Kepercayaan diri pada kemampuan smash tiga meter pada bolavoli  

Self-confidence due to ability of Three Meter Smash in Volleyball  

Arif Purnomo¹ and Awan Hariono²  

¹Graduates School of Sport Sciences Department, Universitas Negeri Yogyakarta, Yogyakarta, 55281, Indonesia  
²Faculty of Sport Sciences, Universitas Negeri Yogyakarta, Yogyakarta, 55281, Indonesia  

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Abstract  

This research aimed at determining the athlete's level of confidence in the three-meter smash on volleyball. The research method used was descriptive quantitative. The instrument used was questionnaire about athlete’s confidence with 20 questions. The subject of the research were 12 volleyball extracurricular athletes in SMA Negeri 1 Pundong, Bantul. The data technique analysis used were validity measured by using the Product Moment Correlation formula and reliability gained 0.428 using Cronbach’s Alpha. The result of the research showed that the level of confidence of volleyball athletes in SMA Negeri 1 Pundong while conducting a three meter smash was in the category: Very low, 5 persons (41.6%); Low, 3 persons (25%); High, 2 orang (16.7%); Very high, 2 persons (16.7%). The ability to smash three meters can only be done by especially in the open spiker and all-round. It is needed to support their ability in doing the three-meter smash. This study is limited with a few research subjects for those who specialize in open spikes and all rounds who usually do three meter semash. More research subjects with open and all-round specialties were reproduced.  

Keywords: self-confidence, three meter smash, volleyball.
INTRODUCTION

Volleyball is a sport that is played by twelve people on the field, the twelve people are divided into two teams, so each team on the field has six players. Regarding teamwork, volleyball is a unique and interesting game that requires solid teamwork and consistent individual decision making. Volleyball court has a length of eighteen meters and is divided into two sides of each field having a length of nine meters for the back line to the center line (line below the net). Each team's line of attack is three meters from the center line. A player in the back row must stay behind the attack line when jumping for a smash (Adin-Mariana, C., & Marilena, C., 2014).

In volleyball games the height for men's net is 2.43 meters and for women's net height is 2.24 meters. Antenna (Root) mounted on the net to mark the outside edge, any ball that touches the net outside the antenna or exits through the antenna when going to enter the ball into the opponent's field is considered invalid and will lose points for the team (Rabaz, F. C., et al., 2014). One of the elements in volleyball is attacking technique.

In determining the attack the team must create a strategy of several obstacles that have occurred in the attacks that have been carried out and determine different ways so as to reduce the likelihood of opponents to anticipate the attacks that will be carried out (Oliveira, L. d., et al., 2020). Spike is one of the more effective attack techniques (Rabaz, F. C., et al., 2014). The Spike technique is a basic technique in volleyball and one of the most important techniques for earning points. The process of spike as usually divided into three steps: 1) run-up; 2) stop-jump; and 3) stroke with swinging arm (Zhao, 2014). Smash is hitting the ball hard from top to bottom and aiming at the opponent's field. Smash is the most common form of attack used in an attempt to score points (Heydari, Soltani, & Mohammadi-Nezhad, 2018). Smash attack on volleyball is usually done by players from various positions. A smash attack can be carried out from positions 2, 3, 4 and usually the defender assists the attack from the rear
position of the 3 meter line ie from positions 5, 6, and 1 to make a smash attack (Subramanyam, 2013).

Usually a three meter smash attack carried out from behind the attack line is also influenced by the direction of the ball coming from the opponent's attack, if the attack from the opponent is directed to position five then it tends to be a three meter smash attack from position one and vice versa if the attack ball from the opponent is directed to the position one then a three meter smash attack will be carried out at position five (Budiman, 2016). The attack from the three meter smash is an attack carried out by the attacker who is in a position behind the attack line, this attack is carried out by the way the player who is behind the three meter line jumps towards the ball fed by the setter in front of the attack line and the attacker makes a jump from behind the three meter line. This attack can be an effective way to score points because it gives setters the option to attack and is often a smash attack that is more difficult to block because it is more difficult to determine the jump to block the attack (Skinner, 2013).

The components that influence volleyball athlete performance are physical, tactic, technical, and mental. Just like with physical skills, preparation of a player's mental state also has an important role in preparing to improve the athlete's performance. If the athlete's self-confidence increases, the athlete's appearance will also increase (Vuorinen, 2018). The confidence possessed by volleyball athletes especially in adolescent athletes has an important role in its success (Heydari, Soltani, & Mohammadi-Nezhad, 2018). Developing self-confidence is paramount significance in order for sports persons to attain self confidence and achieve optimal / peak performance (Subramanyam, 2013). This confidence can also affect athlete's anxiety and performance when competing. If an athlete has high self-confidence then the athlete can reduce his anxiety when competing (Marcelino, R., et al., 2014). The explanation is in line with the explanation from (Dearing, 2018) explaining that sports confidence is low, so performance in sports will also be low and
most female athletes tend to have lower confidence compared to male athletes.

Younger athletes also have higher self-confidence, a factor that supports this source of confidence comes from social support. The social support that influences the athlete's performance mostly comes from teammates and coaches. Hays (2010) explained that the profile of an athlete also affects the confidence possessed by an athlete such as the history of achievement of the athlete, and also the failure experienced by the athlete can also affect his confidence. High self-confidence also influences good performance, making athletes have positive thoughts, feelings, and behavior (Hays, 2009). The ability of athletes to perform at a certain level of the championship is influenced by their actions (chosen sporting activities, effort done, perseverance), the mindset they have, and the emotions of the athlete. The relationship between self-confidence and appearance is very strong (Schmidt, 2016).

In the research conducted Sin., et al., (2020) explains that: (1) There was a direct effect of arm muscle power on the ability of Smash; (2) There was a direct trust effect on Smash ability; (3) There is an indirect effect of arm muscle power on the ability of Smash through self confidence. Described by Hoovanna (2018) that confidence owned by Spikes, Setters and Allrounde has a very significant difference in self-confidence. Factor of anxiety, self confidence, and motivation has contributed to the performance both alone and together (Diyanto., et al., 2018). The novelty in this research is focused on the belief in the three meter smash technique or the smash technique behind the three meter line.

The strong thing to base the research on self confidence in conducting a three meter smash is that a three meter smash is considered very effective in getting points, because opponents will have difficulty in making blocks because the distance of the smash is far from the net and the block points are difficult to anticipate. There are no studies on the effect of self-confidence in relation to the three-meter smash.
METHOD

This research uses quantitative descriptive methods. The instrument in this study was a questionnaire about the athlete's confidence with the number of statements of 20 items with factors that influence in making a smash and errors that often arise in making a three-meter smash. The sampling technique uses a random sampling technique. The subjects of this study were 12 volleyball extracurricular athletes at SMA Negeri 1 Pundong, Bantul. The data analysis technique in this study uses the quantitative correlation method with a confidence questionnaire of 3 meters smash. The data collection process was carried out by distributing a confidence questionnaire to 12 volleyball athletes SMA N 1 Pundong. The data technique analysis used were validity measured by using the Product Moment Correlation formula and reliability gained 0.428 using Cronbach's Alpha with a percentage technique by using SPSS. The following instrument lattices are used in this study:

Table 1. Self-confidence Questionnaire Instruments

| Variabel | Factors       | Indicators                                                                                                                                 |
|----------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Self-confidence | Steps to smash | 1) Players jump to a 45° angle when approaching the 3 meter line. 2) Take the second step longer after the initial step. 3) Quickly move your hands over your head when jumping. 4) Bend the elbows after the arms are over the head. 5) Bring the hand up to take a punch at the highest point. 6) Hit the back of the ball with your palm when your arms are fully extended. 7) Hit the ball using foles or wrists to create a top spin. 8) The landing uses two legs and absorbs. |
| A problem that often occurs when smashing | 1) Don't make high jumps. 2) Don't hit the ball over the net. 3) Cannot aim the ball when making a smash. |

RESULT

Based on the results of research, about the volleyball athlete's confidence using the athlete's confidence questionnaire on the ability to smash three meters in volleyball, the following data are obtained:
Table 2. Athlete’s Self-confidence in Three-Meter Smash Abilities

| No | Intervals  | Category | Person | %    |
|----|------------|----------|--------|------|
| 1  | ≥ 67.5     | Very High| 2      | 16.67|
| 2  | 65.5 - 67  | High     | 2      | 16.67|
| 3  | 63.5 – 65  | Fair     | 0      | 0    |
| 4  | 61.5 - 63  | Low      | 3      | 25   |
| 5  | ≤ 61       | Very Low | 5      | 41.66|
|    | Total      |          | 12     | 100  |

Figure 1. Volleyball Athlete Confidence at SMA Negeri 1 Pundong in Conducting a Three-Meter Smash

DISCUSSION

Based on the results of the study obtained data about the confidence of athletes in doing a 3 meters smash. The higher the athlete’s confidence level, the higher the success in doing the 3 meters smash. Athletes with low levels of self-confidence will affect the success of the 3 meters smash. Besides self-confidence, there is also a specialization factor in the position of volleyball players. Athletes with specialized positions as open smash players, and all rounds will increasingly have more confidence because they are accustomed to the 3 meters smash type.

The ability to smash three meters is closely related to the ability of the smash technique which is adequate, psychic abilities, namely the confidence of an athlete, and also the specialization of the position of players in a team. Self-confidence is an important factor for athletes. Confidence will affect the outcome of the match (Rabaz, F. C., et al., 2014). The success of doing a smash depends on two main components,
namely: the smash step, and the mistakes that often occur in doing a smash. The smash step consists of eight steps, including: 1) Players jump to a 45º angle when approaching the 3 meter line; 2) Take the second step longer after the initial step; 3) Quickly move your hands over your head when jumping; 4) Bend the elbows after the arms are over the head; 5) Bring the hand up to take a punch at the highest point; 6) Hit the back of the ball with your palm when your arms are fully extended; 7) Hit the ball using wrist or wrists to create a top spin; 8) The landing uses two legs and absorbs. Mistakes that are often made by athletes when doing a smash, include: 1) Don't make high jumps; 2) Don't hit the ball over the net; 3) Cannot aim the ball when making a smash.

In doing a spike on volleyball it is necessary to pay attention to the right position to do spike, watch the flight of the ball and get under it early. f the spike is done in a hurry to position themselves when the ball arrives it will result in a bad jump and less hard spike (Crisfield, & Monteleone, 2010). To make a move, a jump in bias involves moving the high jump over the net and releasing the ball towards the opposing team’s field. Most kids learn how to execute a standing spike from 15 feet (4.58 m) behind the net. In doing this they try to hit the bottom third of the ball with the palm of their hand (Ackeman, 2014).

Specialization of the position of players in the team also affects, because the team has determined the positions that carry out a three meter attack (back row attack) is usually an all-round or open spiker, from the results of the study four people who have high confidence are players with specialized open spike and all round, as well as those with low self-esteem, the player with the quicker position or the fast ball specialty The ability of the three-meter smash technique is trained according to the actual conditions while playing (Zhao, 2014).

CONCLUSION

The conclusion in this study that the components that affect volleyball athlete performance are physical, tactic, and technique. But the main determinant of athlete performance in certain championships is
mental factors, especially the level of confidence of an athlete supported by technical, technical, physical abilities that are always trained by the athlete. Athletes who have high levels of self-confidence tend to have low levels of anxiety when competing and athletes who have low levels of self-confidence tend to have high levels of competitive anxiety.

One of the factors that support the confidence derived from social support. The social support that influences the athlete's performance mostly comes from teammates and coaches. The gender factor also influences one's level of self-confidence, most women tend to have lower levels of self-confidence compared to men and the age factor also influences the level of self-confidence of the athlete.

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REFERENCES

Ackeman, J. (2014). Gilrs Volley Ball. America: ABDO Publishing Company.

Adin-Mariana, C., & Marilena, C. (2014). Preferential and performance-related lateralization in volleyball as far as attack hit execution is concerned. Social and Behavioral Sciences, 58-62. https://doi.org/10.1016/j.sbspro.2014.03.212

Budiman, I. A. (2016). Development Model of Volleyball Spike Training. International Journal of Physical EducationSports and Health, 466-471.

Crisfield, D. W., & J.Monteleone, J. (2010). WINNING VOLLEYBALL FOR GIRLS. Amerika Serikat: Bang Printing.

Dearing, J. (2018). Volleyball Fundamentals. Amerika Serikat: Human Kinetics.

Diyanto, K., Kusuma, D. & Rustiadi, T. (2018). Correlation Anxiety, Self confidence and Motivation Toward Atlet's Performance of Tunas Volleyball Club Pekalongan. Journal of Physical Education and Sports, 7-12

Hays, K. (2010). The Development of Confidence Profiling for Sport. Human Kinetics, 373-392.
Hays, K; Thomas, O; Maynard, I; & Bawden, M. (2009). The Role of Confidence in World-Class Sport Performance. *Journal of Sports Sciences*, 1185–1199. https://doi.org/10.1080/02640410903089798

Heydari, A., Soltani, H., & Mohammadi-Nezhad, M. (2018). The effect of Psychological skills training (goal setting, positive self-talk and Imagery) on self-confidence of adolescent volleyball players. *Pedagogy of Physical Culture and Sports*, (4). https://doi:10.15561/18189172.2018.0404.

Hoovanna, S. (2018). Importance of self-confidence on bio-motor variables among women volleyball players. *International Journal of Yoga, Physiotherapy and Physical Education*, 188-189

Marcelino, R; Alfonso, J., Moraes, J.C., & Mesquita, I. (2014). Determinants of Attack Players In High-Level Men's Volleyball. *Kinesiology*, 234-241.

Oliveira, L. d., Moura, T. B., Rodacki, A. L., Tilp, M., & Okazaki, V. H. (2020). A systematic review of volleyball spike kinematics: Implications for practice and research. *International Journal of Sports Science & Coaching*, 1-17. https://doi.org/10.1177/1747954119899881

Rabaz, F. C., Castuera, R. J., Arias, A. G., Echeverría, C. F., & Arroyoa, M. P. (2014). Self-confidence, perception of ability and satisfaction of the basic psychological need of competence in training stages. *Procedia - Social and Behavioral Sciences*, 682–685. https://doi.org/10.1016/j.sbspro.2014.04.372

Schmidt, B. (2016). *Volleyball Steps To Success*. America: Human Kinetics.

Sin, T.H., Nopianto, N., & Fardi, A. (2020). The effect of arm muscle power and confidence on the ability of the volley smash ball. *Journal of Educational and Learning Studies*, 1-6.

Skinner, B.R. (2013). The Relationship Between Confidence and Performance Throughout a Competitive Season. Utah State University: All Graduate Plan B and other Reports 285.

Subramanyam, V. (2013). Building self-confidence in athletes. *Indian Journal of Positive Psychology*, 372-374.

Vuorinen, K. (2018). Modern Volleyball Analysis and Training Periodization. University of Jyvaskyla: Sport Coaching and Fitness Testing Coaching Seminar.

Zhao, X. (2014). Research on volleyball spiking techniques based on biomechanics and kinetic analysis. *Bio Technology An Indian Journal*, 932-940.