

## The effect of animal name and wall shoot training on the accuracy of shooting free throw in terms of hand eye coordination in beginner athletes

### El efecto del nombre del animal y el entrenamiento de tiro de pared en la precisión del tiro libre en términos de coordinación mano-ojo en atletas principiantes

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**Abstract.** Providing training program treatment to athletes is the most important thing in the success of a coach to get more optimal results, one of which is using modified exercise animals name and wall shoots. This study aims to analyze: 1) the difference in the effect of animals name and wall shoot training on the accuracy of free throw shooting techniques, 2) the difference in the influence between athletes who have high and low hand eye coordination on the accuracy of shooting free throw, 3) the interaction between animals name and wall shoot training and high and low hand eye coordination on the accuracy of shooting free throw in beginner class athletes. This study is a type of factorial 2x2 experimental research with a population of 38 athletes and then the basis for determining samples using purposive sampling techniques based on inclusion criteria set by researchers, so that the sample in this study amounted to 20 athletes who would later be divided into each group using ordinal pairing techniques. The instrument used is to measure the accuracy of shooting free throw, namely drill shoot free throw, while hand eye coordination uses a one-pint image. The data analysis technique used is ANOVA two way. The results of this study show that: 1) there is a significant difference in the effect between animal name and wall shoot exercises on the accuracy of shooting free throw, as evidenced by the results of Fhitung's analysis of 6.741 with sig values. amounted to 0.001. 2) there is a significant difference in the influence on the ability of the hand eye coordination system on the free throw shooting accuracy component, as evidenced by the result of a Fcalculate value of 32.463 with a sig value. amounted to 0.000. 3) there is a significant interaction between the name of the animal and the wall shooting exercise in terms of free throw accuracy, as evidenced by the results of the Fcalculate value of 2.294 with the sig value. 0,003. So it can be concluded that the two exercises significantly affect the accuracy of the free throw shooting itself. These factors need to be considered in planning and implementing training programs to improve athlete performance, especially in terms of optimizing the accuracy of free throw shooting techniques in basketball athletes in the beginner class.

**Keywords:** Animals Name, Wall Shoot, Precision, Shooting Free Throw, Hand Eye Coordination, Athletes.

**Resumen.** Proporcionar un tratamiento de programa de entrenamiento a los atletas es lo más importante en el éxito de un entrenador para obtener resultados más óptimos, uno de los cuales es el uso de nombres de animales de ejercicio modificados y rodajes en la pared. Este estudio tiene como objetivo analizar: 1) la diferencia en el efecto del nombre de los animales y el entrenamiento de tiro de pared en la precisión de las técnicas de tiro libre, 2) la diferencia en la influencia entre atletas que tienen coordinación mano-ojo alta y baja en la precisión del tiro libre, 3) la interacción entre el nombre de los animales y el entrenamiento de tiro de pared y la coordinación ojo-mano alta y baja en la precisión del tiro libre en principiantes Atletas de clase. Este estudio es un tipo de investigación experimental factorial 2x2 con una población de 38 atletas y luego la base para la determinación de muestras mediante técnicas de muestreo intencional basadas en criterios de inclusión establecidos por los investigadores, de manera que la muestra en este estudio ascendió a 20 atletas que posteriormente se dividirían en cada grupo utilizando técnicas de emparejamiento ordinal. El instrumento utilizado es para medir la precisión de los tiros libres, es decir, el tiro libre de ejercicio, mientras que la coordinación mano-ojo utiliza una imagen de una pinta. La técnica de análisis de datos utilizada es ANOVA de dos vías. Los resultados de este estudio muestran que: 1) existe una diferencia significativa en el efecto entre el nombre del animal y los ejercicios de tiro de pared sobre la precisión del tiro libre, como lo demuestran los resultados del análisis de Fhitung de 6.741 con valores sig. ascendió a 0,001. 2) existe una diferencia significativa en la influencia de la capacidad del sistema de coordinación mano-ojo en el componente de precisión de tiro libre, como lo demuestra el resultado de un valor de Fcalculate de 32.463 con un valor sig. ascendió a 0,000. 3) existe una interacción significativa entre el nombre del animal y el ejercicio de tiro a la pared en términos de precisión de tiros libres, como lo demuestran los resultados del valor de Fcalculate de 2.294 con el valor de Sig. 0,003. Por lo tanto, se puede concluir que los dos ejercicios afectan significativamente la precisión del tiro libre en sí. Estos factores deben tenerse en cuenta en la planificación e implementación de programas de entrenamiento para mejorar el rendimiento de los atletas, especialmente en términos de optimizar la precisión de las técnicas de tiro libre en los atletas de baloncesto en la clase de principiantes.

**Palabras clave:** Nombre de los animales, Tiro de pared, Precisión, Tiro libre, Coordinación mano-ojo, Atletas

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## Introduction

The ability possessed by a person becomes a benchmark for the movement of his skills in various activities, both professional and beginner class categories. This is because players do a lot of movements and actions as well as technical and tactical on the field or game area

(Maslennikov, Soloviev, Vakalova, Zaiko, & Dmitriev, 2019). Many studies show that a person's ability to facilitate various activities, such as doing enough physical activity, can be a positive benefit for one's limbs or health (Al Attar et al., 2021). In the process of training to improve certain components in beginner class athletes there are three aspects that are the main focus in general and for a

novice athlete are psychomotor, cognitive and affective (Friskawati, 2021; Kaji & Ono, 2021). Because these three aspects are beginner athletes who want to improve their skills in various fields that are popular or are being pursued through a continuous training process and explore and modify training models according to the needs of novice athletes, reviewing and developing athletes, which play a very important role in developing the abilities of beginner class athletes (Xhomara, 2019).

The process of improving the skills of beginner athletes is not easy because it requires a very long time to be able to optimize the skills of novice athletes with the exercises carried out. (Xhomara, 2019). Because, in the status of modern society today, not only physical strength is prioritized, but also the understanding and intellect possessed by novice athletes (Kozina et al., 2023). There is a significant increase or decrease in the skill movements of a novice athlete because it is influenced by two important factors, namely factors from oneself and from outside the personal such as other people or the environment (Morad, Helminck, Sharma, & Wargo, 2021). Another factor that affects the improvement of skill movements in novice athletes is the role of a coach in choosing the right training program treatment model, so that it can be used as a reference by other coaches in providing the exercises needed by a novice athlete (Bores-García, Hortigüela-Alcalá, Fernandez-Rio, González-Calvo, & Barba-Martín, 2021). In addition, the beginner athlete's personal motivation and activity should be aligned with his own talent interests or drive to train, not because of pressure from others (Sudarko, Setijono, & Mintarto, 2021). Because athlete motivation, training models, coach roles and positive motivation are fulfilled, it will have an impact on improving skills and achievements (Parnabas, Mahamood, & Parnabas, 2013). This is in line with research (García-Chaves, Corredor-Serrano, & Arboleda-Franco, 2020) Psychological review of athletes has a much-needed role for amateur athletes in an effort to provide opportunities for achievement at a young age. So that through the process of maximum training and understanding the athlete's psyche, the athlete's ability will automatically change or improve and a character of positive value is formed (Toro Román et al., 2019).

Shooting techniques in basketball can be said to be one of the determining elements of the success or failure of a team, be it a novice or professional team. (Mashuri, 2017). By doing this shooting technique, basketball players will score as many points as possible and help their team to win the game. The sport of basketball involves many short and explosive movements, sprinting, jumps, and changing direction styles without the ball at maximum speed (Meckel, Segev, & Eliakim, 2022). Shooting technique is one of the basic techniques that are common and need to be understood carefully (Risjanna, Mulyana, & Kusumah, 2021). Shooting technique is the ultimate goal in the game of basketball after a player performs various necessary techniques before making a shot towards the opponent's

basket. Therefore, the right exercise program can develop and maximize the ability of movement skills in novice athletes (Abade et al., 2019).

To improve the motion of shooting skills, athletes must practice diligently and repeatedly and show great enthusiasm in order to obtain the best shooting skills (Nogueira et al., 2022; Ozan & Secer, 2022). In addition, anthropometry, physiological objects, and individual skills should be measured regularly (Chaniago, 2022). The quality of the practice process in the technique of shooting free throw in basketball games depends on the training program planning system as well as the right tools and methods (Tymoshenko et al., 2021). Because basically playing basketball requires some special skills, both physical qualities and creative and innovative game development (D'Elia, D'Andrea, Esposito, Altavilla, & Raiola, 2021). In addition, beginner athletes also need a proper and effective training program model to improve their basketball shooting skills (Lu, Lee, Wang, & Chen, 2021). Because if the coach is wrong in choosing a training program, it will have a negative impact on novice athletes, one of which is the occurrence of a relatively monotonous training process (Li, Wang, Liu, Zhang, & Hastie, 2022). So that being an educator or a trainer before providing treatment of the learning process, it is necessary for a teacher to know the characteristics of each student (Huenullán, Flores, Moya, & Bustos, 2023) That way educators or teachers can provide creative and innovative learning modifications according to the classification and characteristics of students so that the learning process is not relatively monotonous and provides more optimal results (Muñoz et al., 2022).

Based on the results of observations made by researchers on novice athletes at the Modern Basketball Club, researchers have obtained final data in the field after the Drill Shoot test is given to be able to analyze the initial steps of the shooting free throw results. From the final data where each athlete was given the opportunity to do a Drill Shoot as much as 10x the experiment found that the average novice athlete could only put 3 balls into the basketball basket. So from these results, researchers can conclude that there are several factors why novice athletes find it difficult to put the ball into the basketball hoop, including the lack of level of hand eye coordination against basketball. This needs to be a concern, especially for coaches, because hand eye coordination is the main component in addition to power in maximizing free throw shototing techniques (Fadillah, Ahmad, Jasmani, & Unsri, 2018). In addition, researchers analyzed the provision of realistic monotonous training programs by coaches, so that novice athletes feel bored during training, whereas basically in providing training to novice athletes requires several special training programs, both physical quality and creative and innovative games (Alghafary, 2021). And researchers found a lack of accuracy possessed by each athlete. We can all know that accuracy is very important in basketball, especially in the basic technique of shooting

Free Throw (Aryanto, Sukoco, & Lumintuarso, 2020) Because without accuracy between throwing the ball into the basket will not produce optimal results, and vice versa if the accuracy created from the coordination system between the eyes and hands is very good, it will get maximum points or results.

The lack of Shooting Free Throw skills is influenced by the lack of training programs, especially in the eye and hand coordination components. Accuracy and coordination between eyes and hands play an important role in supporting the success of technique both from the beginning to the end of the Shooting Free Throw basketball game (Malik & Rubiana, 2019). This is because when the eye coordination center against the basketball hoop and hand coordination with the help of the explosive power of the arm muscles when ready to throw a long distance will require optimal focus. If the coordination between the eyes and hands against the basketball hoop is less than optimal, it will result in less than optimal shooting accuracy. Vice versa, if the eye and hand coordination system against the basketball hoop is optimal, it will get maximum results (Huenullán et al., 2023; Pires, Batista, Mesquita, & Ibáñez, 2022). So it can be concluded that in carrying out basketball game shooting techniques, the coordination system between the eyes and hands plays an important role and is very influential on the accuracy component in playing basketball shooting. Therefore, it is necessary to provide an appropriate training program in supporting the accuracy of shooting free throw to be more optimal, one of which is by applying Animals name and Wall Shoot exercises.

Animals name training is a form of modified training to be able to improve the movement of basketball shooting techniques by combining the names of animals such as frogs, kangoros and giraffes with coordination of shooting techniques (Majid.W Roesdiyanto, 2018). Correspondingly, it is supported by research researched by Ali Munir (2021) In his research related to exercises based on animal role play modifications gave positive results to students, because students felt that learning was very happy and not relatively boring. So that modification of the training program is needed to increase the enthusiasm of novice athletes during the training process (Irfan Arifianto, 2021). In addition, there is also Wall Shoot training to be able to improve the accuracy of the Shooting Free Throw technique.

Wall Shoot training is an exercise with a modification of the basic shooting technique of basketball games by bouncing against the wall that has been given a target point with the aim of improving the hand eye coordination system (Anggara, Usra, & Solahudding, 2018). With wall shoot exercises can improve the strength and accuracy of athletes' arm muscles, as well as eye and hand coordination in shooting free throws (Wartono, Hudha, & Batlolona, 2018). Because athletes are used to making free shots under any conditions, both in practice and in games, without lowering the level of accuracy or strength of the

athlete, because the muscles involved in training are the same as the muscles involved in free throw shots (Mashuri, 2017). In line with this, the research researched by Iqbal Maghobi (2022) In his research related to efforts to improve Free Throw shooting in basketball games with the Wall Shooting practice model, from exercises that focus on wall points can increase the focus between eye and hand coordination to produce maximum shooting accuracy. So from this case study, researchers hypothesized that the implementation of the animal name and wall shoot training program can increase shooting free throw in beginner athletes.

## Material & methods

This research is a type of experimental research with a 2x2 factorial design. The population in this study amounted to 38 athletes and then the basis for determining samples using purposive sampling techniques based on the following inclusion criteria. 1) Active sample in Modern Basketball club, 2) not currently in a state of illness, 3) able to follow a training program that has been prepared, 4) Athletes aged 15-20 years, so that the sample in this study amounted to 20 athletes who would later be divided into each group using ordinal pairing techniques.

Table 1.

2x2 Factorial research design

Accuracy (A)			
	Coordination Eye of the Hand	Animals Name (A <sub>1</sub> )	Wall Shoot (A <sub>2</sub> )
(B)	Tall (B <sub>1</sub> )	A <sub>1</sub> . B <sub>1</sub>	A <sub>2</sub> . B <sub>1</sub>
	Low (B <sub>2</sub> )	A <sub>1</sub> . B <sub>2</sub>	A <sub>2</sub> . B <sub>2</sub>
Information:			
A <sub>1</sub> B <sub>1</sub>	: Animals name exercise group with high hand eye coordination system		
A <sub>2</sub> B <sub>1</sub>	: Wall Shoot exercise group with high hand eye coordination system		
A <sub>1</sub> B <sub>2</sub>	: Animals name exercise group with low hand eye coordination system		
A <sub>2</sub> B <sub>2</sub>	: Wall Shoot exercise group with low hand eye coordination system		

The instruments used in this test are tests and measurements, where to measure the accuracy of shooting free throw researchers use a drill shoot free throw test with a validity value of 0.73 and reliability of 0.78 (Perdima, F.E. & Syarif, 2018), While hand eye coordination uses a one-pint image with a validity value of 0.97 and reliability of 0.98 (Mahfudz & Azkiya, 2021). The data analysis technique used was ANOVA two way at a significance level of 0.05 and the Tukey Test. before the two-way ANOVA test is carried out, prerequisite tests are required, including: 1) Normality Test, Homogeneity Test, and 2) Hypothesis Test.

## Results

The results and discussion in this study will be

presented sequentially, including: 1) Research result data, 2) Analysis prerequisite test, and 3) Hypothesis Test. The

following are the results of research that has been tested.

Table 2. Description of Pre-test and Post-test Data for Each Group

Group	Result	Min	Max	Mean	Median	Modus	Std. Deviation
Animals Name - High Hand	Pre-test	30,00	60,00	38,00	42,00	30,00	13,03
Eye Coordination (A <sub>1</sub> -B <sub>1</sub> )	Post-test	80,00	100	90,00	90,00	80,00	10,00
Wall Shoot - High Hand	Pre-test	65,00	69,00	67,40	68,00	68,00	1,51
Eye Coordination (A <sub>2</sub> -B <sub>1</sub> )	Post-test	77,00	80,00	78,60	79,00	79,00	1,14
Animals Name - Low Hand	Pre-test	10,00	20,00	16,00	20,00	20,00	5,47
Eye Coordination (A <sub>1</sub> -B <sub>2</sub> )	Post-test	60,00	80,00	70,00	70,00	70,00	7,07
Wall Shoot - Low Hand	Pre-test	43,00	50,00	46,80	47,00	43,00	2,83
Eye Coordination (A <sub>2</sub> -B <sub>2</sub> )	Post-test	65,00	69,00	67,40	67,00	65,00	1,58

Based on the results of pre-test and post-test data on each of the above variables, it can be concluded that in the group Animals name - high hand eye coordination found pre-test results with Std. deviation of 13.03 and post-test of 10.00. In the wall shoot group - high hand eye coordination found pre-test scores with Std. deviation of 1.51 and post-test of 1.14. Furthermore, the animal name - low hand coordination group found pre-test scores with Std. deviation of 5.47 and post-test of 7.07. And the wall shoot - low hand coordination group found pre-test scores with Std. deviation of 2.83 and post-test of 1.58. These results can be compared through the data below.

Table 3. Comparison of Average Group Values

No	Group	Average Pretest	Average Posttest	Increased
1.	Animals names – Tall (A <sub>1</sub> B <sub>1</sub> )	38,00	90,00	52,00
2.	Wall Shoot - Tall (A <sub>2</sub> B <sub>1</sub> )	67,40	78,60	11,2
3.	Animals names - Low (A <sub>1</sub> B <sub>2</sub> )	16,00	70,00	54,00
4.	Wall Shoot - Low (A <sub>2</sub> B <sub>2</sub> )	46,80	67,40	20,6

In the data above, the results of the comparison can be known in each group using SPSS. The data can be concluded that the Animals name group with high hand eye coordination has an increase in each pre-test and post-test of 52.00. The wall shoot group with high hand eye coordination had an increase in each pre-test and post-test of 11.02. Furthermore, the group of animals named with low hand eye coordination had an increase in the number of pre-test and post-test each of them by 54.00. And the wall shoot group with low hand eye coordination had an increase in each pre-test and post-test by 20.06

Table 4. Kolmogorov Smirnov Normality Test

Group	Accuracy Shooting	Value	Sig.	Information
Animlas Names - High Coordination (A <sub>1</sub> B <sub>1</sub> )	Pretest	,221	0,200	sual
	Posttest	,241	0,200	sual
Wall Shooting - High Coordination (A <sub>2</sub> B <sub>1</sub> )	Pretest	,254	0,200	sual
	Posttest	,237	0,200	sual
Animals Names - Low Coordination (A <sub>1</sub> B <sub>2</sub> )	Pretest	,367	0,026	sual
	Posttest	,300	0,161	sual
Wall Shooting - Low Coordination (A <sub>2</sub> B <sub>2</sub> )	Pretest	,179	0,200	sual
	Posttest	,136	0,200	sual

From the results of the normality test above using Kolmogorov Smirnov's analysis, the significance level is >0.05. From the data obtained, each group has a Sig.

value of >0.05. So with these results, the value can be concluded to be normally distributed. Furthermore, after the normality test, the researcher conducts a homogeneity test, where the results will be attached to the table below.

Table 5. Leven'e Test Homogeneity Test

Data	Group	Sig.	Information	
Accuracy Shooting Free Throw Pree-test	Animals Names - High Coordination (A <sub>1</sub> B <sub>1</sub> )	,856	0,033	Homogeneous
	Wall Shooting - High Coordination (A <sub>2</sub> B <sub>1</sub> )			
	AnimalsNames - Low Coordination (A <sub>1</sub> B <sub>2</sub> )			
	Wall Shooting - Low Coordination (A <sub>2</sub> B <sub>2</sub> )			
Accuracy Shooting Free Throw Post-test	Animals Names - High Coordination (A <sub>1</sub> B <sub>1</sub> )	,266	0,022	Homogeneous
	Wall Shooting - High Coordination (A <sub>2</sub> B <sub>1</sub> )			
	Animals Names - Low Coordination (A <sub>1</sub> B <sub>2</sub> )			
	Wall Shooting - Low Coordination (A <sub>2</sub> B <sub>2</sub> )			

In the homogeneity test results, researchers used the leven'e test, which in the test results on the component data Shooting Free Throw Pree-test Accuracy has a F<sub>count</sub> value of 8.856 and sig. 0.033. In the Shooting Accuracy component, the Post-test Free Throw has a F<sub>count</sub> value of 4.266 and sig. 0.022. So that based on the existing homogeneity test provisions, the data is homogeneous.

Table 6. Two Way Anova Analysis Hypothesis Test

Treatment	F <sub>count</sub>	Sig.	Information
Training Model	6,741	0,001	Significant
Hand Eye Coordination	32,463	0,000	Significant
Hand Eye Interaction	2,294	0,003	Significant

Furthermore, a hypothesis test was carried out using Two Way Anova analysis. Based on the results of the analysis, the training model component has a F<sub>count</sub> value of 6.741 with a sig level. amounted to 0.001. Furthermore, the high and low hand coordination components have a F<sub>count</sub> value of 32.463 with a sig level. amounted to 0.000.

And in the eye interaction component, the hand has a  $F_{\text{count}}$  value of 2.294 with a sig level. amounted to 0.003. So that from these data, it can be concluded that there is a significant in each component. Finally, to determine the

validity of the Two Way Anova Analysis test, the researcher continued the test using the Tukey test with the results of the data analysis below.

Table 7.  
Tukey Test

Group	Interaksi	Mean Difference	Si.
Animals Name - High Coordination	Wall Shooting - High Coordination	20,00	0,001
	Animals Names - Low Coordination	11,40	0,046
	Wall Shooting - Low Coordination	23,00	0,000
Wall Shooting - High Coordination	Animals Name - High Coordination	-20,00	0,001
	Animals Names - Low Coordination	-8,60	0,167
	Wall Shooting - Low Coordination	3,00	0,869
Animals Names - Low Coordination	Animals Name - High Coordination	-11,40	0,046
	Wall Shooting - High Coordination	8,60	0,167
	Wall Shooting - Low Coordination	11,60	0,041
Wall Shooting - Low Coordination	Animals Name - High Coordination	-23,00	0,000
	Wall Shooting - High Coordination	-3,00	0,869
	Animals Names - Low Coordination	-11,60	0,041

## Discussion

Efforts to improve movement skills, especially shooting techniques, Free Throw basketball games have quite a lot of modifications, one of which is practice using animal names and wall shoots. These two training models are a form of implementation of training models that have been tested on both small and large scale samples. This results in the fact that both training models in general have a positive impact and significant improvement. However, when researchers compared the two models, the animal name exercise had more impact than the Wall Shoot exercise, according to biomechanical analysis, the movement of animals name provides more biomotor and psychological components to the characteristics of students by role-playing, and wall shoot exercises only have a motor impact on students, because in striving for student motor movements there needs to be treatment that can have a positive impact both outside and inside the athlete's personality (Suárez-Manzano, Solas-Martínez, Loureiro, & Rusillo-Magdalenó, 2024).

To understand the context of this study, there are several things that need to be discussed, such as the creativity of coaches in providing training programs to athletes. The successful application of training programs in basic skills based on animals name to improve the skills of novice athletes in performing free throw shooting techniques in basketball games makes the coach's creativity change to change training patterns that are not relatively monotonous and classic (Hanif, Wijaya, & Winarno, 2019). An exercise program that has been prepared by the coach and has been implemented and found positive results is a dream for a coach (Pargeter, Khreishah, & Stout, 2019). The success of implementing this training program is influenced by several factors, including good coach preparation, selection of the right training program, presentation of a program that is not strict, and the activeness of athletes who follow the training process during the course (Nurhayati, Angkarini, & Tanamal, 2021). The animal name-based exercise program used in this study is an

introduction to more advanced thinking to encourage coaches, especially basketball coaches, one of the steps to use an exercise program that is easy, fun, and not threatening to athletes (Kolovelonis, 2019).

Based on the results of the study above, it is known that there is a significant difference in the effect between animal name and wall shoot training on the accuracy of shooting free throw in beginner athletes. The animals name training group was higher (good) than the wall shoot training group on the accuracy of shooting free throw. According to biomechanical analysis, animal name movement involves more muscle groups in the movement than wall shoot movement. The movement of animals name gives more weight to the hip, leg muscles and even to the arm muscles. The animals name exercise is an exercise that is done by placing students in game situations by role-playing. In this exercise, the ability to play shooting, especially free throw through the names of animals such as frogs, kangaroos, and giraffes with the development of the game. In addition, with the animals name training program does not require more facilities and infrastructure, athletes only learn to improve shooting skills by role-playing, so that the allocation of time needed by the coach is not drained out in other words the training process can run optimally. These findings are in line with and supported by research researched by (Munir et al., 2021) That in a teaching and learning process choosing a game modification is needed by educators or trainers, because with the modification of the game it can invite students to actively participate in the teaching and learning process and during the learning the enthusiasm that exists in students is very optimal and not relatively monotonous.

The results of the analysis of research data showed that there was a significant difference in the effect of hand-eye coordination on the accuracy of basketball free throw shooting. It can be seen that high hand eye coordination results in better basketball shooting accuracy compared to low hand eye coordination. This means that increasing the accuracy of shooting free throw requires mastery of ability with high hand eye coordination (Sudarko et al., 2021).

Hand eye coordination is a motor ability that involves coordination between two organs, namely the eyes and hands. Hand and eye coordination performance is centered on the use of simple visual basic systems performed with high precision (Rosmi, 2017). Hand eye coordination plays an important role in achieving shooting accuracy in basketball games (Wartono et al., 2018). In shooting free throw, basketball requires careful sight and accuracy of hands to move and direct the ball shot to be on target (Mukhtarsyaf, Arifianto, & Haris, 2019). Basketball shooting requires eye coordination to see the shot target and hands that move effectively as a control of motion control on the target (Hanif et al., 2019). In line with the research, it is supported by Arydho Ilahi (2021) Yang suggests that there is a contribution of the eye and hand coordination system to the results of shooting accuracy, this is because when doing shooting techniques it is necessary to focus the explosive power of the arm muscles with the eyes when looking at the basketball basket, in line with that the strength of the arm muscles will function when pushing the ball into the basketball basket.

In the last hypothesis, the results of the analysis prove that there is a significant interaction between animal name and wall shoot training and hand eye coordination (high and low) on the accuracy of shooting free throws in basketball games. This can be interpreted that if there is an interaction between animal name and wall shoot practice with hand eye coordination, it can increase accuracy in doing free throw shooting techniques better in basketball games. The results showed that Wall Shoot training is a more effective training model used for athletes who have high hand eye coordination and Animals Name exercises are more effective for athletes who have low hand eye coordination. This is because when the Animals Name training when the coordination system works, the entire nervous system and muscles contract very strongly and quickly so as to produce good accuracy and the coordination of the eyes and hands is trained to the maximum. Good hand eye coordination is one of the basic skills for shooting free throws in basketball (Fatahillah, 2018). The existence of hand eye coordination plays an important role in achieving the quality of good basketball free throw shooting techniques (Rustanto, 2017). Shooting accuracy in basketball games requires careful sight and accuracy of hands to shoot targets (Irfan Arifianto, 2021). The interaction between the Animals name training model and high hand eye coordination results in an increase in the accuracy of shooting free throw in novice athletes who have high hand eye coordination and are trained using the animal name training method have good mastery of shooting techniques, because in mastering shooting techniques must have good eye and hand coordination capital (Rahayu, 2017).

## Conclusion

Based on the results of this study, it can be concluded that it is very important for coaches to be able to choose

and apply the right training to develop the accuracy of free throw shooting techniques against novice athletes. In addition, it is also very important for beginner athletes to have basic capital in the form of high motor skills, hand eye coordination. The interaction between the two training models is very effective for developing and improving basketball shooting accuracy for beginner athletes. This means that if novice athletes are given a training model that suits their characteristics, then during the training process athletes will feel happy and motivated to follow the training process, so that training goals will be achieved.

In summary, this research underscores the pivotal role of tailored training methodologies in optimizing the accuracy of free throw shooting techniques among beginner-class basketball athletes. The study establishes a clear distinction in the impact of animal name and wall shoot exercises, emphasizing the necessity for coaches to carefully select and integrate specific training methods. Furthermore, the differential influence of hand-eye coordination on free throw accuracy highlights the importance of individualized training strategies based on athletes' unique coordination abilities. The significant interaction between training methods and hand-eye coordination levels reinforces the nuanced relationship between these factors, advocating for a holistic and personalized approach in coaching. These findings serve as a crucial guide for coaches, urging them to consider both exercise types and individual characteristics when planning and implementing training programs. Ultimately, this nuanced understanding is vital for achieving optimal results and enhancing the performance of beginner-class basketball athletes, particularly in refining the critical skill of free throw shooting accuracy.

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