular participants. A pre-test was conducted by using a One Hand Set Shoot test instrument from five directions, namely: between angles of 0 -36, angles of 36 - 72, angles of 72 ° -108, angles of 108 -144 and angles of 144 -180 respectively, for 10 times. After the test, a treatment was given by playing a five-way hoops target for 16 meetings. Then the post-test was conducted by the same way of doing the previous test. From the results of the pre-test and post-test conducted, it can be hypothesized that there was an increase in the basketball shooting ability of basketball extracurricular participants.

1 INTRODUCTION

Extracurricular activities are non-formal educational activities organized by formal education jams related to the development of the interests and talents of the students. These activities are aimed at developing the potential needed by each extracurricular participant in accordance with the needed potential. The task of the trainer of these activities, in addition to fostering athletes, is to observe the potential needed by the participants, both the strengths and weaknesses. However, it would be better if these activities are compared to the existing programs, both in terms of the potential possessed and the training program provided. Therefore, a consideration whether it would need improvement or not can be taken to increase the potential needed.

In addition, monotonous, less varied, and less innovative training methods tend to make participants or athletes for the sport extracurricular activities feel bored. Thus, their abilities in other aspects are not thoroughly touched because of the monotonous trainings. Basketball, as one of sport extracurricular activities, requires continuous trainings on many aspects, such as heart and lung endurance, muscle strength, agility, and accuracy. Then, apart from those physical aspects, the psychological aspects of the athletes must also be taken into account; for instance the athletes' learning motivation must be developed and raised so that they are able to join the learning activities well. There are differences in psychological profiles between gifted and non-gifted sport participants (Kruger, Pienaar, Kemp, & Nienaber, 2013). Morgan (2015) explains that for coaches to pay attention to psychological skills is a very useful factor and helps to discover the athletes' talents for their future careers Psychological skills can help coaches improve their training practices to gain the success for athletes (Camiré & Trudel, 2014). Based on the explanation above, to improve the skills of athletes by providing a variety of exercises is really necessary. By doing so, it is expected that athletes are accustomed to all conditions and are motivated to always improve their abilities.

Based on observations conducted toward the men's basketball athletes at SMK Negeri 3 Yogyakarta located on Jalan W.R. Monginsidi No.2 Yogyakarta, it turned out that the athletes performed low shooting ability during practices. The problems

Karim Amrulloh, A., Purwanto, S. and Rithaudin, A.
The Effect of Five-way Hoops Target Exercise Training on Basketball Ability of Basketball Extracurricular Participants at SMK Negeri 3 Yogyakarta.
DOI: 10.5220/0009213700990109
In *Proceedings of the 3rd Yogyakarta International Seminar on Health, Physical Education, and Sport Science in conjunction with the 2nd Conference on Interdisciplinary Approach in Sports (YISHPESS and CoIS 2019)*, pages 99-109
ISBN: 978-989-758-457-2

were then examined and finally formulated as follows: the athletes' difficulty in shooting, in understanding the basic movements of shooting, in feeling the balls.

Furthermore, other obstacles in basketball extracurricular activities at SMK Negeri 3 Yogyakarta Special Region were found, one of which was the lack of coaches or trainers. In fact, those athletes independently without any guidance or direction from the coaches.

The existence of coaches on the training sessions is really crucial. A couple years ago when the school basketball athletes were trained by coaches, they successfully won pretty good year-to-year championships like the ones of LKS / O2SN and other events and finally could finish at the second place on the men's basketball invitations event in 2015. However, since there was no coach for this extracurricular activity, starting at the mid-2015, the basketball team of that school has never won any the basketball championship because there was no training program to be implemented on the practices.

Due to the difficulties faced by the basketball extracurricular students regarding the shooting ability, the problem limitation was conducted in an effort to establish the limits of the research problem to be studied. This limitation was also to avoid different interpretations and to give clear explanation regarding the scope of this research. Thus the problem limitation in this study referred to is the participants' lack of understanding toward the technique to be used as a means to improve their shooting ability.

In basketball, shooting is very important in scoring points. Thus, the players' shooting skills are required to be improved gradually to prepare them winning the plays (Savaş, Fatih Yüksel, & Uzun, 2018). Shooting techniques are very diverse. The forms of shooting movement techniques in basketball games include: (1) One-handed shots above the head, (2) Lay-up shots, (3) Shots produced by catching the ball and continuing to shoot, (4) Shots produced by jumping with two hands and (5) relation shots (Muhajir, 2007). Shooting should be performed from various directions in order to get more chances to collect points to win. With proper training, basketball athletes can improve their shooting techniques from various directions.

Exercise is a process of systematically preparing athletes to achieve optimum quality of achievement. By being given regular and directed, exercise is able to enhance physical and mental condition of the athletes (Suharno in Irianto, 2002). In general, most exercises in sports are directed at physical conditioning and improving technical skills also game tactics (Oudejans, Koedijker, Bleijendaal, & Bakker, 2005).

Conducting the exercises for 16 meetings can be said as a practice, because there have been permanent changes, for example muscle hypertrophy due to heavy lifting (Soegiardo, 1991). The optimal trajectory of a basketball shot depends on the shooter. This can be defined as one that maximizes the probability of a successful shot (Khlifa et al., 2013).

Based on the explanation above, it can be concluded that the more an athlete or basketball extracurricular participant does the exercise, the easier he is able to form a ball feeling so that an athlete is able to estimate the optimal trajectory of the shooting. The kind of exercise also affects a certain movement as well; in physiology it is a routine activity with a method that has a purpose. Different forms and methods cause different results (Soegiardo, 1991). Determination of target practice is the right target for shooting techniques so a training using a five-way hoops target game was provided.

A target game is one of the classifications in TGFU (Teaching Games for Understanding) which has different characteristics compared to the other forms of classification. This game will be highly determined by the own ability of each player. This needs the players' accuracy and foresight without any interference from other parties, i.e. from the opponents (Pambudi, 2010).

2 THEORITICAL REVIEW

Some theoretical reviews were done before conducting the research. Those theories were reviewed as follows:

2.1 Basketball Game

Basketball is a game played by two teams, each of which consists of 5 players (Muhajir, 2007). This type of game aims to score points as many as possible by getting the ball into the opponents' ring and to prevent the opponents to get scores. In playing this game, players can push the ball, hit the ball with open palms, and throw or dribble it in all directions on the court. Basketball is a combination of defence and attack, for that a player must master the basic techniques and skills of playing basketball to play well (Wissel, 2000). Basketball is a team game played by five players for each team, making

use of a large ball and two hands to play (Sumiarsono, 2002). The principle of the basketball game is that the ball must not be carried away, but must be bounced by running or walking and passed to teammates.

From the definitions offered by the experts above, it can be concluded that basketball is played by two teams consisting of 5 players each team. The goal of basketball is to get or score points by putting the ball in the opponents' basket and prevent the opponents from doing the same thing. The ball can be passed to teammates using operands by hands or by dribbling (batting, pushing, or tapping) several times on the floor without touching them with two hands simultaneously. Its basic techniques include foot working, shooting and capturing, dribbling, re-bounding, moving with the ball, moving without the ball, and defending.

The techniques of basketball games consist of: (1) throwing the ball (Passing), (2) proposing the ball (Dribbling), (3) shooting the ball into the basketball ring (Shooting), (4) rotating body (Pivote), (5) Exercising (Foot Work) (Abidin, 1999). He further explains some information related to basketball: (1) the ball is made of synthetic rubber wrapped in leather, (2) the weight of the ball is not less than 600 grams and not more than 650 grams, (3) the circumference of the ball is not less than 75 cm, (4) the ball is pumped with sufficient air pressure, so that if the ball is reflected from a height of 180 cm, it will bounce as high as 120 cm, (5) The ball must be completely round and flat.

While the size of the basketball court based on FIBA (Federation of International de Basketball) regulations in 2010 is as follows: (1) the length of the field is 28 m, (2) the width of the field is 15 m, (3) the distance between the field line and three point line is 0, 90 m, (4) the center circle of the field has a diameter of 3.6 m, (5) the distance of the field line to the ring board is 1.575 m, (6) and the distance of the three point line to the ring is 6.75 m.

2.2 Shooting

Shooting is one of the techniques used to get scores in a match by putting the ball into the ring. Shooting is a combination of the legs, waist, shoulders and elbows, and hands (Abidin, 1999). The thrust and control of the final shot are determined by the flexibility of the hands. The final shot is done by releasing the ball from the middle finger with a soft touch of the fingertip to make round the back of the ball and smooth shot. According to Sumiyarsono (2002), shooting is an attempt of players to put the ball into the opponent's basket by obtaining as many points or scores as possible. Meanwhile, according to Kosasih (2008), the notion of shooting is a technique to move the ball.

From some definitions above, it can be concluded that shooting is a basic technique used in basketball games, namely by putting basketball into the ring to get a score or point. It is a determinant of winning or losing a match. There is also the purpose of shooting according to (Dasamardana, 2013), that is to score some points which will determine the win or lose of a team.

According to Muhajir (2007), the shooting movements in basketball games include: (1) One-handed shots above the head, (2) Lay-up shots, (3) Shots produced by catching the ball followed by shooting (Lay-up), (4) Jump shots with two hands and (5) Relation Shots. According to Kosasih (2008), there are seven types of shooting techniques, namely: (1) Lay-Up Shoot, (2) One Hand Set Shoot, (3) Jump Shoot (shots while jumping), (4) Free Throw Shoot (free shots), (5) Three Point Shoot, (6) Hook Shoot, (7) Runner Shoot (shots with dribbling with steps extended). Meanwhile according to Abidin (1999), there are 7 (seven) basic techniques of shooting namely:

2.2.1 One Hand Set Shot

One Hand Set Shot is often used in basketball games. To do a one hand shot is basically the same way as that used for free shots, including sight, balance, hand position, elbow adjustment, rhythm of shots and their implementation. Meanwhile, according to Kosasih (2008), one hand set shoot is a shot using one hand with another hand is placed beside the ball serving to keep the ball and compensate for the shooter's hand movements without jumping. According to Abidin (1999) one hand set shoot is a type of shooting that is often done in basketball games both in close ranges and long distance shots to get a score.

2.2.2 Free Throw

Free throw is a type of shot that requires habit, skill, concentration and confidence. Success with free shots requires the right beliefs and techniques, as well as confidence. According to Kosasih (2008), these shots are taken because of violations and done to put the ball into the ring with one point for each shot. According to Priyanto (2012), the goal of a free throw is to put the ball into the ring to score a point from behind the line of shot by taking advantage of

the opportunity given because the opposing team makes a foul.

2.2.3 Jump Shot

Jump Shot is often used by all players in basketball games. The jump shot movement must be accompanied by a jump and then at the peak of the jump shot, the ball must have been released through the arms, wrists and fingers with the whole power. Then, the ball is lifted simultaneously with the legs, back and shoulders upward. Meanwhile, according to Kosasih (2008), jump shoot is a type of shot done by adding a jump when shooting where the ball is released at the highest point of the jump. A jump shoot is carried out when the space for the shot is tightly guarded and the shot is accompanied by a jump.

2.2.4 Three Point Shot

Three Point Shot is carried out and prepared at a reasonable distance from a predetermined line, to avoid stepping on the line and to focus on the basketball hoop. According to Kosasih (2008), these shots are taken because of violations and done to put the ball into the ring with one point for each shot. Meanwhile, according to Fauzan (2011) a three-point shot is a shot with the highest points carried out from the outside of curved line and aims to get more points.

2.2.5 Hook Shot

Hook Shot has the advantage of being difficult to be blocked even by tall opponents. The hook shot is only done if the shooter is close to the basketball ring about 3 to 4 meters away. According to Kokasih (2008) the hook shoot is a shot related to the direction of the shot sideways and directs the ball towards the ring. This type of shoot needs further training, because it is an advanced shot. According to Abidin (1999) the superiority of a hook shot is a shot that is difficult to be blocked even by opponents.

2.2.6 Lay-Up

Lay-Up is done close to the basketball hoop, after slipping the ball or dribbling. To be able to make high jumps in lay-up movements, it takes speed in the last three or four steps to get the ball. According to Kosasih (2008), lay-up shot is a shot done with the 1 to 2 footsteps approaching the ring and carried out by jumping accompanied by shooting. This shoot is often used by players because the shooting distance is closer to the basketball hoop and easier to do.

2.2.7 Runner Shot

Runner Shot is lay-up shot which was made further from the basketball ring with the longer steps too. According to Kosasih (2008), this runner shot is done by the same way of doing lay-up, but taking longer starting point from the ring basket. Overall, the runner is done by the same way of doing lay-up

2.3 The Nature of Exercise

The nature of the exercise in this chapter discusses the definition of exercise, the aims and objectives of exercise, as well as the principles of exercise based on several expert theories, as described in the following section:

2.3.1 Definition of Exercise

Exercise or training, according to Irianto (2002), is a process of systematically preparing the athlete's physical condition to achieve maximum achievement. It is given regularly and directed way to improve the athletes' physical and mental condition. Meanwhile, according to Setiawan (2012), training is a process of improving the ability to exercise that contains material, theory and practice, using methods, and rules, so that its goals can be achieved well.

According to Soegiardo (1991), exercise in physiology is a routine activity given using certain methods to achieve certain goals. Different forms and methods cause different results.

From above definitions, it can be concluded that exercise is a systematic process that is carried out repeatedly in connection with a matter that wants to be learned with the aim of increasing abilities better than the previous ones.

2.3.2 Objectives of the Exercise

The purpose of the exercise or training is as a refinement of the abilities possessed by athletes. This is based on the task of the trainer according to Irianto (2002), which states that the trainer has a fairly arduous task of improving athletes as multi-dimensional beings which include physical, spiritual, social and religious aspects.

According to Irianto (2002), before a training program is implemented, it is necessary to set training objectives, which are useful for: (1)

increasing motivation to practice; (2) reminding the athletes on their responsibility to achieve the training objectives; (3) encouraging the athletes to reach higher achievement.
Setiawan (2012) adds that the purpose of training is to improve the athletes' skills and performance to achieve the goals of the training.

2.3.3 Principles of Exercise

According to Irianto (2002), there are several principles which need to be considered in the training process, including:
a. Overload Principle
Super-compensation (increased performance) will occur if the load given to the exercise is just above the threshold of sensitivity or critical point, accompanied by sufficient recovery.
b. Reversible Principle
"If you do not use it, you will lose it" that is the philosophy of the reversible principle, meaning that the adaptation of the exercise that has been achieved will be reduced or even lost if the training is not sustainable and irregular. In other words, it results in detraining (decreased performance).
c. Specificity Principle
The philosophy of the principle of specificity is SAID (Specific Adaption to Imposed Demand), meaning that the exercise should be specific to the desired target.

2.3.4 Hoop Medium

According to Sudrajat (2010), the word media derived from Latin is a plural form of "medium" which literally means "intermediary" or introduction to the source of the message with the recipient of the message. Meanwhile, according to Krisjarwanto, (2015), a hoop is a ring made of rattan, while what is meant by a hoop media is a circular object or rattan rings made of wood which is used as an intermediary for communication between the teacher and students during the learning process. Hoops have suitable sizes, as follows: (a) diameter: 80-90 cm, (b) thickness: 8-12 mm, and (c) weight: 300 grams. Based on the description above, it can be concluded that the hoop media is a tool or media made of plastic or rattan in a circle and is useful as a tool in providing learning material so that the material can be conveyed.

2.3.5 Target Games

According to Pambudi (2010), target game is one of the game classifications in TGFU (Teaching Games for Understanding) which has different characteristics compared to other forms of classification. The success of this game will be determined by the athletes' accuracy, foresight, and accuracy without any interference from the opponents. According to Rithaudin & Saryono, (2012), target games are games where the players will get a score if a ball or other similar projectile is either thrown or hit with direction to achieve a predetermined target. Meanwhile, Krisjarwanto (2013) explains that "*in target games, players score by throwing or striking a ball to a target*". The target game is a game which requires concentration, calmness, focus, and high accuracy in the game.

Based on the description above it can be concluded that target game is a form of game that relies on a good level of accuracy and foresight so that the players will get a score if the object used as a tool to play can hit the target correctly.

According to Mitchell et al in Pambudi (2010), it is explained that the players will get a score if a ball or other similar projectile is thrown or hit with direction on a predetermined target, i.e. the fewer blows to the target the better. In addition, there are also several forms of target games which are commonly done, e.g. archery, golf, bowling, billiard, snooker with various modifications (Pambudi, 2010).

Basically the target game requires accuracy, foresight, estimation/ feeling, and high concentration so that in doing the game the target is achieved with a lot of scores. In addition, the right tactics to hit the target can be predicted with frequent target aiming exercises including: archery, gate ball, wood ball, darts, bowling, and golf. According to Krisjarwanto (2015), the hoop target game is a game which uses the hoop media. The players will score a point if the thrown and hit ball with direction on the hoop target has been done. In addition, the hoop target game is as intermediate shooting or hitting practice using the distance specified in the form of modification. Meanwhile, Johnson (2010) explains that "*A game target, for use in conjunction with a thrown article, comprises adjacent upper and lower hoop members and has aligned vertical axes and horizontal axes*". The target game used in this study was a modification of the hoop which can change its position on the vertical and horizontal axes by adopting the development of previous research.

According to Dasamardana (2013), in basketball, the game is divided into two areas related to points namely 1) shots with a point of 2 in the area of 2 points within 4-5 meters, and 2) shots with a point of 3 outside the area of 3 points. Both have different

areas, but there is a shot that is worth 1 point, which is a penalty shot done if something goes wrong and the referee gives a penalty in the form of a penalty shot.

Here is a picture of the students' angle to take a photo shoot.

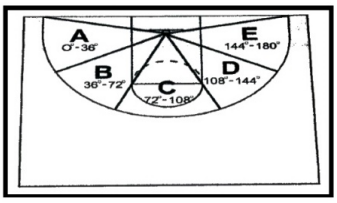

Figure 1: Shooting Position from Five Directions.

One-Way Horizontal Position Target Game. Participants play the game with the hoop media in a horizontal position. Then, each participant shoots from one direction or the area between the angles of 72 ° -108 °, from a 2-point area with a distance of 4-5 meters.

Five-Way Horizontal Position Target Game. Participants play the game with the hoop media in a horizontal position. Then each student shoots from five directions: between 0 ° -36 ° angles, 36 ° - 72 ° angles, 72 ° -108 ° angles, 108 ° -144 ° angles and 144 ° -180 °angles. The shooting was done 10 times divided by 2 sets from with a distance of 4-5 meters.

One-Way Vertical Position Target Game. Participants play the game with the hoop media in a vertical position. Then, each participant shoots from one direction or the area between the angles of 72 ° -108 °, from a 2-point area with a distance of 4-5 meters.

Five-Way Horizontal Position Target Game. Participants play the game with the hoop media in a vertical position. Then each student shoots from five directions: between 0 ° -36 ° angles, 36 ° - 72 ° angles, 72 ° -108 ° angles, 108 ° -144 ° angles and 144 ° -180 °angles. The shooting was done 10 times divided by 2 sets from with a distance of 4-5 meters..

3 METHOD

This research is conducted with the aims to produce a study (treatment) as many as 16 times a meeting of something to be discussed, this research was conducted by Soegiardo (1991), by trying as many as 16 times the meeting can already be discussed, because there have been completed changes, for example hypertrophy due to heavy lifting.

According to Sugiyono (2014), the experimental method can be interpreted as a research method used to search for certain studies against others under controlled conditions. The purpose of this study was to identify the effect of target training on the participants' shooting ability. The research design is One Group Pretest and Posstest Design, namely research that does not use a comparison group before making preparations prior to the implementation/ intervention given (Guntur, 2012). Schematically, it can be written into formula 1 below.

$$01—X—02 \quad (1)$$

Notes: 01 = Pre-test using 5-way shooting 10 times from each angle. X = The group that is treated with one-way horizontal position hoops, one-way horizontal position hoops, one-way vertical hoops target, and hoops vertical position of five directions. 02 = Post-test using 5-way shooting 10 times from each angle.

Thus this experimental research was intended to get a picture as it is about the effect of the target training on the shooting ability of basketball extracurricular participants at SMK Negeri 3 Yogyakarta.

To achieve the objectives of this study, it is necessary to know in advance the research variables, because the variables are something that will be the object of research which play a role in the event to be measured. According to Sugiyono (2014), the definition of a variable is basically something which is determined to be studied in order to obtain its information. Meanwhile, according to Suryabrata (2012), the term variable can be interpreted in different ways. In this paper variables can be interpreted as everything that will be the object of research observation. While in this study there are 2 variables, namely: (1) Target Exercise (Independent Variable), A definition of training according to Irianto (2002) is a process to systematically prepare the athletes' condition to reach maximum achievement. It is usually given regularly, and in directed way to enhance the athletes' physical and mental condition. While the hoop target game is a game which uses accuracy, foresight and speed by making use of hoop media as a tool or means to play. Therefore, it can be explained operationally that the game of the hoop target is the systematic process of training to achieve an improvement in the quality of shooting movements to be better than it

was before. This target game was carried out as many as 16 meetings covering 4 types of exercises namely: horizontal one-way horizontal, one-way horizontal target position training exercise, one-way vertical position hoop target exercise, five-way vertical position limited hoop target exercise; (2) Shooting Ability (Dependent Variable), The operational shooting ability can be shown by the ability of a child or basketball extracurricular participant to put the ball into the basketball hoop within 30 seconds. The shooting was done 10 times divided by 2 sets done from 5 different directions, as follows: between 0 ° -36 ° angles, 36 ° - 72 ° angles, 72 ° -108 ° angles, 108 ° -144 ° angles and 144 ° -180 ° angles respectively for each participant from the 2-point area at a distance of 4-5 meters from the basketball hoop.

According to Sugiyono (2013), population is an area consisting of objects / subjects which have certain qualities and characteristics to be studied and then to draw conclusions. The population in this study were basketball extracurricular participants of SMK Negeri 3 Yogyakarta, totalling 14 participants.

The instrument of this research was a test of ability to shoot from different positions or angles before and after being given treatment. This research instrument is a type of experimental research using a shooting test which in its implementation, the shooting was carried out 10 times divide by 2 sets done from 5 directions, namely: between 0 ° -36 ° angles, 36 ° - 72 ° angles, 72 ° -108 ° angles, 108 ° -144 ° angles and 144 ° -180 ° angles. Each participant shot from the 2-point area with a distance of 4-5 meters from the basketball hoop. The test scores were obtained from the in balls only. Finally, the score results on the test before being given treatment will be compared to those after being given treatment.

3.1 Data Collection Technique

Data collection techniques used in this study were tests (tests of shooting as many as 10 times opportunity from 5 different directions or areas, namely: between 0 ° -36 ° angles, 36 ° - 72 ° angles, 72 ° -108 ° angles, 108 ° -144 ° angles and 144 ° -180 ° angles respectively for each participant from the 2-point area at a distance of 4-5 meters from the basketball hoop before and after being treated. There are 2 types of data collected in this study.

Pre-test Collection Techniques, Pre-test data were obtained by using a shooting test from 5 different directions; between 0 ° -36 ° angles, 36 ° - 72 ° angles, 72 ° -108 ° angles, 108 ° -144 ° angles and 144 ° -180 ° angles, 10 times 2 from each angle. There is also a sequence in getting research data as follows: (1) Participant lined up into 2 lines sharing, praying, getting explanation of training materials; (2) Participants did warm up activities; (3) Participants were divided into 2 groups and each group conducted a series of shooting tests from five angles 10 times 2 from each angle according to instructions instructed by each participant (there were 2 participants); (4) Participants conducted a series of shooting tests from five angles using one hand set shoot 10 times from each angle; (5) The in balls are recorded by each participant (there were 2 participants); (6) After all participants did the shooting, participants rested for approximately 5 minutes. (7) Then, they did the same pre-test with the same plot; (8) After conducting the test, the participants cooled down, lined up, evaluated and prayed.

Post-test Collection Techniques, Post-test data were obtained by using a shooting test from 5 different directions or areas, namely: between 0 ° -36 ° angles, 36 ° - 72 ° angles, 72 ° -108 ° angles, 108 ° -144 ° angles and 144 ° -180 ° angles, 10 times 2 from each angle. There was also a sequence in getting research data as follows: (1) Participants lined up while sharing, praying, getting explanation of training materials; (2) Participants did warming up; (3) Participants were divided into 2 groups and each group conducted a series of shooting tests from five angles 10 times 2 from each angle according to instructions instructed by each participant (there were 2 participants); (4) Participants conducted a series of shooting tests from five angles using one hand set shoot 10 times from each angle; (5) The in balls were recorded by each participant; (6)After all participants did the shooting, participants rested for approximately 5 minutes; (7) Then, they did the same pre-test with the same plot; (8) After conducting the test, the participants cooled down, lined up, evaluated and prayed.

3.2 Data Analysis Technique

In this study there are several steps to analyze the data, namely:

a. Data Normality Test

According to (Sugiyono, 2013), the parametric statistics work based on the assumption that the data of each variable to be analysed, is based on a normal distribution. For this reason, before the parametric statistical techniques were used, the normality of the data must be tested first.

Normality test is carried out to test whether or not the data to be analysed is normal. The test depends on the

variable to be analysed, or to be processed. According to Sugiyono (2013) data normality can be tested using Chi Square. Furthermore, the data normality testing with Chi Square is processed using SPSS 16 program. According to Arisandi (2015), the data will be said to be normally distributed if the calculated Chi Square value (X2 count) is smaller than the Chi Square table (X2 table) at the level significance α = 0.05. The sample normality was tested using the formula suggested by Sugiyono (2013) as shown in the formula 2 below.

$$\mathbf{X^2} = \sum \frac{(\mathbf{f_0} - \mathbf{f_h})^2}{\mathbf{f_h}} \quad (2)$$

Note: X^2 = Chi square, f_o = Frequency / amount of observational data (based on the data obtained), f_h= expected frequency / amount (percentage of area of each field multiplied by n), $f_0 - f_h$= Difference f_o with f_h .

b. Homogeneity Test

Homogeneity test is used to determine the obtained data were homogeneous or not. This Homogeneity was tested using the formula proposed by (Sugiyono 2013) as follows:

$$\mathbf{F} = \frac{\text{biggest variant}}{\text{smallest variant}} \quad (3)$$

Based on the results of the calculation is then compared by looking at the value of table F, if F_h is greater than F_t (F_h>F_t) then H_0 which states the difference between the two groups was rejected. In other words the two groups are not homogeneous. The significant level in table F is 5% with F table = N largest -1 (numerator) and smallest N -1 (denominator). If the F_{count} is smaller than F_{count} . F_{table} (F_{count}< F_{table}), then the variant of the data can be concluded to be homogeneous.

a. Hypothesis Testing

After normality and homogeneity tests have been carried out, to prove statistically whether a result can be said to be significant or not, namely by means of a different test (t-test), using the following formula proposed by (Arikunto, 2002) as follows:

$$\mathrm{F}t = \frac{\sum Md}{\sqrt{\frac{\sum d^2}{N(N-1)}}} \quad (4)$$

Notes: Md= Mean Differences ((M X_k – M X_e) / mean of the difference between the pre test and the post test, $\sum d^2$= Number of squares of the deviation of the mean difference, N = Subject in the sample, SD = Standard deviation of crude numbers. Hypothesis criteria are accepted if t count is greater than t table (t_{count} > t_{table}), but if t count is smaller than t table (t_{count} < t_{table}), the hypothesis is rejected, before the results of t_{count} are consulted with t_{table} with a significant level of 5%.

4 RESULT

This research was carried out in the basketball extracurricular activities at SMK Negeri 3 Yogyakarta which was located on Jalan W.R. Monginsidi No.2 Yogyakarta. The pretest was conducted on Friday 13 May 2016 and the post-test was on 14 June 2016. The treatment was carried out 16 times with a training frequency of four times a week, on Mondays, Tuesdays, Fridays and Saturdays. The subjects in this study were basketball extracurricular participants at SMK Negeri 3 Yogyakarta. The research data were collected using a close-range test (two-point shoot) from five directions or positions. The in ball will be given a point, while the out ball will be counted zero, then added up, which becomes a pretest and post-test. The results of the pretest and post-test were compared after the athletes were given treatment using a hoop target for 16 meetings. Thus, the data were obtained when conducting close-up shooting tests (two-point shootings) during the pre-test and post-test.

4.1 Data Distribution

The research that has been carried out aims at determining the effect of the target exercise on increasing basketball shooting ability of SMK Negeri 3 Yogyakarta extracurricular participants. Then, the results of the pre-test and post-test shooting ability of basketball extracurricular basketball participants in SMK Negeri 3 Yogyakarta can be described in the following section.

The results of the study were described using descriptive statistical analysis as follows. The conducted pre-test resulted in a minimum value of 16, maximum value of 31, average (mean) of 21.50, variant of 21.500, with the standard deviation of 4.637. Meanwhile, the post-test resulted in a minimum value of 18, maximum value of 34, mean of 24.93, variant of 18.841 with standard deviation of 4,431. The research finding is presented in the frequency distribution with the formula of searching for many classes = 1 + 3.3 Log N; range = maximum value - minimum value, and class length with the formula = range / many classes, (Sugiyono, 2013).

Table 1: Frequency Distribution of Shooting Ability of Basketball Extracurricular Participants at SMK Negeri 3 Yogyakarta Pre-test.

No	Interval	Frequency	Percentage
1	28>	2	14,285
2	25 – 27	1	7,142
3	22 – 24	3	21,428
4	19 – 21	4	28,571
5	<18	4	28,571
Total		14	100

Table 2: Frequency Distribution of Shooting Ability of Basketball Extracurricular Participants at SMK Negeri 3 Yogyakarta Post-test.

No	Interval	Frequency	Persentage
1	31>	2	14,285
2	28 – 30	1	7,142
3	25 – 27	4	28,571
4	22 – 24	5	35,714
5	<21	2	14,285
Jumlah		14	100

4.2 Increased Percentage of Shooting Ability

In the previous section, it is explained the descriptive statistics of the shooting ability of basketball extracurricular participants at SMK Negeri 3 Daerah Istimewa Yogyakarta using the practice of target hoops. To find out the magnitude of the improvement of the participants' shooting ability, the formula of increasing percentage was used in this research. To find out the percentage, then the following formula was implemented.

$$\boldsymbol{e}nhancement = \frac{mean\ different}{mean\ pretest} X\ 100\% \qquad (5)$$

Note: mean difference is obtained from the difference of post-test and pre-test mean. The mean of the pre-test results was 21.50 while the posttest results' mean was 24.93. After obtaining the pre-test and post-test mean values, the increase percentage can be calculated as in the following formula 6.

Known the average value of pre-test and post-test, the increase in the percentage can be calculated as follows:

$$enhancement = \frac{24{,}93 - 21{,}50}{21{,}50} X\ 100\ \% \qquad (6)$$

$$enhancement = 15{,}95\ \%$$

The results' enhancement was calculated in the percentage of 15.95%. This can be interpreted that the practice done using the hoop target game can improve the shooting ability of basketball extracurricular participants of SMK Negeri 3 Yogyakarta.

4.3 Data Analysis

The data analysis is used to answer the hypotheses that have been proposed in the previous chapter. The conducted analysis tests included the normality test, homogeneity test and hypothesis test (t test). The results of the normality test, homogeneity test and t test can be seen in table 3.

Table 3: Normality Test Results.

	Df	χ^2 table	χ^2 Value	*P*	Information
Pre-test	10	16.919	1.714	998	Normal
Post-test	9	18.307	3.143	958	Normal

The results in table 5 above describe that the shooting ability pre-test resulted in χ2value (1.714) <χ2table (16.919), so it can be concluded that the pre-test data on the participants, shooting ability were normally distributed. The post-test results were also considered normally distributed since the value χ2(3.143) <χ2table (18.307)

4.3.1 Homogeneity Test

Based on the conducted homogeneity test, it can be concluded that the variant is homogeneous since the obtained F value (1.47) <F table (4.67).

4.3.2 T test

T test in this study is intended to answer the hypotheses which have been proposed. This testing was done to determine the acceptance or rejection of the proposed hypotheses. This testing was done using t-test (paired sample t test) at a significant level of 5%.

The data analysis resulted in the value of t count (4.593)> t table (1.771), and p value (0.001) <of 0.05. These results indicate that the value of t count is greater than t table. These results mean that the research hypotheses were accepted, so that it can be concluded "there is an influence between the five-way hoop target training exercises on the shooting ability of basketball extracurricular participants at SMK Negeri 3 Yogyakarta".

5 DISCUSSION

Basketball game is a type of games played by two teams consisting of five players for each and has the goal to win the match by finding as many points as possible by getting the ball into the opponent's ring and preventing the opponent's ball from getting into his own ring. In this game, to be able to find a lot of points, the players must be able to master the shooting techniques well.

Shooting is one of the efforts to put the ball into the ring by the players to get points in the basketball game. However, shooting requires a good level of accuracy in order to put the ball into the ring as many as possible so that a lot of points can be gained.

Because shooting is one of the most important basic techniques in basketball, this research intended to improve shooting skills through the practice of five-way hoops target. The analysis on the collected data resulted in the t count value (4.593)> t table (1.771), and p value (0.001) <of 0.05. These results indicate that the calculated t value was greater than the t table which meant that the hypotheses were accepted. Therefore, it can be concluded "there is an influence between the implementation of five-way hoops target on the shooting ability of basketball extracurricular participants at SMK Negeri 3 Yogyakarta".

Furthermore, the research findings also indicated that shooting practice using the target exercise can affect the ability to shoot. The effect could be shown by the positive results with an increase of 15.95%. By applying this target practice, the extracurricular participants were trained to shoot with a large number of repetitions. As a result, their accuracy will be improved progressively.

According to Pambudi (2010), five-way hoops target is one of the game classifications in TGFU (Teaching Games for Understanding) which has different characteristics compared to the other forms of classifications. This game will be highly determined by the own ability of each player. This needs the players' accuracy and foresight without any interference from other parties, i.e. from the opponents. For the players deal with their accuracy and foresight, this target game was conducted by using the hoop media as a tool or means to play.

The implementation of this target game in this case aimed at increasing the level of accuracy and foresight. Indirectly, by using this target training exercise, participants were required to shoot with a lot of repetitions so that they became accustomed to progressively improve their speed and accuracy. Moreover, the use of the hoop as a target training medium with a larger diameter compared to the ring improved the participants' ball feeling when shooting with a large number of repetitions. For this, the shooting ability of students was expected to enhance.

6 CONCLUSION

Based on the research findings and discussions, some conclusions can be drawn as follows:

The data analysis and hypothesis testing resulted in the value of t arithmetic (4.593)> t table (1.771), and p value (0.001) <of 0.05. Therefore, it can be concluded that there is an influence between the five-way hoops target on the shooting ability of basketball extracurricular participants at SMK Negeri 3 Yogyakarta. The research Ho was rejected and Ha was accepted, that is, there was an influence between the five-way hoops target training exercises on the shooting ability of basketball extracurricular participants at SMK Negeri 3 Yogyakarta.

Besides knowing the effect of the training on the ability to influence between the practice of target hoisting game on the shooting ability of basketball extracurricular participants at SMK Negeri 3 Yogyakarta, this can be used as a guide for coaches in order to improve the quality of players to achieve desired achievements.

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