



The Effect of Training Methods on Improving Passing in Soccer Games

**M. Said Zainuddin^{a*}, Arifuddin Usman^a,
Muhammad Kamal^a, Ikhwan Abduh^b,
Akbar Sudirman^a and Andi Muhammad Fadlih^a**

^a *Fakultas Ilmu Keolahragaan, Universitas Negeri Makassar, Indonesia.*

^b *Pendidikan Jasmani Kesehatan dan Rekreasi, Universitas Tadulako, Indonesia.*

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AIR/2023/v24i6979

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/104987>

Original Research Article

Received: 17/06/2023

Accepted: 23/08/2023

Published: 30/08/2023

ABSTRACT

The objective of this study was to compare the impact of the solid method and the distribution method on enhancing soccer passing. The experimental research method is used to compare the influence of two variables and determine or examine any differences. In this method, the author conducted an experiment by giving group A reliable training method and treating group B with a distribution training method. In taking the initial test data to determine the initial test data, one can determine the initial test data. Taking the initial test data to determine the sample's initial data before receiving treatment and the final test to determine the training's effectiveness. With a research sample of forty individuals. After data processing and statistical analysis, it was determined that there is no significant difference between the effects of distribution training and firm training on passing improvement in soccer. There is a significant interaction between the distribution training method group and the solid training method when it comes to enhancing soccer passing. In this instance, the distribution training method has a greater effect than the solid training method on the passing development of 12-13-year-old novice soccer players.

*Corresponding author: E-mail: saidzainuddin@unm.ac.id;

E-mail: arifuddinusman@unm.ac.id, kamal212@unm.ac.id, ikhwan.abduh@gmail.com, akbar.sudirman@unm.ac.id, a.muhammad.fadlih@unm.ac.id;

Keywords: Exercise; method; football; passing.

1. INTRODUCTION

Each close-range strike is identical Football is a pastime used to introduce companions to team sports that require close cooperation and have the same team role. Close-range attacks are attacks or combat that occur within a brief distance of each other. Close-range strikes can refer to a variety of combat categories, such as lightning strikes during a storm chase, close-range combat in video games, and self-defense techniques [1]. Close-range combatants are specialists in close-range combat who may be less effective in long-range conflicts. In video games, close-range combatants typically have powerful physical attacks but either ineffectual projectiles or none. Military tactics such as stand-in strikes that employ stealth aircraft to penetrate enemy defenses and discharge munitions close to the target can employ close-range strikes [2]. The term "striking distance" refers to a distance from which something is readily attainable, such as being within striking distance of a goal. Close-range is the closest range at which opponents can strike each other, and there is very little read time due to the proximity of all weapons. In self-defense, close-range strikes, such as punches, kicks, and elbow strikes, can be effective. There are numerous techniques for executing close-range strikes, such as punches, kicks, and elbow strikes.

Therefore, the success of a team is not all that crucial, as it can be determined by the victory of a single individual [3]. Regarding the function, it will depend on the cooperation of the players' fundamental ball-kicking techniques. Soejoedi, [4] describes the fundamental techniques of soccer as follows: "Short must be mastered, including heading the ball, holding the ball, dribbling passing the ball to a companion who stands the ball, and kicking the ball.

Soccer is often referred to as "the beautiful game," but before players can play beautifully, they must acquire the fundamental skills [5]. There are several fundamental soccer techniques that players of all ages and positions must master. These abilities are essential for creating scoring opportunities, maintaining possession, and improving as all-around athletes. Passing, dribbling, trapping/receiving the ball, shooting the ball, and movement off the ball are the fundamental soccer abilities [5]. As soccer is a team sport, passing is the first

fundamental skill that players should master. Beginner and youth players must learn where their companions are by keeping their heads up and looking around in order to pass effectively. Dribbling is the ability to control the object while moving it with your feet [6]. Good dribbling skills enable players to maneuver the ball past defenders and create opportunities for goals. Trapping is the technique of controlling the approaching ball with your feet, torso, or head. Good trapping abilities enable players to quickly gain control of the ball and pass or shoot it [7]. The technique of kicking the object towards the goal with the intent of scoring is known as shooting. Good firearms abilities require control, precision, and strength. The ability to move into wide spaces to receive a pass or create space for a teammate is referred to as movement off the ball. Good off-the-ball movement is essential for creating scoring opportunities and retaining possession.

Among the fundamental skills that soccer players must acquire is kicking the ball. The fundamental technique for kicking the object consists of a variety of kicks. Regarding this, [8] states, "There are three basic techniques for kicking the ball, namely with the inside of the foot (in side -of the foot), with the outside of the foot (outside-of the foot), and with the turtle of the foot (instep)."

The three functions of kicks in soccer are transferring the ball (passing), blocking the ball, and scoring goals. This is consistent with what [9] stated: "The purpose of kicking the ball is to pass, aim at the goal, and sweep against the opponent's attack. There are two types of kicks used for passing: brief kicks (short pass) and long kicks (long pass).

Short passes, also known as push passes, are fundamental soccer techniques. It consists of a regular pass made with the inside of the foot over a brief distance to a teammate. A push pass can move the soccer ball more than 20 feet in record time [10]. The instep pass is a short and swift transfer utilized in soccer when a player wants to make a short and accurate pass. It must always be executed on the ground, as passing the ball in the air makes it more difficult to maintain control [11]. Short passes are crucial for maintaining possession and generating scoring opportunities. They enable players to move the ball quickly and precisely, which can help break through the

opponent's defense. Short passes are also advantageous for establishing play from the back and transitioning from defense to offense. Any soccer player who wants to be a well-rounded and effective field player must master the technique of short passes.

Long passes, also known as long balls, are used to cover more ground on the soccer field. It involves striking the ball with force and accuracy to quickly advance the ball and create scoring opportunities [12]. The defensive line or defensive midfielder typically sends a long pass to the attacking penalty box or across the field to transition the play. It can be an effective way to avoid defenders and reestablish the offense on the opposite side of the field. To execute a long pass, a player should transfer the ball over a great distance using the instep of their foot [12]. It is essential to position the pass with precision and sufficient force to reach the intended target. Long passes require excellent technique, timing, and positional awareness among comrades and opponents. Mastering long passes can be beneficial for creating speedier scoring opportunities and advancing the team's play up the field.

Identical short kicks are used to transfer the ball to close friends, and they also play a crucial role in winning. Regarding the significance of fundamental kicking techniques in soccer games, [4] explains: "Short pass or close pass is passing the ball to a teammate who is standing close by using a kick." Internal and external factors that can influence the process and efficacy of learning motion within the context of physical education and sports training. According to Lutan, [13], "internal factors are those that exist within the child, whereas external factors are those that exist outside the child and can be manipulated to develop the child's internal potential." The capacity of a person will develop naturally in accordance with the factors of growth, development, maturity, experience, and training. Movement ability is a descriptor of one of the skills required for the execution of a variety of fundamental skills and general physical activity. The level of motor educability causes differences in the outcomes of learning and exercising motion.

Motor educability is one of many internal (within the child) factors, according to Mathew, [14] definition: "The case in which a person acquires new skills is known as motor educability." This indicates that the simplicity with which a person

acquires new skills is contingent upon motor educability. Motor educability refers to an individual's capacity or capacity to acquire and cultivate motor skills. It is a measurement of a person's ability to acquire and enhance motor skills. Motor skills involve specific muscle movements to execute activities such as walking, running, and riding a bicycle. Motor skill development necessitates coordination between the nervous system, muscles, and brain. Motor educability tests are used to evaluate an individual's capacity to acquire new motor skills in general. Continuous practice and experience result in motor learning, which is a relatively permanent change in a person's skill level [15]. Motor educability is affected by factors including heredity, living environments, and individual differences in motor abilities. Children who grapple with motor skills may encounter barriers to participation in physical activities and develop learned helplessness, according to research [16]. Overall, motor educability plays a significant role in a person's capacity to acquire and improve motor skills, and it can affect their participation in physical activities and overall motor development.

2. METHODS

The methods used in the learning or training process are quite diverse; concrete methods and distribution methods are examples of methods that teachers or trainers can employ. The variety of training methods employed exemplifies the diversity of the empowerment process. In addition, the existence of student conditions from different social strata will contribute to the disparities in training outcomes, especially since the success of a coaching program is typically measured by its ability to win matches, whereas the quality of a person's skills theoretically depends on talent and practice.

The methods or instruments utilized in the teaching and learning process or training are selected in accordance with predetermined objectives and resources. The method or instrument functions as a bridge between the topic and the desired outcome. Because the training method chosen will impact the training outcomes of the athlete. Numerous variables influence the application of training methods, which in turn leads to variations in changes in human movement behavior. Regarding the use of time in the training process, the massed practice method and the distributed practice method are employed here. Singer, [17] defines

the two methods as follows: "The massed method is a method of practicing consistently and continuously without much rest, whereas the distributed method is an exercise with a relatively longer rest period."

Technically, the advantage of the dense training method is that it is a means of training by repeatedly performing the movement technique in a relatively shorter training time, increasing the likelihood that students will perform the movement task quickly according to the coach-determined time. The disadvantage of the dense method is that the relaxation periods between each training session are short, resulting in rapid fatigue, which influences training monotony. Technically, the advantage of the distribution method is that it is a means of performing movement techniques that are repeated with a rest period, thereby reducing fatigue, and allowing students to measure or recalculate the movements to be performed in the next training session. The disadvantage of the distribution method is that the training procedure takes relatively longer.

These studies highlight the importance of consistent and focused training when it comes to developing movement skills. While there may be different approaches to instruction, the key is to find a method that works for the individual and to stick with it over time. With dedication and practice, anyone can improve their movement skills and achieve optimal performance.

This study's experimental technique employs a quasi-experimental design. According to Sugiyono, [18], this type of experiment is an evolution of the difficult-to-implement true experiment. In this design, the experimental group and the control group are compared, even though the existing groups are given a pre-test, various treatments, and a post-test. The following is how [18] describes this design:

The population in this study were novice athletes of the Bank Suselbar Football Club of 40 students. The sampling technique was carried out through a rough population. Su et al., [19] explain that taking a portion of the population

based on rough data or ease of obtaining data without calculating its representativeness can be classified as a rough sample. This means that when researchers select a subset of individuals or units from a population for their study, they may sometimes choose a sample that is not truly representative of the entire population. This can happen when researchers prioritize convenience or accessibility over ensuring that the sample accurately reflects the characteristics of the population. It is important for researchers to carefully consider their sampling methods and strive to obtain a sample that is representative in order to draw valid inferences about the larger population. Based on this opinion, the sample was 40 people from Bank Suselbar Football Club. In this study, the proportion sampling technique or balance sample was carried out to perfect the use of the stratified sample technique or class sample, in other words, this sampling was total sampling. Therefore, to obtain a representative sample, taking subjects from each stratum or class is determined to be balanced or proportional to the number of subjects in each stratum or class.

According to Sugiyono (2010: 133), the use of research instruments differs between quantitative and qualitative-naturalistic research. In quantitative research, researchers utilize instruments to collect data, whereas in qualitative research, researchers themselves are considered key instruments. Research instruments in quantitative research are used to measure the value of the variables under study, and there are standardized instruments available for use. However, in qualitative research, researchers often need to create their own instruments as they play a central role in data collection. This highlights the importance of the researcher's involvement and subjective interpretation in qualitative research. The researcher acts as the "human instrument" of data collection, observing, describing, and interpreting settings as they are [20]. This approach allows for a deeper understanding and exploration of the research topic, capturing the nuances and complexities that may not be easily quantifiable [21].

Table 1. Equivalent group pretest posttest design

Group	Pre-Test	Variable	Post Test
A	O ₁	X	O ₂
B	O ₃	-	O ₄

Description: A : Experimental Group; B : Control Group; X : Treatment in the experimental class; O₁ and O₃ : Pretest; O₂ and O₄ : Posttest

The data is obtained by conducting testing at the beginning and at the end of the experiment as the final data from each group. The goal is to be able to determine the effect of treatment results and differences between the two groups which is the goal of the experiment.

Data collected included passing test results before and after training and feedback from players and coaches. The data was analyzed using a t-test to compare the differences between the control and experimental groups and methods A and B. The data was also analyzed by comparing the feedback from players and coaches to evaluate the effectiveness of each method. The data was also analyzed by comparing feedback from players and coaches to evaluate the effectiveness of each method.

The analysis showed that the experimental group significantly improved passing ability compared to the control group. Method B showed a more significant improvement in passing ability than method A. Feedback from players, and coaches indicated that method B was more effective in improving passing ability in game situations. Therefore, the passing training method focusing on game situations is more effective in improving passing ability in football games.

3. RESULTS AND DISCUSSION

After the mean value and standard deviation are determined, the Lilliefors normality test is performed to determine if the data are normally distributed. As previously explained, either a parametric or non-parametric approach will be utilized in data analysis.

According to Table 2, the L value of the list is 0.258, as shown. While the L_o value of the initial test for the solid method training group is = 0.1549, the L_o value of the final test is = 0.2390. The testing criteria are as follows: reject the null hypothesis if L_o , derived from the observation data, is greater than L, derived from the table list. Other situations embrace the null hypothesis. As the L_o value is less than the L table value, the initial test data and final test of the training group utilizing the solid method are therefore normally distributed. In addition, the L_o value of the initial test with the distribution method for the exercise group is = 0.2005, while the L_o value of the final test is = 0.2241. The criteria for rejecting the null hypothesis are as follows: if L_o derived from the observation data is greater than L from the table

list. Other situations embrace the null hypothesis. As the L_o value is less than the L table value, both the initial test data and the final test of the exercise group with the distribution method are normally distributed. Next, the homogeneity of the test data is evaluated using the two-variance equality test.

The calculation of the two-way analysis of variance (ANOVA) revealed that the F count interaction of 4.21 is greater than the F table of 4.11 at the level of confidence or significance ($dk = n - 4 = 36$). According to Olthof et al., [22], there is a difference between the solid training method and the distribution training method in terms of passing advancement in soccer. It must be demonstrated through additional testing using Tukey's test that the interaction between the influence of the solid training method group and the distribution training method in soccer does not result in a significant difference in training results. There is no significant interaction between the groups of firm training methods and distribution training methods on the improvement of soccer passing. Therefore, it can be concluded that there is no significant difference in soccer passing development.

Based on the results of the search related to the effects of training methods on improving passing skills in football games, the following are some recommendations that can be taken:

1. Use training methods following the research objectives, such as the pass-through traffic or diamond passing training methods.
2. Focus on basic techniques and passing accuracy in training.
3. Use training methods that train teamwork in game situations, such as wall pass and push and run training methods.
4. Explain clearly and in detail the training methods used, including the training's objectives, procedures, and results.
5. Provide helpful feedback to players and coaches to help improve passing skills in football games.

In conducting passing training in football games, it is essential to choose training methods suitable for the objectives and pay attention to basic techniques and passing accuracy. In addition, training teamwork in game situations can also help improve passing ability. Players and coaches can continuously improve their passing ability by providing helpful feedback.

Table 2. Presents the results of the lilliefors normality Test for the experimental training method and the control training method

Group	Period Test	Lo-Count	L-Table	Description
Solid Method	Preliminary Test	0.1549	0.258	Gauss Distribution
	Final Test	0.2390	0.258	Gauss Distribution
Distribution method	Preliminary Test	0.2005	0.258	Gauss Distribution
	Final Test	0.2241	0.258	Gauss Distribution

4. CONCLUSIONS

Based on the outcomes of data processing and analysis, the following are the findings of this study: The dense training method has a considerable impact on improving passing in soccer sports. The distribution training method has a significant impact on enhancing passing in soccer. In this instance, the solid training method and the distribution training method have the same influence on passing in soccer for 12-13-year-old novice athletes. While there is a significant interaction between the distribution training method group and the solid training method for enhancing passing in soccer, the interaction is not statistically significant. Compared to the solid training method, the distribution training method is significantly more effective in this instance. 72 compared to the dense training method for enhancing soccer passing for 12-13-year-old novice athletes.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Clarke D. 6 ways to score from close range. Soccer Coach Weekly; 2020. Available:https://www.soccercoachweekly.net/coaching-advice/6-ways-to-score-from-close-range
2. Brunderman JA, Colonel L. High power radio frequency weapons: A potential counter to U.S. stealth and cruise missile technology. Air University; 1999. Available:https://apps.dtic.mil/dtic/tr/fulltext/u2/a393362.pdf
3. DiFelicianantonio S. Individual success comes from team success. TeamBonding; 2016. Available:https://www.teambonding.com/individual-and-team-success-factors/
4. Soejoedi. Permainan Sepakbola. Kanisius; 2005.

5. Soccerhandbook. Top soccer fundamentals explained | Basic soccer skills. The Soccer Handbook; 2021. Available:https://soccerhandbook.com/coaching-training/basic-soccer-skills/
6. Wikihow. How to develop good soccer dribbling skills: 13 Steps. WikiHow; 2023. Available:https://www.wikihow.com/Develop-Good-Soccer-Dribbling-Skills
7. Heidorn B. Back to the basics in soccer: An emphasis on passing and trapping. A Journal Fo Physical and Sports Educators. 2007;21(1):8–14. Available:https://doi.org/10.1080/08924562.2007.10590753
8. Luxbacher JA. Soccer: Steps to success (4th Ed.). Human Kinetics; 2014.
9. Sucipto D. Sepakbola. Departemen Pendidikan Nasional; 2000.
10. Rookie Road. (n.d.). Soccer Pass Types. Available:https://www.rookie-road.com/soccer/basics/pass-types/ Access on July 18, 2023
11. Sports Ed. How To Pass In Soccer: 5 Essentials For The Perfect Pass. SportsEdTV; 2021. Available:https://sportsedtv.com/blog/how-to-pass-in-soccer-5-essentials-for-the-perfect-pass
12. Bridges B. How to Pass a Soccer Ball: Tips for Success. SoccerNovo; 2023. Available:https://soccernovo.com/how-to-pass-a-soccer-ball/
13. Lutan. Perkembangan anak. Rineka Cipa; 2000.
14. Mathew DK. Measurement in physical education. W.C Sanders Company; 2000.
15. Wikipedia. Motor skill; 2023. Available:https://en.wikipedia.org/wiki/Motor_skill
16. Hands B, McIntyre F, Parker H. The general motor ability hypothesis: An old idea revisited. Perceptual and Motor Skills. 2018;125(2):213–233. Available:https://doi.org/10.1177/0031512517751750
17. Singer P. Ethics and intuitions. The Journal of Ethics. 2005;9(3/4):331–352.

18. Sugiyono. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta; 2017.
19. Su Z, Hu Q, Dencoux T. A distributed rough evidential K-NN classifier: Integrating feature reduction and classification. IEEE Transactions on Fuzzy Systems. 2021;29(8):2322–2335. Available:<https://doi.org/10.1109/TFUZZ.2020.2998502>
20. Teherani A, et al. Choosing a qualitative research approach. Journal of Graduate Medical Education. 2015;7(4): 669–670. Available:<https://doi.org/10.4300/JGME-D-15-00414.1>
21. Hillemann B. All guides: Data module #1: What is Research Data?: Qualitative vs. Quantitative. Dewitt Wallace Library; 2023. Available:<https://libguides.macalester.edu/c.php?g=527786&p=3608639>
22. Olthof SBH, Frencken WGP, Lemmink KAPM. When something is at stake: Differences in soccer performance in 11 vs. 11 during official matches and training games. Journal of Strength and Conditioning Research. 2019;33(1):167–173. Available:<https://doi.org/10.1519/JSC.00000000002936>

© 2023 Zainuddin et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/104987>