

Weight Training With a Set System Has Influential Effect Weightlifting Snatch Force Ability

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ABSTRACT

The problem in this study is the low performance of PABBSI weightlifting athletes in Tanah Datar District. The purpose of this study was to see the extent of the effect of the training system set method on the ability of the PABBSI weightlifting snatchatlet Tanah Datar District. This type of research is experimental research. The population in this study were all PABBSI weightlifting athletes in the flat land districts totaling 6 people. Sampling is determined by total sampling. Then the number of samples in this study were 6 athletes. The research instrument is the ability to weightlifting snatches. The analysis technique in this study is to use the t test. Based on the results of research and hypothesis testing, the following conclusions can be drawn: System load training exercises influence the ability of the PABBSI Weightlifting Athletes Snatch in Tanah Datar District. With a tcount of 4.54 while a ttable of 2.02. Based on the decision making, tcount > ttable (4.54 > 2.02).

Keywords: Weightlifting, Set System, Snatch Force

1. INTRODUCTION

Sports are increasingly becoming a necessity for all people. This can be seen in the rise of sports carried out starting from running in the morning until the need for achievement. One of the sports achievements that are rife today is the Weightlifting Sport. Weightlifting is a sport that competes to lift heavy loads called barbells, which are carried out with a combination of strength, flexibility, concentration, ability, discipline (very important), athletic, fitness, engineering, mental and physical strength. The word "weightlifting" is usually unofficially used as weight training. Weightlifting is a sport that is played with great power and speed techniques to control weights. This sport has a very large risk of injury if it is done not seriously.

In Indonesia, the body that houses weight lifting is PABBSI (Association of Indonesian Weightlifting and Bodybuilding). PABBSI bodies are found throughout Indonesia both in cities and in regions. In the process of fostering achievement, a weightlifting coach is required to be able to guide and train his athletes so that they can master the force techniques that are good and right, the psychological factors of athletes and a good and balanced diet are also very influential for the creation of conditions of athletes who are happy in carrying out training and producing energy maximum so that it can achieve the highest achievement possible. The training given must pay attention to the physical condition factors of the athlete. Components of physical conditions that affect the ability of the athlete's forces

include strength, explosive power, speed and flexibility. Besides these other effects are the influence of squat training, athlete's age, athlete's weight, and gender.

With the development of weight lifting and coaching in each district since the Porprov race to XII West Sumatra, many of the medal gains from the weightlifting branch helped improve performance in an area. One of them is the Tanah Datar District area, the weightlifting branch became the most gold medalist among other sports, but during the Porprov XVI race in Padang Pariaman yesterday the achievements and medals were down. In the future it is necessary to prepare for the West Sumatra Porprov to XVI race, in order to find quality athlete seeds, and the development of achievements can be done from the regional championships of youth, juniors, and seniors each year, aiming at holding championships in each region and preparation of the West Sumatra Province ProPro in XVI in in order to regenerate and foster athletes to be developed to a higher level of competition so that West Sumatra is respected at the national level.

Based on the results of observations that have been made, the ability of PABBSI Athletes weightlifters in Tanah Datar Regency is still far behind, because athletes are unable to lift weights to the maximum. This is due to weakness and frequent failures in snatches and weak athlete's leg muscles. According to Edwarsyah (2013) squat training is the main supporting exercise to increase leg muscle explosive power in the snatch force of weightlifting athletes. Whereas Front Squat and Legs

Press exercises are supporting exercises for the Clean and Jerk force. To get strong leg muscles to lift loads as much as possible athletes must have good physical condition, including the explosive power of leg muscles speed lifting weights, and concentration in lifting weights.

According to Agusta, et al (1997) in *Lifting Biadaduateknik lifting barbell* namely (1) Snatch technique, the hand holding the barbell wide 080-1000cm then the barbell is pulled over the head in one direct motion together with the body movements in a squatting position and the arms holding the barbell with the position of both elbows straight. From a squat position then the body changes to a standing position with a vertical push by both legs and arms stays straight 'supporting the barbell above the head, and (2) the Clean & Jerk technique of two kinds of movements performed sequentially and done in a short time. Clean movement is a technique to lift the barbell over the shoulder with the body prefix in a squat position, then slowly change to a standing position using the aid of pushing the legs. Followed by the Jerk force, which is bending the knees slightly while lifting the barbell up 'at the same time as lifting it, the right leg (the strongest leg) is @ in front with the position of the straight hand resting on the head.

Sukadiyanto (2011) suggested that strength is one of the most important basic biomotor components needed in every branch of sport. In order to achieve optimal performance, the strength must be increased as the basis for the formation of other biomotor components. Barbell back squat training is a type of weight training to develop and increase strength in leg muscles, and load is a basic exercise. how to do a backsquat barbell exercise that is to burden the body with barbells, with the frequency, intensity, set and duration of the exercise can have an impact on the exercise in the form of strength (strength), muscle endurance and muscle tone, and physical abilities will increase in general. Barbell back squat training can be done with a kind of training that is with a machine (smith @ machine) and free weights (freeweight), smith machine really helps to balance the load well, especially for the pulse so it can concentrate with the muscles being trained (Riadi, 2010: 146).

Exercise is an activity that is carried out systematically and planned in improving the functional body. In sports activities, exercise is useful for improving skills. Harsono (1988) states that training is a systematic process of practicing that is done repeatedly, over time increasing the amount of burden. Whereas Bompa (2000) said that training is a way to achieve the organism system improvement goals and its function is to optimize sports performance or performance.

1. Weightlifting

Weightlifting is a sport that resembles the form of weight lifting, which is equally competitive in lifting weights as heavy as possible. According to Edwarsyah (2013: 6) Weightlifting is a sport that competes to lift heavy loads called barbells, which are carried out with a combination of strength, flexibility, concentration, ability, discipline, athleticism, fitness, engineering, mental and physical strength. Weightlifting is a sport that resembles a form of weight lifting. In weightlifting there are two types of forces that are contested namely the type of snatch and the type of clean and jerk. How to play it, lifting weights from the floor without being able to bend the knees until both hands lift weights (barbells) straight above the head in a perfect standing position for a few seconds, until the jury rang the bell of the legitimate force sign is called the type of snatch force. The type of clean and jerk is an athlete lifting a barbell in two stages. First, lifting weights from the floor to the chest level in a squatting position, after a short pause to take a swing, the athlete then raises the barbell until both hands are straight above the head, in a perfect standing position for a few seconds, until the jury rings the bell for the legal force sign.

Both types of this generation can be contested one by one and calculated the acquisition of the two forces called the total force on the final result. To perform maximum force, each player is required to master basic techniques and several physical condition factors which include strength, balance, leg muscle explosive strength and hand muscle strength to lift weights.

2. Weightlifting Rules

Weightlifting competitions are held on a platform (podium). The rectangular platform is 4 x 4 meters on each side. Around the platform there is a "clear area" with a distance of 1 meter. This area must be flat and free from anything including discs (discs). During the lifter competition, wear weightlifting clothes or leotard (tight clothing). T-shirts may be worn behind costumes, sleeves do not cover the elbows, these clothes are plain, not collared. In addition to athlete costumes, lifter must wear weightlifting shoes to protect the feet and provide a stable position when stepping on the platform. Lifter also uses a belt with a width of no more than 120 mm, this belt should not be worn under a lifter costume, Edwarsyah (2013: 15-16). This belt serves to hold the waist from the risk of injury.

The start of the game starts with a withdrawal, the lifter must hold their respective numbers. Lottery numbers determine weight composition, after that the lifter carries a weight scale to determine the class of competition, the lifter is weighed in clothes only allowed to wear underwear only, witnessed by referees

who are the same sex as the lifter. Lifter who fail to be categorized according to their weight are excluded from the match. During the weight of the trainer's weight each lifter must write and sign an agreement for the first batch (snatch and clean and jerk) with the weight on the lifter card. Lifter will be given 3 (three) pass cards to get to the warm-up area before the lifter name is called.

Equipment used in a match or during weight lifting:

a. Barbell

Only barbells that meet IWF specifications and are approved for use in weightlifting matches. Barbell consists of:

1. Handlebar, the weight of the barbell for men is 20 kg and the weight of the barbell for women is 15 kg.
2. Discs / disks, discs have various color variations and sizes of weight,
3. Key

To secure discs / plates on the barbell handlebar, each bar is equipped with two keys weighing 2.5 kg each for men and women.

- a. Barbell handlebar must be filled with discs that are the biggest and heavier on the inside and the smaller ones in the next order on the outside. The discs must be arranged so that the referee can read the weight of each disc / disk.
- b. Weightlifting bar handlebar must be colored to identify the weight of each. Barbell handlebar for men is marked in blue and barbell handlebar for women is yellow. These colors are associated with discs of 20 kg and 15 kg.

The position of the referee in the weightlifting branch has quite a dominant influence, the subjective element in the match can be when the referee has to determine the winner through weight if there is a similarity between the lifters. Then the lightest weight will be taken.

3. Snatch Force Technique

Snatch force is a load that is lifted directly from the floor to the top of the head (Apriagus, 2012: 97). This snatch force is carried out directly without pause. According to Edwarsyah, et al (2013: 8) the type of snatch force is a type of force which in its implementation is fast (direct) and has 2 models in its implementation.

From the above understanding the authors can conclude, the type of Snatch force is a type of direct force without pause, two hands holding sticks as wide as 80-100 cm (adjusted to the size of the hand lifter), then pulled up over the head in one direct motion, athletes must lift weights from the floor without being able to bend the knees until both hands support the load straight above the head in a perfect standing position for a few seconds until the referee says to go down or ring the bell

in the form of a white light sign of a legitimate force and a red light if the force is invalid or failed.

According to Edwarsyah (2013: 38) the procedures or implementation of the snatch force are as follows:

- a. Barbell is placed horizontally in front of the two lifter legs.
- b. Barbell is grasped, palms facing down, then pulls or raises the barbell with one pull from the platform to both hands above the head, while stretching or bending the legs.
- c. During this movement, the barbell may slide along the thighs.
- d. There must be no other body parts besides the feet that step on the platform during this generation.
- e. Lifter may get up or stand according to the desired time from a squat or split position.
- f. Weights that have been lifted must be in a fixed or immovable position, arms and legs widened, in line or parallel to the body parts of the lifter and barbells to the platform.
- g. The referee gives the cue to lower the barbell after all parts of the Lifter's body are at rest or not moving.

2. MATERIALS AND METHODS

This type of research is experimental research. The population in this study were all PABBSI weightlifting athletes in the flat land districts totaling 6 people. Sampling is determined by total sampling. Then the number of samples in this study were 6 athletes. The research instrument is the ability to weightlifting snatches. The analysis technique in this study is to use the t test.

3. RESULTS AND DISCUSSION

1. Research Findings

- a. Initial test of Snatch ability with the System Strength Training Set

To see the ability of the PABBSI Weightlifting SnatchAtlet, Tanah Datar Regency, then the data is displayed which aims to see the initial ability before being given treatment. based on data obtained from the initial weight training test with a set system there were six samples. Based on the results of the initial test of system load training before being given treatment, it was obtained that the results of the PACBSI Weightlifting SnatchAtlet ability in Tanah Datar District had the highest score of 60, the lowest score of 40, the average score (mean) 47.67 and the standard deviation (standard deviation) 7.97. In order to be clearer the preliminary data on the ability of the PABBSI Weightlifting SnatchAtlet in TanahDatar Regency who

were given a training system load training with initial results:

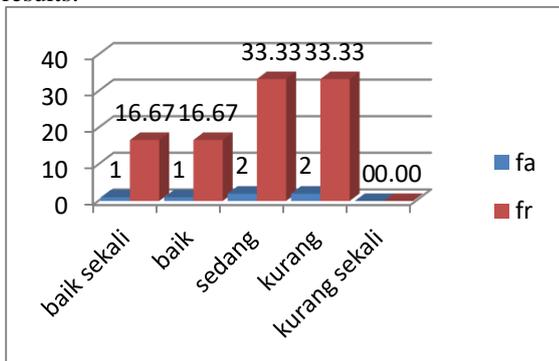


Figure 3. Histogram Results of Pre Test System for the Set of Ability Capability of Weightlifting PABBSI Tanah Datar Regency

b. Final Test of System Load Ability Snatch Ability Set

Athletes Snake in Tanah Datar District with the were the ability of the PACBSI Weightlifting highest score of 70, the lowest score of 42, the after the treatment was given, the results obtained average score (mean) of 52.83 and the standard deviation (standard deviation) 10.40. In order to be the final test results of the set system training group given weight training with a set system. Based on clearer the final test data of the ability of the final test of the treatment group is given which is PABBSI Weightlifting Athletes Snake Tanah Datar District who were given the training system load To see whether there is an effect of weight training with a set system on Snatch's ability, a training can be seen in diagram 4 below:

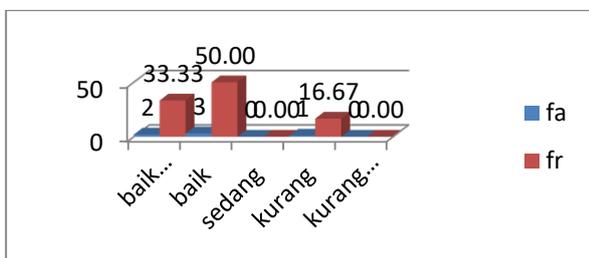


Figure 4. Histogram Results of Postest System Set of Ability Capability of Weight Lifting PABBSI Tanah Datar Regency

2. Discussion

In an effort to improve the capabilities of the Tanah Datar District PABBSI Weightlifting SnatchAtlet, training is given. In this case the exercises are carried out using the training method with a set system. This exercise will be seen whether there is an

influence of the training method on the ability of the PABBSI Weightlifting SnatchAtlet Tanah Datar District. To get good strength results you need to do programmed training. Exercise is a systematic participation aimed at increasing physical functional capacity and endurance in training. In carrying out this study to get the data the first time the initial test was conducted. This initial test aims to see the initial abilities.

For this reason, it is necessary to study the methodology and theoretical study of a research. which can be obtained through a scientific approach and made based on certain theories systematically and carried out according to the correct steps and procedures so that the results of this study can be accepted as correct. After being given physical condition exercises that support the ability of Snatch during 16 meetings there was an increase in the ability of the Snatch force from the sample. This is evident from the initial and final proficiency tests. The average total frequency of the Snatch weight training capability of the initial test set system is 47.67 to 52.83. This increase is likely due to the adaptation of an exercise and body organs that support the abilities such as the lungs, heart, circulation system, muscles order, etc.

Thus it can be concluded that this exercise has a significant effect on the ability of the PABBSI Weightlifting Snatch Athlete in Tanah Datar District. From the theoretical study presented by experts and literature which says that training with the system set method can provide an increase in one's Snatch ability.

4. CONCLUSION AND SUGGESTIONS

Based on the results of research and hypothesis testing, the following conclusions can be drawn: System load training exercises influence the ability of the PABBSI Weightlifting Athletes Snatch in Tanah Datar District. With a tcount of 4.54 while a ttable of 2.02. Based on the decision making, tcount > ttable (4.54 > 2.02).

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