JSES: Journal of Sport and Exercise Science
Volume 7, Number 1, March 2024

Comparison of Training Using the Inside of the Foot and the Back of the Foot on Shooting Accuracy towards the Goal at Gasak FC

Imam Syafii[1], Agus Himawan[1], Septyaningrum Putri Purwoto[1]

[1]STKIP PGRI Bangkalan, Indonesia

Corresponding Author: Imam Syafii; egionino67@gmail.com
Accepted for Publication: March 25, 2024
Published: March 30, 2024
DOI: https://doi.org/10.26740/jses.v7n1.p19-23

ABSTRACTS

Purpose: This research aims to evaluate and compare the effectiveness of training with the instep versus the outside of the foot on soccer shooting accuracy.

Materials and Methods: An experimental design with pre-test and post-test measures was employed, involving two distinct treatment groups. The first group received training focused on using the instep for shooting, while the second group practiced shooting with the outside of the foot. The study included 30 soccer players, randomly assigned to these two groups. Shooting accuracy was assessed before and after an 8-week training period.

Result: Results indicated that both training methods led to significant improvements in shooting accuracy, but training with the instep yielded a greater enhancement compared to using the outside of the foot.

Conclusion: These results suggest that instep training is more effective for improving shooting accuracy and should be considered the preferred method for developing shooting skills in soccer players.

Keywords: Shooting accuracy; Instep; Outside of the foot; Soccer training; Skill improvement.

INTRODUCTION

Soccer is one of the most popular sports in Indonesia. This game involves two teams, each consisting of 11 players (Wisnu, 2022). The development of soccer in Indonesia has progressed rapidly because this sport is loved by various groups, from professional athletes to the general public (Rahman et al., 2020; Udam, 2017). The main goal in a soccer match is to score as many goals as possible by getting the ball into the opponent's goal (Ardianda & Arwandi, 2018). As a competitive sport, soccer is not just entertainment or a pastime activity; players and coaches are expected to give their best performance (Nur Fajrin et al., 2021). High achievements in soccer can only be achieved through planned and consistent training.

To play soccer well, it is important to master basic techniques such as kicking, heading, dribbling, controlling the ball, and shooting at the goal (Tohari, 2017). In soccer, the main principles that players must apply include striving to control the ball, passing accurately, dribbling to get past opponents, regaining possession if the ball is controlled by the opponent, shooting at the goal accurately, and defending their own area (Ariyuda et al., 2018; Udam, 2017).

In soccer, the shooting technique is one of the crucial elements that can affect the outcome of a match. Kicking the ball to score a goal is a basic skill that all players, especially those in attacking

ISSN 2615-8744 (online)
ISSN 2620-6668 (print)

roles, must master (Junaidi et al., 2019; Lamungga et al., 2020). In soccer, shooting accuracy is a crucial factor for effective goal scoring. Although powerful kicks can be made, without good accuracy, the chances of scoring a goal can be lost. Accuracy helps players place the ball precisely at the target, bypassing the goalkeeper and the opponent's defense. Training with targets, especially using the instep, can improve shooting quality. To achieve optimal performance in shooting, players need to practice with targets because, in an actual soccer field, players must be able to direct their shots to the desired targets (Kosasih et al., 2019; Mappaompo et al., 2022).

Accuracy is the ability to direct something precisely to the desired target, where the target can be an object being hit (Hunter Jr, et al., 2018). Accuracy is very important in soccer kicks. Players with good ball control and dribbling skills will be less effective in a match if they do not have adequate shooting accuracy. Whether passing the ball to teammates or in finishing, good shooting accuracy is essential for achieving maximum results (Anam et al., 2021).

Players often use two main techniques to improve their shooting accuracy: using the inside of the foot or the instep (Sunarta & Irawadi, 2020). Using the inside of the foot for shooting results in more controlled and accurate kicks. This technique allows players to direct the ball precisely to the corners of the goal that are difficult for the goalkeeper to reach, especially in situations where accuracy is more important than power, such as during a penalty kick or placing the ball in the far corner of the goal. Conversely, the technique of using the instep, or "instep kick," is designed to create stronger and faster kicks. With this technique, players can add power to their kicks, making it more difficult for the goalkeeper to stop the ball. Although this kick is more powerful, consistent practice is needed to maintain its accuracy, and it is usually used for long-range shots or when players have an open opportunity to shoot directly at the goal. These two techniques complement each other and provide flexibility in various field situations. By mastering the technique of kicking using the inside of the foot and the instep, players can become more effective and reliable shooters, thus increasing the team's chances of scoring goals and achieving victories. However, at Gasak FC, the impact of these two training models is not yet known. Therefore, this study aims to compare training using the inside of the foot and the instep on shooting accuracy towards the goal at SSB Gasak FC.

METHODS

***Study Participants*:** The research population includes 51 players from SSB Gasak FC, with 30 players randomly selected as research subjects. The subjects were divided into two groups, each consisting of 15 players, using the ordinal pairing technique after pre-test data collection.

***Study Organization*:** This study applies a quantitative approach with an experimental method using a pre-test and post-test design on two treatment groups. The first group underwent shooting training using the inside of the foot, while the second group used the instep. The training was conducted over 8 weeks with a frequency of three times a week. This research was carried out at the field of SMPN 1 Socah, Socah District, Bangkalan Regency, East Java, and the research instrument used was a shooting accuracy test (Rahmat et al., 2023).

RESULT

Subgroup analysis shows a significant difference between pre-test and post-test results in both groups, namely the group that underwent training using the inside of the foot and the group using the instep. The average pre-test score for the inside of the foot group was 13.80, while the post-test

ISSN 2615-8744 (online)
ISSN 2620-6668 (print)

score reached 18.33. Conversely, the group that trained with the instep had a pre-test score of 13.93 and a post-test score of 16.66. Normality tests showed that both groups had p-values > 0.05, indicating that both pre-test and post-test data were normally distributed. Therefore, data analysis continued with a t-test or paired sample test. The results of the paired sample t-test showed a p-value < 0.05 or sig 2-tailed 0.00 < 0.05 for both groups, indicating a significant difference in training accuracy between the inside of the foot and the instep methods. The collected data were analyzed to evaluate significant differences between pre-test and post-test within each group, as well as differences between the two groups after undergoing training.

Table 1. Descriptive Data Table for Inside of the Foot and Instep Training

	N	Range	Min	Max	Mean	Std. Deviation
Pre_KD	15	11.00	9.00	20.00	13.8000	3.23375
Post_KD	15	7.00	16.00	23.00	18.4667	1.76743
Pre_PK	15	10.00	9.00	19.00	13.9333	3.05817
Post_PK	15	6.00	14.00	20.00	16.6667	1.83874

Table 2. Tests of Normality

	Shapiro-Wilk		
Pre_KD	.958	15	.661
Pre_PK	.965	15	.779
Post_KD	.898	15	.089
Post_PK	.900	15	.096

The data shows that the pre-test score for instep training is 0.661 and the post-test score is 0.089. Meanwhile, for the inside of the foot training group, the pre-test score is 0.779 and the post-test score reaches 0.96. This indicates that the distribution of pre-test and post-test scores in all training groups is normal.

Table 3. Paired Sample Test

		Sig. (2-tailed)
Pair 1	Pre_KD - Post_KD	.000
Pair 2	Pre_PK - Post_PK	.000

The collected data were analyzed using a t-test to evaluate significant differences between pre-test and post-test in each group, as well as differences between the two groups after the training period. The analysis shows that there was a significant improvement in shooting accuracy in both groups after training. However, the group that trained using the inside of the foot experienced a greater improvement compared to the group using the instep.

DISCUSSION

From the results of this study, it was found that training using the inside of the foot has a significant impact on shooting accuracy. The group that trained using the inside of the foot showed a greater improvement in accuracy compared to the group that trained using the instep. This finding is consistent with previous research that suggests training with the inside of the foot is more effective in improving shooting accuracy than training with the instep (Ardianda & Arwandi, 2018; Fajar Ramadhan et al., 2020; Putra et al., 2024). This is likely due to better control and a larger contact area with the ball when using the inside of the foot, which results in more accurate shots. This technique also allows players to direct the ball more precisely (Ariyuda et al., 2018). These findings are consistent with several previous studies that indicate the use of the inside

ISSN 2615-8744 (online)
ISSN 2620-6668 (print)

of the foot is more effective in situations requiring high accuracy (Kosasih et al., 2019). However, using the instep still has benefits, particularly in adding power to the shot.

The increase in shooting accuracy is likely due to the comfort of the sample in using the inside of the foot. The soccer school students felt it was easier to use the inside of the foot and could move better, resulting in better shots (Mappaompo et al., 2022). Accuracy is the ability to control one's body movements towards a target precisely. Accuracy is very important, especially for players who want to shoot and determine the direction of the ball. Therefore, precision is one aspect that needs to be considered (Kosasih et al., 2019).

CONCLUSION

Based on the research findings, it can be concluded that training using the inside of the foot is more effective in improving shooting accuracy compared to training using the instep. Therefore, it is recommended that soccer coaches prioritize the shooting technique using the inside of the foot to enhance players' accuracy.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest regarding the publication of this study.

REFERENCES

Anam, K., Zullfa, G. M., Irawan, F. A., Permana, D. F. W., Nurrachmad, L., & Susanto, N. (2021). Latihan akurasi shooting sepakbola: Sasaran gawang besar-kecil dan sasaran ban, mana yang efektif? Journal Of Sport Education (JOPE), 4(1), 55. https://doi.org/10.31258/jope.4.1.55-63

Ardianda, E., & Arwandi, J. (2018). Latihan Zig-Zag Run dan Latihan Shuttle Run Berpengaruh Terhadap Kemampuan Dribbling Sepakbola. Jurnal Ilmu Keolahragaan, 32–41.

Fajar Ramadhan, Z., Surisman, & Jubaedi, A. (2020). Hubungan Kecepatan Dan Kekuatan Otot Tungkai Terhadap Keterampilan Menggiring Bola Mahasiswa UKM Sepakbola Universitas Lampung. Sport Science And Education Journal, 13–21. https://ejurnal.teknokrat.ac.id/index.php/sport/issue/archive

Gutawa Arda Wisnu, K. F. R. (2022). Analisis Teknik Dasar Sepak Bola Pada Anak Usia Dini Pada Siswa Sekolah Sepak Bola (SSB). Urnal Kesehatan Olahraga Vol., 10(1), 183–190.

Ariyuda, I Made Dwi., I Wayan Weta, I Made Muliarta, Ketut Tirtayasa, I Made Jawi, & Putu Adiartha Griadhi. (2018). Pelatihan Pliometrikdiagonal Cone Hoplebih Efektif Dibandingkan Front Cone Hopuntuk Meningkatkan Kekuatan Otot Tungkai Dan Kecepatan Tendangan Pada Pemain Sepak Bola SMK SMSR Ubud. Sport and Fitness Journal, 72–82.

Junaidi, A., Sugihartono, T., Sutisyana, A., & Defliyanto, D. (2019). Pengaruh Latihan Variasi Shooting Ke Arah Gawang Terhadap Akurasi Shooting Dalam Permainan Sepak Bola Pada Pemain U-14 Ssb Tunas Muda Bengkulu. Kinestetik, 2(2), 126–132. https://doi.org/10.33369/jk.v2i2.6490

Kosasih, K., Safari, I., & Akin, Y. (2019). The effect of double leg cone hop plyometric exercise on long pass accuracy in soccer. Journal of Physics: Conference Series, 1318(1). https://doi.org/10.1088/1742-6596/1318/1/012145

ISSN 2615-8744 (online)
ISSN 2620-6668 (print)

Lamungga, P., Iqbal, M., & Alsaudi, A. T. B. D. (2020). Keterampilan Shooting Bola pada Permainan Sepakbola Menggunakan Metode Bagian. Prosiding Seminar Nasional Pendidikan STKIP Kusuma Negara II, 8–14.

Mappaompo, M. A., Saparia, A., Mashuri, H., Mappanyukki, A. A., & Juhanis, J. (2022). Shooting Accuracy of Concentration In The Game of Football. Halaman Olahraga Nusantara (Jurnal Ilmu Keolahragaan), 5(2), 371. https://doi.org/10.31851/hon.v5i2.7087

Nur Fajrin, S., Suci Mahayati, D., Studi Fisioterapi Program Diploma Tiga, P., Ilmu Kesehatan Universitas Pembangunan Nasional Veteran Jakarta, F., & Pusat Otak Nasional, R. (2021). Literature Review : Hubungan Koordinasi Terhadap Keterampilan Menggiring Bola Pada Pemain Sepak Bola. In Indonesian Journal of Physiotherapy (Vol. 1, Issue 1).

Putra, M. E., Fauzi, F., Kurniawan, F., Ningrum, N. R., & Susanto, N. (2024). The relationship between explosive power, elbow angle, and jump height with smash accuracy in volleyball games; correlational studies. Health, Sport, Rehabilitation, 10(1), 65–75. https://doi.org/10.58962/HSR.2024.10.1.65-75

Rahman, T., Nurkholis, & Ismalasari, R. (2020). Pengaruh High Intensity Interval Training (HIIT) Rasio 1:3 dan Rasio 1:5 terhadap Kecepatan, Kelincahan dan VO2max Pada Ekstrakurikuler Sepakbola SMAN 5 Mataram. Jurnal Ilmiah Mandala Education, 6(1), 234–242. http://ejournal.mandalanursa.org/index.php/JIME/index

Rahmat, M., Nursasih, I. D., & Risma, R. (2023). Pengaruh Latihan Shooting Menggunakan Gawang Kecil Terhadap Ketepatan Shooting Dalam Cabang Olahraga Sepakbola. Jurnal Keolahragaan, 8(2), 87. https://doi.org/10.25157/jkor.v8i2.9594

Sunarta, H., & Irawadi, H. (2020). Perbedaan Efektivitas Akurasi Shooting Menggunakan Kaki Bagian Atas Atlet Sepak Bola Bintang Salju Kecamatan Matur Kabupaten Agam. Jurnal Patriot, 2(1), 256–264.

Tohari, M. A. (2017). Analisis Teknik Keterampilan Dasar Permainan Sepakbola Pada Akademi Kresna Bina Pesepakbola Surabaya Pada Pemain Usia 14-16 Tahun. Jurnal Prestasi Olahraga, 2(1), 1–9.

Udam, M. (2017). Pengaruh Latihan Shuttle-Run Dan Zig-Zag Terhadap Kemampuan Dribbling Bola Pada Siswa Sekolah Sepakbola (SSB) Imanuel Usia 13-15 Di Kabupaten Jayapura. Jurnal Pendidikan Jasmani Olahraga Dan Kesehatan, 3(1), 58–71.

ISSN 2615-8744 (online)
ISSN 2620-6668 (print)