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The Effect of Of Box Jump, Double Leg Speed Hops Training and Ankle-Knuckles Coordination Against the Results of Shots on Goal of the Soccer Players

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Abstract

Soccer is one of the very popular sports that is enjoyed by all ages and levels of society. Soccer players must know about the basic techniques, one of which is kicking the ball. Success in kicking the ball requires training for leg muscle power. Plyometric exercises (such as box jumps, and double leg speed hops) can be used to train leg muscle power. The purpose of the study was to determine the effect of box jump exercise, double leg speed hops and ankle-knuckles coordination against the results of shots on goal of the soccer players from SMPN 27 Padang. This research is an experimental study with a 2x2 factorial design. The population of the study was soccer players at SMPN 27 Padang totaling 32 people. Data analysis used 2x2 ANOVA and Tukey's further test at a significance level of = 0.05. The results showed that soccer players at SMPN 27 Padang who had high ankle-knuckles coordination had better shots on goal when trained with Box Jump exercises. Meanwhile, those who have low ankle-knuckles coordination have better shots on goal if they are trained with the Double Leg Speed Hops exercise. There is an interaction between training methods and ankle-knuckles coordination against the results of shots on goal of the soccer players at SMPN 27 Padang.

Keywords: *Box Jump, Double Leg Speed Hops, ankle-knuckles coordination*

INTRODUCTION

Nowadays soccer becomes one of the most popular and enjoyed by all ages and levels of society. Soccer also able to raise the image of the nation in the eyes of the world.

Achievement in sports is the result that has been achieved by someone after implementing an activity that has certain goals and objectives. Optimal sports achievements can be accomplished through good and correct coaching programs (Adzalika, Soegiyanto, & Rumini, 2019). This is not easy, because many things contribute to the success of an achievement.

The efforts of the Indonesian athletes to reach achievements in sports are becoming more thrilling. This can be seen from the increasing attention of the government and the public towards sports. To reach achievement in sports, effort is needed as stated in the Constitution No. 3 of 2005 concerning the national sports system which reads: "Sports of achievement are sports that foster and develop athletes in a planned, tiered, and sustainable manner through competitions to attain achievements with the support of sports science and technology".(Zil Isra, 2020). As one of the most popular sports by the public, an international standard soccer field must have certain criteria as set out by the Fédération Internationale de Football Association (FIFA), namely: a minimum length of 100 meters and a maximum of 110 meters and a minimum width of 64 meters and a soccer field of 64 meters. maximum 75 meters (Parrish, 2011).

The main goal of soccer is to score as many goals as possible according to the stipulated conditions. To be able to make goals, players must be agile, swift, fast, and good at controlling the ball (Little & Williams, 2005). Furthermore, soccer is a game played by kicking the ball, which aims to put the ball into the opponent's goal and defend his own goal so as not to concede the ball (Ferraz, van den Tillar, & Marques, 2017).

A soccer player must know about the basic techniques of playing soccer. The basic techniques are all movements with or without the ball that are needed to develop maximum performance with maximum power. To be able to play well, you must first master all the basic techniques of playing the game of soccer. Without mastering this, the game is less

interesting and even boring (Pratama B. A., 2018).(Asnaldi, 2020b) One of the basic techniques of football is the technique of kicking the ball, and all players must master it well.

Problem on kicking in the game of soccer is very vital, because a soccer player who is not able to kick the ball well is unlikely to be a good player either. Kicking the ball aims to (1) give the ball to a friend or pass the ball, (2) to put the ball into the opponent's goal or score a goal, (3) to revive the ball after a violation such as free kicks, corner kicks, penalty kicks and so on, and (4) to make clearing or clearing by sweeping the ball which is dangerous in its own area or in an attempt to stem the opponent's attack in its own defense area (Parrish, 2011). To find out whether a soccer player's kick is good or not, it can be seen from the ball kick indicators, namely the accuracy and speed of the ball (Majelan, Rahmani-nia, Norasteh, & Damirchi, 2011).

Many factors can affect achievement in sports activities. Sports achievements cannot be separated from the role of coaches (Dimyati, 2019). The relationship between coaches and soccer players plays a very strategic role in building success or achievement. A soccer coach is professional in his field, has a certificate and knowledge of coaching, and can handle players and teams. Besides that, coaches also help players and teams to achieve their best performance using various scientific approaches. Coaches should not stop learning and continue to learn for the betterment of themselves and their teams (Johnson, Andersson, & Fallby, 2011). Coaches must be lifelong sports learners to properly train athletes to achieve the highest levels of achievement.

A coach strives for his players and team to always experience an increase in performance. To achieve good performance, it cannot be separated from practice. The best achievements (peaks) in sports coaching are obtained through a planned preparation process in stages, directed, systematic, and sustainable(Asnaldi, 2020a).

The preparation process covers the entire process starting from the preparation of the training program, implementation of the program in the field, and evaluation of the training program. The training program is a written binding guide or guide that contains things that must be taken or implemented to achieve the goals that have been set (Budiwanto, 2012).

To achieve success, a soccer player must know the techniques in the game of soccer, such as: kicking, heading, controlling, passing, and dribbling techniques. Therefore, planned, structured and sustainable coaching, development and trials are needed.

One of the basic methods that are very important and must be mastered by soccer players is the technique of kicking the ball (shooting). To achieve maximum kick results in addition to physical condition, technique must also be considered, especially kick technique (long ball or launch kick). Mastery of basic soccer techniques, especially the technique of kicking the ball, is very important for a player so that the results of the ball kick become harder, directed, and accurate.

A soccer player must have strong legs, strong foot, strong knees, and strong legs to be able to carry a heavy body. This leg muscle strength is used when running, dribbling, and kicking the ball. The stronger the leg muscles, the stronger the kick will be. Thus, the ball that is kicked towards the goal will be increasingly difficult for a goalkeeper to anticipate, so it is expected that there will be more goals that can bring victory to a team in a match (Arwandi, Ridwan, Irawan, & Soniawan, 2020).

Success in kicking the ball requires practice. Maximum leg power is needed to have a strong and hard kick. Therefore, it is necessary to train leg muscle power. One of the training methods can be used in training leg muscle power, namely the plyometric method. Plyometric exercises contribute to improved vertical jump performance, acceleration, leg strength, and muscle strength (Wang & Zhang, 2016).

In every sport activity, muscles are the dominant body component and cannot be separated. All movements performed by humans can occur due to the presence of muscles, bones, joints, ligaments, and tendons, so that movement can occur through muscle pulling movements and the number of activated muscle fibers. Muscle explosive power is one of the elements of physical condition that is much needed in sports (Mukhtarsyaf, Arifianto, & Haris, 2019). The results of Rosmawati's research (2016) show that the explosive power of the leg muscles has a significant relationship and makes a significant contribution to the shooting ability of futsal club players at the NUSATAMA Padang Vocational High School.

In general, plyometric exercises have a very wide application in various sports

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activities, and in particular this exercise is very useful for increasing explosive power. Davies, Riemann, & Manske (2015) suggest that researchers and practitioners assume that these characteristics of plyometric exercises provide significant gains in muscle strength, thus optimizing jump performance. Fatouros, et al. (2000) added that plyometric exercises are recommended for sports that require explosive power and increase the athlete's vertical jumping ability.

Plyometric exercises include squat jumps, jumps over cones and benches, repeat triple jumps, single or double-leg hops, alternate leg bounds, depth jumps, and box jumps (Davies, Riemann, & Manske, 2015). Plyometric exercises are performed vigorously, quickly, and explosively, so that contraction, muscle relaxation, and the use of energy stores can be maximized. Therefore, it is necessary to have very fast, strong repetitions of movements, and at almost the same time between contraction and (Pratama & Sulistyorini, 2018).

Athletes aged 19-25 years who are given plyometric exercises include: squat jumps, split jumps (lounges), vertical depth jumps, jump ups, box jump marches, lateral jumps (single leg), and lateral jump over the cone (double leg). 6 weeks can increase explosive strength, speed, and agility (Baro & Sonowal, 2014).

Based on information from the teacher as well as the soccer coach of SMPN 27 Padang, the performance of the soccer team at this school has tended to decline since 2017. This is because athletes often make mistakes in kicking on goal or shooting at rival teams. According to Al Mubarok & Sukoco (2020) the game of soccer requires mastery of various basic techniques including passing, dribbling, crossing, heading, and shooting. Shooting aims to score goals against the opponent's goal, one of which requires ankle-knuckles coordination skills.

The soccer players at SMPN 27 Padang have been practicing intensively for the past 2 years. Players should have been very skilled in the basic method and handling the ball during a match. Based on initial observations during the match, players can cooperate well, and are disciplined in conducting tasks based on their position. However, at the time of kicking into the opponent's goal a lot were not on target. Players lack explosive power and poor coordination when kicking. This certainly affects the soccer performance of SMPN 27 Padang.

The training given and applied by the coach to soccer players at SMPN 27 Padang has not been maximum, so that when kicking or shooting at the goal it is not good. The research that has been carried out is to provide intensive and continuous training, and well programmed.

The selection of the right exercise method will have a positive impact on the effectiveness of the exercise to be undertaken. When viewed from the form of movement, the plyometric training method is a very appropriate training method used to improve ankle-knuckles coordination and shots on goals results.

The explosive motion character in plyometric exercises allows the physical to undergo physiological changes in the form of increasing the ability of the leg muscles. The main movements in plyometric exercises include box jumps and double leg speed hops. This study shows the training methods given to soccer players, namely plyometric box jumps, double leg speed hops and eye-foot coordination for kicking the goal.

METHODS

This type of research is a quasi-experimental research. This study cannot control all relevant variables except for some of the studied variables. The research design used is a 2 x 2 factorial design as shown in Table 1.

Table 1. 2x2 Factorial Design for Shots on Goals Results

Exercise methods \ Ankle-knuckles coordination	High (B_1)	Low (B2)
Box Jump (A_1)	A_1B_1	A_1B_2
Double Leg Speed Hops (A_2)	A_2B_1	A_2B_2

Notes:

A_1B_1 The shots on goal results of soccer players at SMPN 27 Padang who has high ankle-knuckles coordination and participates in Box Jump training

A_1B_2 The shots on goal results of soccer players at SMPN 27 Padang who has low ankle-knuckles coordination and participates in Box Jump

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training

A_2B_1 The shots on goal results of soccer players at SMPN 27 Padang who has high ankle-knuckles coordination and participates in Double Leg Speed Hops

A_2B_2 The shots on goal results of soccer players at SMPN 27 Padang who has low ankle-knuckles coordination and participates in Double Leg Speed Hops

The Research Hypotheses are:

1. The shots on goal results of soccer players at SMPN 27 Padang who took part in the Box Jump training are better than those who participated in the Double Leg Speed Hops training.
2. The shots on goal results of soccer players at SMPN 27 Padang who has high ankle-knuckles coordination and participates in Box Jump training are better than players who have high ankle-knuckles coordination and participates in Double Leg Speed Hops training.
3. The shots on goal results of soccer players at SMPN 27 Padang who have low ankle-knuckles coordination and participate in Box Jump training are better than players who have low ankle-knuckles coordination and participate in Double Leg Speed Hops training.
4. There is an interaction between training methods and ankle-knuckles coordination on the shots on goal results of soccer players at SMPN 27 Padang.

RESULTS AND DISCUSSIONS

Research result

1. Data Description

a. Data on the results of the shots on goal with the box jump training (A1)

The data obtained on shots on goal of soccer players at SMPN 27 Padang who were given Box Jump training: the highest score = 42.00, the lowest score = 32.00, average = 37.13 and standard deviation = 4.09.

b. Data on the results of the shots on goal with the Double Leg Speed Hops training (A2)

The data obtained on shots on goal of soccer players at SMPN 27 Padang who were given Double Leg Speed Hops training: the highest score = 38.00, the lowest score = 32.00, average = 34.88 and standard deviation = 2.23.

c. Data on the results of the shots on goal seen from high ankle-knuckles coordination (B1)

The data obtained on shots on goal of soccer players at SMPN 27 Padang seen from high ankle-knuckles coordination: the highest score = 42.00, the lowest score = 32.00, average = 37.50 and standard deviation = 3.89.

d. Data on the results of the shots on goal seen from low ankle-knuckles coordination (B2)

The data obtained on shots on goal of soccer players at SMPN 27 Padang seen from low ankle-knuckles coordination: the highest score = 38.00, lowest score = 32.00, average = 34.50 and standard deviation = 2.07.

e. Data on the results of the shots on goal with the box jump training seen from high ankle-knuckles coordination (A1B1)

The data obtained on shots on goal of soccer players at SMPN 27 Padang who were given Box Jump training seen from high ankle-knuckles coordination: the highest score = 42.00, the lowest score = 39.00, average = 40.75 and standard deviation = 1.50.

f. Data on the results of the shots on goal with the Double Leg Speed Hops training seen from High ankle-knuckles Coordination (A2B1)

The data obtained on shots on goal of soccer players at SMPN 27 Padang Padang who were given Double Leg Speed Hops training seen from high ankle-knuckles coordination: the highest score = 37.00, lowest score = 32.00, average = 34.25 and deviation default = 2.22.

g. Data on the results of the shots on goal with the box jump training seen from low ankle-knuckles coordination (A1B2)

The data obtained on shots on goal of soccer players at SMPN 27 Padang who were given Box Jump training seen from low ankle-knuckles coordination: the highest score = 35.00, the lowest score = 32.00, average = 33.50 and standard deviation = 1.29.

h. Data on the results of the shots on goal with the Double Leg Speed Hops training seen from Low ankle-knuckles coordination (A2B2)

The data obtained on shots on goal of soccer players at SMPN 27 Padang who were given Double Leg Speed Hops training seen from low ankle-knuckles coordination: the highest score = 38.00, lowest score = 33.00, average = 35.50 and deviation standard = 2.38.

2. Requirement Analysis Test

a. Normality test

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Testing the normality of the data of shots on goal results consists of: (1) overall data on players who are given Box Jump (A1) training, (2) overall data on players who are given Double Leg Speed Hops (A2) training, (3) overall data on players who have high ankle-knuckles coordination (B1), (4) overall data on players who have low ankle-knuckles coordination (B2), (5) data on players who are given

Box Jump training with high ankle-knuckles coordination (A1B1), (6) data on players who are given Double Leg Speed Hops training with high ankle-knuckles coordination (A2B1), (7) data on players who were given Box Jump training with low ankle-knuckles coordination (A1B2), and (8) data on players who were given Double Leg Speed Hops with low ankle-knuckle coordination (A2B2). For more details, the normality test of research data can be observed in Table 2.

Based on Table 2 the results of normality test of the entire research data group obtained $L_{observation} < L_{table}$, so it can be concluded that all sample groups came from populations that were normally distributed.

Table 2. Summary of Research Data Normality Test Results

No	Group	N	$L_{observation}$	L_{tabel}	Conclusion
1	A_1	8	0,198	0,285	Nomal
2	A_2	8	0,175	0,285	Nomal
3	B_1	8	0,127	0,285	Nomal
4	B_2	8	0,220	0,285	Nomal
5	A_1B_1	4	0,203	0,381	Nomal
6	A_2B_1	4	0,212	0,381	Nomal
7	A_1B_2	4	0,152	0,381	Nomal
8	A_2B_2	4	0,236	0,381	Nomal

b. Homogenity test

Homogeneity test was carried out on each research cell with a significance level of =0 .05. The experimental group A1, A2 and the attribute/moderator group B1, B2 were tested for homogeneity using the Variance Test, while for the four experimental design cells A1B1, A2B1, A1B2 and A2B2, the Bartlett test was used. For more details can be seen in Table 3.

Table 3. Summary of Research Data Homogenity Test Results

No	Group	X^2_{count}	X^2_{tanle} (α=0,05)	Conclusion
1	A_1 and A_2	3,35	3,79	Homogen
2	B_1 and B_2	3,53	3,79	Homogen
3	A_1B_1, A_2B_1, A_1B_2, and A_2B_2	1,51	7,81	Homogen

3. Hypothesis Analysis Test

a. First Hypothesis Test

This hypothesis test is used to find out the results of shots on goals of soccer players at SMPN 27 Padang who take part in Box Jump training are better than those who take part in Double Leg Speed Hops training. Because the data is normally distributed and has a homogeneous variance, the test used is the Tukey test as presented in Table 4.

Table 4. Summary of First Hypothesis Test Results

Means		Difference in means	Q_c	Q_t	Remarks
A_1	A_2				
37,13	34,88	2,25	4,73	3,00	Significant

On Table 4, we can see that Q_{count} = 4.73 > Q_{table} = 3.00. While the mean A1 = 37.13 and A2 = 34.88 with a difference in means = 2.25. Therefore, it can be concluded that H_1 is accepted, and H_0 is rejected. Thus, it can be stated that the shots on goal of the soccer player at SMPN 27 Padang who took part in the Box Jump training was better than the one who participated in the Double Leg Speed Hops training.

b. Second Hypothesis Test

This hypothesis test is used to find out the results of shots on goals of soccer players at SMPN 27 Padang who have high ankle-knuckles coordination and participate in Box Jump training better than players who have high ankle-knuckles coordination and participate in Double Leg Speed Hops training. Because the data is normally distributed and has a homogeneous variance, the test used is the Tukey test as presented in Table 5.

Table 5. Summary of Second Hypothesis Test Results

Means		Differences in means	Q_c	Q_t	Remarks
A_1B_1	A_2B_1				
40,75	34,25	6,50	9,66	3,26	Significant

Based on Table 5. it can be seen that Q_{count} = 9.66 > Q_{table} = 3.26. While the mean of A1B1 = 40.75 and A2B1 = 34.25 with a difference in means of 6.50. Therefore, it can be

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concluded that H_1 is accepted, and H_o is rejected. Thus, it can be stated that the shots on goal of the soccer player at SMPN 27 Padang who has high ankle-knuckles coordination and participates in Box Jump training is better than players who have high ankle-knuckles coordination and participates in Double Leg Speed Hops training.

c. Third Hypothesis Test

This hypothesis test is used to find out the results of shots on goals of soccer players at SMPN 27 Padang who have low ankle-knuckles coordination and participate in Box Jump training better than players who have low ankle-knuckles coordination and participate in Double Leg Speed Hops training. Because the data is normally distributed and has a homogeneous variance, the test used is the Tukey test as presented in Table 6.

Table 6. Summary of Third Hypothesis Test Results

Means		Differences in means	Q_c	Q_t	Remarks
A_1B_1	A_2B_1				
33,50	35,50	2,00	2,97	3,26	Not Significant

Based on Table 6. it can be seen that $Q_{count} = 2.97 < Q_{table} = 3.26$. While the mean of A1B2 = 33.50 and A2B2 = 35.50 with a mean difference of 2.00. Therefore, it can be concluded that H_1 is rejected, and H_o is accepted. Thus, it can be stated that the soccer player at SMPN 27 Padang who has low ankle-knuckles coordination and participates in Double Leg Speed Hops training is better than players who have low ankle-knuckles coordination and participates in Box Jump training.

d. Fourth Hypothesis Test

This fourth hypothesis is used to determine the interaction between training methods and ankle-knuckles coordination against the results of shots on goal of soccer players at SMPN 27 Padang. The results of the calculation of this hypothesis test can be seen in Table 7.

Table 7. Summary of 2 x 2 Analysis of Variance (ANOVA) Results

Source of Variation	DF	SS	MS	F_c	F_t
Antar Baris (b)	1	36,00	36,00	9,93	4,75
Antar Kolom (k)	1	20,25	20,25	5,59	4,75
Interaksi (bxk)	1	72,25	72,25	19,93	4,75
Dalam Kelompok (JKD)	12	43,50	3,63		
Total Reduksi	15	172,00			

The calculation results in Table 7 show that the interaction $F_c = 19.93 > F_t = 4.75$. Therefore, it can be concluded that H_1 is accepted and H_0 is rejected. Thus, it can be stated that there is an interaction between training methods and ankle-knuckles coordination on the results of shots on goal of soccer players at SMPN 27 Padang.

Discussion

1. The results of shots on goal of soccer players at SMPN 27 Padang who took part in the Box Jump training were better than those who participated in the Double Leg Speed Hops training

Based on the first hypothesis, it shows that overall, the results of shots on goal improvement score for soccer players at SMPN 27 Padang between the group given the Box Jump training is better than the group given the Double Leg Speed Hops training ($Q_{count} = 4.73 > Q_{table} = 3$,00). From this finding, it was concluded that giving Box Jump training is more efficient to improve skills of shots on goal than Double Leg Speed Hops training.

Zakaria, Mudian, & Riyanto (2018) stated that the Box Jump exercise is a form of plyometric guidance that aims to increase the strength of the leg muscles by using two leg muscles simultaneously. (Chu & Myer, 2013) suggested that the Box Jump training is a training in jumping up a box of blocks and then jumping back and forth like the initial position by using both feet together.

2. The results of shots on goal of the soccer players at SMPN 27 Padang who have high ankle-knuckles coordination and participate in Box Jump training are better than players who have high ankle-knuckles coordination and participate in Double Leg Speed Hops training

Based on the second hypothesis, it shows that the increase in shots on goal results for soccer players at SMPN 27 Padang who have high ankle-knuckles coordination and participate in Box Jump training is better than players who have high ankle-knuckles coordination and participate in Double Leg Speed Hops training. According to Faruq (2008) coordination in soccer games includes coordination of movements between hands, feet, and eyes. Prasetyo, Soegiyanto, & Irawan (2020) stated that coordination is needed by almost all sports that are competed and played.

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The level of good or bad coordination of a person's movements is reflected in his ability to carry out a movement smoothly, precisely, quickly, and efficiently. Parrish (2011) states that in the game of soccer, ankle-knuckles coordination is necessary because it will greatly support the mastery of the game. Ankle-knuckles coordination is the basis for achieving high skills in kicking, controlling the ball, and dribbling the ball.

Not all players have the same ankle-knuckles coordination. The high and low ankle-knuckle coordination that a player has will affect the player's skills. This is because ankle-knuckle coordination is one of the dominant elements in movements that require a high level of skill (Suteja, 2009).

3. The results of shots on goal of the soccer players at SMPN 27 Padang who have low ankle-knuckles coordination and participate in Box Jump training are better than players who have low ankle-knuckles coordination and participate in Double Leg Speed Hops training

Based on the third hypothesis, the increase in kicking results for soccer players at SMP Negeri 27 Padang who have low ankle-knuckles coordination and participate in Box Jump training is better than players who have low ankle-knuckles coordination and participate in Double Leg Speed Hops training.

H_1 is rejected, so H_0 is accepted. Thus, it can be stated that the soccer player at SMPN 27 Padang who has low a ankle-knuckles coordination and participates in Double Leg Speed Hops training is better than players who have low ankle-knuckles coordination and participates in Box Jump training.

The results of the study also showed that the average results of shots on goal of soccer players at SMPN 27 Padang who had low ankle-knuckles coordination and participated in the Double Leg Speed Hops training was 35.50.

Meanwhile, those who have low ankle-knuckles coordination and participate in Box Jump training are 33.50. In this case, it appears that players who have low ankle-knuckles coordination will be better trained using the Double Leg Speed Hops training. Faruq (2008) explains that when a soccer player is about to take a shot, ankle-knuckles coordination is very important because with good coordination, the basic technique of kicking the ball will get better. Furqon & Doewes (2002) added that the Double Leg Speed Hops exercise involves the gluteals, hamstrings, quadriceps and gastrocnemius muscles.

4. There is an interaction between training methods and ankle-knuckles coordination on the results of shots on goal of soccer players at SMPN 27 Padang

Based on the fourth hypothesis, there is an interaction between the training method and ankle-knuckles coordination on the result of shots on goal of soccer players at SMPN 27 Padang, where $Fc = 19.93 > F_t = 4.75$. Therefore, it can be concluded that H_1 is accepted and H_0 is rejected. In the game of soccer, ankle-knuckles coordination is needed because it would be a great help at mastering the game, ankle-knuckles coordination is the basis for achieving high skills in kicking, controlling, and dribbling.

Ankle-knuckles coordination will support someone to make quick and agile movements in making movements that are difficult to read by opposing players, especially when dribbling. The results of Putra's research (2020) stated that there was a significant effect between the ankle-knuckles coordination of soccer players and their dribbling abilities

The skill of playing soccer is a complex movement because the skill of playing soccer is a combination of various elements such as running, controlling, touching the ball, and observing the situation on the field. The success of a soccer player cannot be separated from the role of the coach who fosters and develops in a planned and sustainable manner. To be able to master all the basic techniques of good soccer playing, practice is needed.

According to Istofian & Amiq (2016), training in shooting techniques cannot be done quickly and easily. It takes extraordinary tenacity from soccer players to train shooting. Hunter, Murphy, Angilletta, & Wilson (2018) stated that if you want to become an excellent shooter, players must spend hours practicing shooting towards the goal.

CONCLUSIONS

From this research, the following conclusions can be drawn:

1. The results of shots on goal of soccer players at SMPN 27 Padang who took part in the Box Jump training are better than those who

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participated in the Double Leg Speed Hops training.
2. The result of shots on goal of soccer players at SMPN 27 Padang who has high ankle-knuckles coordination and participates in Box Jump training are better than players who have high ankle-knuckles coordination and participates in Double Leg Speed Hops training.
3. The results of shots on goal of soccer players at SMPN 27 Padang who have low ankle-knuckles coordination and participate in Box Jump training are no better than players who have low ankle-knuckles coordination and participate in Double Leg Speed Hops training.
4. There is an interaction between training methods and ankle-knuckles coordination on the results of shots on goal of soccer players at SMPN 27 Padang.

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