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Training Model Based On Exercise Assistance On Smash Kedeng Sepak Takraw Skills In Pontianak City Athletes, What Impact?

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ABSTRACT

The aimed to see how training models used tools to break abilities affected Pontianak city athletes. The Research method was used Experimental research with 40 subjects. Data were collected through a preliminary test of smash ability. Data interpretation and hypothesis showed two-sample assumption with equal variances with a significance degree = 0.05. The results of the study received a t-count of 9.67 with a t-distribution table at a meaningful stage () = 5% and a table of 2.101. It is equivalent to t-count> t-table, 2.0101. In the study, there is a gap in the performance of the smash abilities in the post-test and pretest. Sixty-four percent. The calculation of win score using a simulation model focused on training aids yields a 31.64 percent impact on the potential to smash.

Keywords

exercise model, smash, Sepak takraw

Introduction

Sports are one form of initiative to raise the excellence of living in Indonesia. Intending to develop character and attitude, discipline and high sportsmanship, and enhanced achievement, It can inspire people to be healthier and better citiz ens by fostering a sense of national pride. Sports have long been an crucial part of the human body, from ancient times to the current, where human existence entails rather dynamic motions that activate health, satisfaction, and safety in life from infancy to death. Designed and constructed exercise focused on the athlete's attitude and the aims to be reached. Youth training, for instance, can differ from adult training in terms of procedures, facilities, and rules. However, since numerous Sepak takraw clubs are still in their early stages of growth, the number of variations in practice is still quite restricted.

Sepak takraw becomes a sport with a high degree of difficulty. Moving the ball on foot and must not blunder to the floor, this playing is done with a few touches including the back, shoulders and legs. The player may only done alternately and only three times the chance of either team in the game means that this sport needs a high level of balancing and movement control Any Sepak takraw player must practice fundamental skills to improve their game on both offence and defense. Hananto (2015) expressed formalized the findings of analyses and interviews conducted between the municipalities of Pontianak and Memawah at the Takraw Challenges VII Competition.

The smash has not benefited sufficiently in referring figures from its results, there is an ability to acquire several smashes on an aggregate of 15 times the probability to do a smash in each set, around 40 percent succeeds, 60 percent even declined in February 2019, at the community inter-club championship for junior high school and high school in - Pontianak city.

One of the models used in the training process is a simulation framework based on training aids, which includes different variations in tandem with the stages of the smash ability that an athlete must learn, not only on the frequency factor of the ball's entry but also by paying attention to the required smash motion mechanism and carried out with the right stages systematic.

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Nature of Motion Learning

Learning Concepts

Behavioral change as a result of experience, the most important thing is input in the form of a stimulus and output in the form of a response (Gage, Berliner, 1998), Learning is the process of acquiring new, or modifying existing ones, a series of processes associated with experiential training and situation (Schmitt, 2000), knowledge, behavior, skills, values or references (Mayer R, 2001), motion learning is a flexible term that includes motor adaptation, skill acquisition, and decision making (Krakauer & Mazzini, 2011), Learning is a process to acquire knowledge, improve skills, improve behavior, attitudes and strengthen personality (Suyoto, 2014). Continuous changes in human performance or potential performance that must occur as a result of interaction with the world (Valle I D, 2014), an individual's internal active process, where through his experience interacting with his environment causes a relatively permanent change in behavior (Deni, 2014). A process that brings together cognitive, emotional, environmental influences, to gain experience, changes in knowledge, skills, values and views of the world (Illeris, Knud, 2018) Motion learning emphasizes that skills are acquired by using specific strategies and refined through many repetitions and transfer of skills to other tasks (Horvat, 2019). Learning motion is a series of involvement processes in acquiring and perfecting movement skills that are closely related to training and experience that develops into motor development, which is a change in movement behavior that reflects the interaction of maturity of the organism and the environment (Dlis F, 2020)

Sepak takraw Smash Motor Skills

Motor skill is anyone's ability to execute physical abilities to accomplish a movement capacity in displaying motion, (Widiastuti, 2011), Identified motion according to the so-called motor learning principle, as a collection of mechanisms that, when coupled with planning or practice, result in comparatively everlasting changes in a individual's capacity to show movements skill. Sepak takraw is a activity need a high level of movement experience, as the motions in Sepak takraw include difficult movements. Takraw necessitated the use of a motor (Schmitt, 2000).

Sepak Takraw necessitates motor abilities such as strength, pace, endurance, stamina, and coordination. Smash is one of the Sepak takraw game performances that is significant in donating points if done properly and on schedule. It is also one of the movements that involve a large degree of motor ability components that are very helpful in the smash operation. (Widiastuti, 2015) pace the potential to pass in a row similarly. The pace needed to reach the ball on the foot swing is required during the smash movement. 2). Power is one aspect of motor ability that is extremely helpful in achieving a serious smash. 3). Agility is described as a person's capacity to shift direction in coordinated movements (agility). The player must be willing to pursue a ball when attempting to prevent it from crashing to the ground, and Sepak takraw must be agile to play an important role(Widiastuti, 2015). weighing scales According to Harsono, the equilibrium should keep up (Harsono, 2018).

The capacity to sustain standing the equilibrium (postural control) is dependent on the dynamic integration of vestibular structure, vision, proprioception, and locomotor system elements, and a subset of the wider principle of movement synchronization. As a result, standing posture is critical for athletic success (Hahn, 1999)

The Essence of Exercise

Lakshmi Krishnan and Siva Kumar (2013) training is an systematized, scheduled, and systematic. The pedagogical science approach on skill ability to te purpose of athletic achievement and performance enhancement in sports context competition. The whole training routine, according to Bompa and Buzzichelli (2015: 13), is planned to attain maximum presentation in critical competitions. Nossek (1982), training is a stage or period that lasts many years until the athlete. An exercise is a systematic tool for improving athletes' overall fitness by the execution of specific routines (Thompson, 1994). Training is a systematic everyday regimen of activity or workout, with the burden of training or study increasing as the number of days rises (Hanif, 2011)

Exercise Characteristics

Mylsidayu & Kurniawan (2015) recommended that the training process considered as follows: 1) an activity phase achieves a higher degree of skill

in athletics, which takes time and require proper meticulous preparation. 2) the teaching phase must be consistent and progressive. It is organized when it is done slowly, gradually, and consistently (continuous), while it is incremental when the physical is provided from easy to complex, humble to more challenging (complex), and mild to major. 3) There must be expectations and targets for each face-to-face/training session. 4) The teaching material have both theoretical and functional so that capacity comprehension and mastery is relatively everlasting. 5) Exhausting a specific approach that is the most efficient and is strategic in steps, taking into consideration the trouble aspect, the complexity of the motion, and the focus on target drill.

The Purpose of Exercise

The key goals of preparation are to help athletes develop their talents and results to the greatest degree possible. To accomplish this, four types of training are required, namely: 1) Physical fitness is essential; if an athlete is not in proper physical shape, he or she will be unable to perform the workouts correctly. The primary aim is to maximize physiological capacity and improve biomotor capacities to the maximum degree possible such that the highest milestones are also possible. 2) Technical preparation is an activity designed to develop the mobility skills used by professional athletes to perform their sport. 3) Tactic planning is an activity that encourages athletes to create interpretive or meanings. Training or tactic preparation can only be fruitful if each team member's technical skill level is perfect. 4) Mental conditioning for athletes is almost as critical as the advancement of the three variables listed above, and no substance how good the athlete's physical development, and technique. High accomplishment can not be accomplished if the mental is not improved (Harsono, 2018)

Principles of Exercise

Training is a process of positive improvement mechanism aimed at enhancing trainees' physical quality, functional capability of body tools, and psychological quality (Sukadiyanto and Muluk, 2011) Training is the most crucial element of preparing for sports competitions (Reilly, 2005). Training can be described as a set of physical or physical exercises aimed at improving specific skills and increasing energy capacity for detailed actions (Fox and Richard 1992) The primary goal of athletic training is to cultivate personality, improve physical conditions including such agility, explosive ability, and speed; efficient movement coordination; develop strategies, and strengthen mental training. Clarified eight training ideologies; individual, overload, active participation in exercise, multilateral development; restoration of origin; reversibility; and exercising. Using models and the principle of avoiding overload training (Bompa, 2015)

Consequently, exercise may be designated as a monotonous and continuous work replicated with increasing training load. Systematic preparation is a well-ordered exercise curriculum that is accepted on time and in line with a prescribed sequence, with assessment using the appropriate methods. The substantial must be presented from the easiest to the most complex and from the pretentious to the utmost difficult.

Characteristics of Youth

Adolescence is a developmental period that occurs among adulthood which involves cognitive, biological, and social-emotional changes (Santrock, 2007). In English, adolescence is referred to as adolescence, which is derived from the term adolescence, which means maturation. Adolescence is divided into three groups early adolescents (11-14 years old), middle adolescents (15-18 years old), and late adolescents (over 18 years old) (18-21 years old) (Steinberg and Silk, 2002). Divided two puberty stages: early and late adolescence. The starting of youth begins between the ages of 13 and 16. And the end of adolescence appears between the ages of 17 and 21, when a person is considered legally mature (Hurlock, 1980)

Takraw Football Playing

Sepak takraw is a old-style sport that emerged in Indonesia. It has long been developed in the country. It is also named soccer as a freedom time to go to the sea, because many citizens living near on the beach in Makassar. H historically sport reflects the nation's ethos and natural circumstances and the effects of Indonesian cultivation (Hanif, 2015). It is played circular by way of 5-10 people in Minangkabau. Sepak takraw is a typical with rattan balls (Iyakrus, 2012: 1). Southeast Asia's Sepak Takraw is a popular sport. It's played all over the world

now. In Malaysia, football means "Kick," and in Thai, "Takraw" (Kubo at al, 2016). In South East Asia, Sepak takraw means is a popular sport. In Malaysia "football" means kicking and in Thailand "Takraw." (Angels , 2010) Sepak takraw is commonly known as "Takraw," commonly known as "kick volleyball". Takraw's tournament is a combination of three football, volleyball and badminton Dervish and Wet in (Saputro and Upriadi, 2017). Sepak takraw is a popular sport in Asia, It popular around the world (Silalertdetkul, 2016). In other words, sepak takraw is prevalent sport in the world.

Sepak Takraw Smash

The smash or Rejam (Malaysian term) is the most important work movement and the last movement of the attack's work movement. Failure to smash the opponent's spaciousness will cause them to counterattack; on the other hand, success in smashing will earn the Darwis attacking team a point (Darwis, 1992). In the game of sepak takraw, smash is one of the five techniques that appeals to players. Smash is the final movement in the attack's work, and it should be learned and practiced on a regular basis. Normal, guided, growing, and repeated physical and mental burdens are used to systematically prepare athletes' species to achieve optimum quality achievement. (Suharno, 1990). Darwis and the Commander of the Bases (1992) Failure to smash the ball on the opposing team's pitch allows the opposing team to counterattack, die on their own ground, or leave the game. The effectiveness of a smash, on the other hand, will boost the defending team's numbers. As a result, the two wedges should be needed to have good smash skills. Greetings, (Hanif, 2015) Smash is a collection of movements that includes: (1) the prefix attitude, (2) repulsion, and (3) a smash (when the body is above). There are two types of smash in the Sepak Takraw game: smash rolls and straight smash. According to (Junidi and Pamot, 1997), a Kedeng smash is a type of sepak takraw smash performed with the feet, with the ball initially positioned above the player's front side. Kedeng smash is a relatively easy smash movement compared to other smash movements such as roll smashes (salto) or rotate, all of which are performed with the feet.

As a result, flank players, specifically left and right wedge, who have several opportunities to perform smashes in attacking opponents, must be well prepared to have the ability or strong smash skills. (Dt. Penghulu Basa and Ratinus Darwis, 1992). The form and motion of smash Kedeng can be defined as follows: The body adjusts the direction of the ball when it makes a smash on the back of the net, and the view adjusts the direction of the ball. 1) Smash repulsion is performed with the right foot first, followed by a straight forward swing with the left foot as a counterweight. 2) When the right foot reaches the highest range, it strikes the ball. 3) After making a smash, the feet are swung sideways or outward to form regular, continuous movements. 4) Maintain balance by positioning the body to follow the swinging arm's continued motion.

Modification of Training Aid

Athletic equipment is often changed to optimize processes, increase performance, and/or alter the degree of sophistication of exercise/training standard. (Khlifa et al., 2012) altered the basketball free-kick kinematics (free-throw) by reducing the ring diameter to that of standard basketball rings. Changes in sports equipment, according to Pellett and Lox (1998: 453), maybe due to greater self-efficacy in addition to the potential for improved performance (defined as a specific situation or form of self-confidence). Metzler (2011) observes that in the field of physical education, improvements to buildings, rooms, and regulations will provide teachers with suggestions about how to raise or decrease the level of complexity or maturity to better match students' skills. Arias et al. (2012), testing the effectiveness of scaling devices (modification of tennis balls and field size) on the acquisition of novice player abilities in the game of tennis generated positive results (Farrow & Reid, 2010).

Smash Soccer Takraw Training Model with Smash Training Aid Practicing the Kedeng smash by droopy the ball, practicing the Kedeng smash by feeding the ball themselves, practicing the Kedeng smash by feeding the ball to others, and practicing the Kedeng smash by feeding the ball to others' paws are several training strategies for developing the ability of the Kedeng smash. In addition, to enhance the practice of smash strategies, differences of the activity must be done by exploiting training supports in the form of the ball hanging extremes. The developed variety models will allow the use of a variety of training

aids. Aids are used to incorporate several alternative exercises depending on the athletes' ability level at each stage. Steps to get started, ball accuracy (impact), and smash accuracy

Sepak takraw aid training is frequently used to help students learn basic skills. Lower service drills using hanging balls, for example, would vastly improve service skills under sepak takraw (Hidayat, 2015). Another Sepak takraw preparation aid that has been advanced is a ball throwing device. The ball-launcher "Ball-Launcher," according to the results of Hidayah and Priyono's research, can be used to exercise and develop athletes' endurance when doing soccer kicks (Hidayah, Nurul, and Priyono, 2017). On the other hand, the modification of the foreign football Takraw association, especially the change of the Takraw ball believe rattan balls were first seen about 500 years ago. However, due to reduced rattan, new regulations were introduced to protect the survival of rattan. Furthermore, rattan balls are more easily split and lost in-game nets. Then, in the same shape as the rattan ball, a plastic ball appears and is still hand-woven. (Engel, 2010) distinguishes formalized Ball hanging instruments, which can be used to execute smash movements, while variations of smash drills, were used by researchers to maximize the smash training aids.

Methodology

The experimental method was used; True-experimental with One Pretest-Posttest Control Group Design (CGD). Purposive sampling was used as the sample collection method in this research, which included 40 athletes. In this analysis, the data was collected through assessments and measures. Sepak takraw is verified by two experts. Data interpretation and hypothesis checking to utilize comparative analysis methods such as the dependent sample t-test, known as the paired, and the Independent sample t-test, also known as the t-test: two-sample presumptuous equal variances, with a meaningful level = 0.05.

Results and Discussion

This analysis aimed to evaluate the impact of the smash training model based on smash aids for sepak takraw. In this analysis, 40 Pontianak City adolescents were split into two categories: 20 EG and 20 CG. The EG obtained pre-test and post-test EG data of the study, while the CG obtained of pre-test and post-test experimental. In the analysis, the outcomes of the pre-test and post-test EG and CG are used to address the formulation.

1. Data Analysis

Testing a hypothesis, it is essential to first analyze the research requirements. The criteria of testing analysis is approved by:

a. Normality test

Previously measuring the data, it is significant to measure the normality test. The normality test was used in this analysis to determine data normality. The findings details on the pre-test and post-test results are perceived in the table 1:

Table 1. Pre-test and post-test normality test results

No	Variabel	n	Lo	Ltabel	Distributio
1	Preliminary test of EG	20	0,0738	0,190	Normal
2	Final test of	20	0,1492	0,190	Normal
3	Initial of test	20	0,0821	0,190	Normal
4	Final test of	20	0,1134	0,190	Normal

b. Homogeneity

The homogeneity test is used to determine the correlation of variation between groups 1 and 2. The homogeneity test is used to ensure that if there are variations between groups studied. The discrepancy is caused by the differences in average scores. If F-count Ftable, the pretest and posttest data are considered homogeneous. The following table showed the results of homogeneity test for pre-test and post-test.

Table 3. Pretest and posttest homogeneity test results

No	variable	n	Fcount	Ftable (α=5%)	Information
1	EG	20	2,08	2,15	Homogen
2	CG	20	1,73	2,15	Homogen
3	EG & CG	20	0,88	2,15	Homogen

The findings of the EG and the final test of the homogeneous CG can be inferred. It was Based on the definition above, the three study variable data findings are homogeneous, since each of the F-

count score variables is smaller than the F-table at the level of = 5%.

2. Influence Exam

The impact test is performed on the EG and CG to determine if the future theory is approved or denied, specifically utilizing t-test review. The following table shows the effect of pre-test and post-test data based on the test estimation findings. Summary of Findings (t-test). The impact of smash training models with assistive devices.

Table 4. result of t-count pretest dan posttest EG

Exp	mean	t-count	α	t-	Informatio
Pre-test	50,15	14,95	0,05	2,10	$H_o$refused
Post-test	59,52				H_1 received

From the calculation of the EG data, t count >t.table (2,10), there are differences in the results of the smash training with the training aids.

Table 5. Result of t-count pretest dan posttest

Group	mean	t-count	α	t-table	Informa
Pre-test of EG	59,52	2,21	0,05	2.028	H_o refused
Post-test of CG	53,73	0,1492			H_1 received

t-count 14.95> t table 2.10 from the preceding table indicates that there are variations in the outcomes amid the pretest and post-test EG and the CG; the average pretest score is 50.15, and the post-test score is 59.52, implying a 31.64 percent improvement in smash abilities.

3. Increase your score

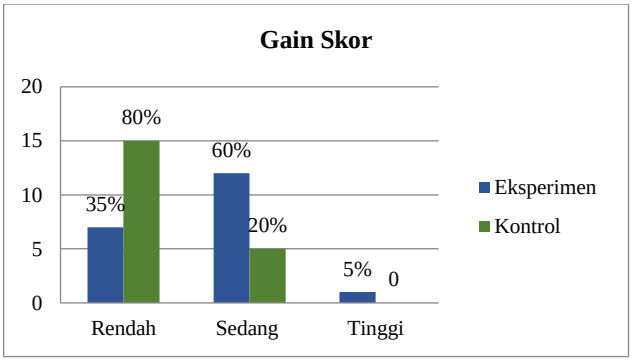
The size of the rise in smash skills can be determined by calculating the benefit score as follows:

Table 6. CG and EG obtain score results

Criteria	Exp	percentage	control	percentage
High	1	5%	0	0%
Moderate	12	60%	16	80%
Low	7	35%	1	20%

The table 6 reveals that the EG has a large category 1 topic with 5%, a modest category 12 subject with 60%, and a poor category 7 proportion of 35%, while the control group has a high category of 0% and a moderate category of 16%. Subjects are 80 percent presentation and 20% presentation in low category 1.

Graph 4. gain score on smash skills in the EG and CG



Based on the evidence presented above, it is possible to infer that the EG smash skills handled with training-based smash training in Pontianak city athletes were superior to the CG

Conclusion

Based on the data analysis of EG and CG results, where the value of the EG t-test is 11.19. It is superior than the t-table value of 1.740, assumptions may be drawn that address the testing hypothesis that the hypothesis is agreed with a 10.64 percent rise. This indicates that the alteration of the *Takraw* ball has an important impact on the learning results of Sila in the experimental class. The teaching paradigm focused on training tools has an impact on smash Sepak takraw abilities, raising them from an average value of 50.15 to 59.52 with t-count = 9.67> tt = 2.101. There is a variation in the impact of the smash training model focused on training aids on the Sepak takraw smash abilities, with an average value of 59.52, and there is a 31.64 percent improvement in smash potential. Based on the findings of studies undertaken recommended; to enhance smash abilities, a smash preparation model focused on training tools should be utilized; carrying out the training phase, the mentor is required to pay attention to the specificity of the athlete's established character; and the smash training model is carried out in conjunction with the model's phases in a structured manner.

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