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### ABSTRACT

The purpose of this study was to determine the calming ability of different parts of the foot in soccer. The research method is a survey of 15 soccer players. The test is to do a precision kick with different sides of the foot: the inside of the foot, the instep, and the outside of the leg. A statistical descriptive analysis was carried out. Based on the results of the research that was carried out with tests of deep leg, instep, and outer leg kicks showing the skill level of Samustida FC players, in doing deep leg kicks, there were 4 players in the very good category and the rest were in that category. The skill level of the instep kick is 4 players in the medium category, and the rest are under that category. Based on the data that has been obtained, it can be concluded that the level of instep kick ability in the very low category is 7%. In the outer leg kick ability category, there are 3 players in the very good category. Based on the data that has been obtained, it can be concluded that the level of leg kick ability is in the less than 20% category.

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# INTRODUCTION

Football is a sport that uses a ball made of leather and is played by two teams, each consisting of 11 core players and some reserve players. Football is played with eleven people, and the goal is to score as many goals as possible to win kemenangan (Sidik et al., 2021). Not only that, the game of football must also have basic techniques to be able to play the ball, one of which is the technique of kicking. Some basic soccer techniques that must be mastered by soccer players to be able to play well are passing, controlling, dribbling, heading, kicking, and catching. Of all the basic techniques that exist in football, the



technique of kicking the ball (shooting) has an important role in football according to the purpose of playing football.

Kicking is one of the basic soccer techniques that we must master. This is because the technique of kicking the ball will more or less affect how to play against opponents (Penjasorkes, 2021). The results of data processing show that the half volley, drop kick, and forward kick techniques have a significant difference in the distance achieved in soccer games, and the data results show that the best kick is using the forward kick technique (Badissalam et al., 2016). In order to make it easier to evaluate the success and failure of football player shooting training programmes, the shooting test instrument developed by the Ministry of Education and Culture can be applied because it has higher validity and reliability values (Efendi & Widodo, 2019). Slalom dribbling ability at women's soccer clubs in Bengkulu City is stated to be lacking with a percentage of 36.67%, and long passing ability at women's soccer clubs in Bengkulu City is stated to be very lacking with a percentage of 66.67% (Putri et al., 2019). As well as a comparison of the accuracy of kicking the ball into the goal with the inside of the tortoise and the outside of the tortoise in male students of class XI at SMA Negeri 1 dompu in the 2018/2019 academic year" (Pratama, 2020). From the conclusions above, it can be interpreted that kick techniques can affect the game.

The soccer game passing training model for the beginner level of high school age that has been developed obtained evidence of this increase in the results of testing the pretest and posttest data. There was a significant difference between before and after the model treatment (Mahardika & Parlindungan, 2021). Learning media for passing football (back passer) is urgently needed to be used as a medium for learning football passing more effectively and efficiently because it is very important in the learning process, and besides that, learning is not boring and becomes input material for PJOK teachers throughout Indonesia (Rapandy & Aufan, 2021). Interactive multimedia based on video tutorials on the basic technique of passing football in the inner leg is suitable for use in sports and physical education subjects (Simanjorang et al., 2021). The conclusion that can be drawn from the research above is that the training methods provided greatly affect the ability to perform basic soccer techniques.

Some basic soccer techniques that must be mastered by soccer players to be able to play well are passing, controlling, dribbling, heading, kicking, and catching. Of all the basic techniques that exist in football, the technique of kicking the ball (shooting) has an important role in football according to the purpose of playing football. Shooting techniques and principles are a combination and understanding of players when shooting skills that must be considered and given practise because this is an important component for a player to score goals in every situation or build momentum in every game and match where there is an opportunity.

Based on the description above, the authors are interested in conducting this research with the title Differences in the Ability to Kick the Inner Leg, Instep, and Outer Leg of Junior Soccer Players." As well as aiming to determine the ability to kick the inner leg, instep, and outer leg of junior football players.

## **MATERIALS AND METHODS**

The method used in this study is a descriptive method with quantitative analysis, in accordance with the aim of obtaining the desired data. Quantitative descriptive research is about differences in the ability to kick the inside, back, and outside of the legs in junior soccer players. The method used in this research is a survey with test and measurement techniques to collect data.

This sampling technique uses a population sample and, according to Sugyono (2017), is a technique for determining samples from populations that have certain characteristics up to the desired quota. The sample in this study was all members of the population used as a research sample on Samustida FC Junior Football 15 players. Tests conducted on the ability to shoot with accuracy.



Figure 1. Shooting accuracy

The data that has been collected is then separated according to its respective types and arranged for analysis and conclusions. The analysis technique used in this research is descriptive. There is a descriptive test between them; Parametric tests are tests that have information about population parameters, while non-parametric tests are tests where the researcher does not know about population parameters. First, a prerequisite analysis test is carried out, which includes a normality test.

# **RESULTS AND DISCUSSION**

Based on the research results obtained from 15 junior football athletes from Samutida FC, The implementation of this research was carried out on July 4–8, 2023. The data obtained in this study were as follows:

in junior soccer players					
Statistic	Inside foot	Instep	Outside foof		
mean	13.40	7.40	11.93		
Median	13.00	7.00	13.00		
Mode	13	7	9		

**Table 1.** Data on differences in the accuracy of kicking the inside of the instep and the outside of the foot in junior soccer players

Based on Table 1 above, after obtaining the score from the inside leg kick test on Samustida FC junior soccer athletes, then obtained an average value of Inside foot 12.40, instep 7.40, and outside leg kick of 11.93.

Table 2. kicking ability status						
Level	Inside foot	instep	Outside foot			
Very good	4	0	3			
Good	6	0	6			
Avarege	4	4	3			
Poor	1	10	3			
Very poor	0	1	0			



Figure 1. Kicking ability status

Table 2. Kolmogorov-Smirnov Z test					
Inside foot	Asymp. Sig. (2-tailed)	.536			
Instep foot	Asymp. Sig. (2-tailed)	.109			
Outside foot	Asymp. Sig. (2-tailed)	.594			

Based on the results of the normality test for the inside kick, back kick, and outside leg kick, the significance value is known. Based on Surahman et al. (2015) if p 5% > 0.05, then the distribution is normal; otherwise, if the p value is 0.05, then it is not normally distributed. So, it can be concluded that the inside leg kicks had a mean of 13.40, the instep kicks had a mean of 7.40, and the outside kicks had a mean of 11.93.

Т	Df	Sig. (2-tailed)
5.319	28	.000
.986	28	.333
-3.716	28	.001
	.986	.986 28

Based on the table showing the T test, the significance value of the kick in the foot and instep is 0.000 < 0.05, in the foot and in the Outer leg 0.333 > 0.05, and in the instep and outer leg 0.001 < 0.05. In this case, the Independent T test has a significant value, so it can be concluded that the data shows significant differences in the Samustida FC players.

Based on the results of the research that was carried out with tests of deep leg, instep, and outer leg kicks showing the skill level of Samustida FC players, in doing deep leg kicks, there were 4 players in the very good category and the rest were in that category. The skill level of the instep kick is 4 players in the medium category, and the rest are under that category. Based on the data that has been obtained, it can be concluded that the level of instep kick ability in the very low category. Based on the data that has been obtained, it can be concluded that the level of are 3 players in the very good category. Based on the data that has been obtained, it can be concluded that the level of leg kick ability is in the less than 20% category.

Kicking is one of the basic soccer techniques that we must master. Because the technique of kicking the ball will affect the way you play to face your opponent. For example, when we want to give gastric bait, we have to use an instep kick. It's different when you are going to dribble fast, so players have to use the outside of the foot (Penjasorkes, 2021). Kicking the ball is the technique with the ball that is mostly done in football games. A player who does not master the technique of kicking the ball well will not be a good player.

(Amrullah & Widodo, 2017). Kicking the ball is one of the most dominant characteristics of the game of football. The main purpose of kicking the ball is to pass and shoot at the goal (Adi et al., 2019). Teaching Games for Understanding (TGfU) is a learning model that emphasises playing tactics to be understood as a first introduction. Students must know why and when skills are needed in games and the technical implementation of skills, especially basic football techniques (Qohhar & Pazriansyah, 2019). From the description above, football players are required to master kick techniques. Players who do not master kick techniques properly can affect the game either by baiting or shooting at goal.

To get accurate kick results for soccer players, it is required to have an ideal body structure and balanced physical abilities. One of the basic techniques that must be mastered is the ability to kick in order to obtain the maximum level of accuracy and score goals. Therefore, every athlete must have a supporting body structure and physical components that support kick accuracy, such as calf length, thigh length, and leg explosive power (Ditya, 2013). According to Muis (2014), there are four components of these physical conditions: leg muscle strength, flexibility, balance, and leg explosive power. The results of the analysis show that there is a significant relationship between leg muscle strength and the results of kicking the ball at the SSB UTP Surakarta Football Club in 2018 (Budiyono, 2018). This means that there is a significant contribution between leg muscle strength, concentration, and balance (Setiawan & Bawono, 2016), and there is a significant relationship between leg muscle strength and kicking ability, abdominal muscle strength, and ankle coordination. There is also a significant relationship between leg muscle strength, abdominal muscle strength, and ankle coordination with the ability to kick a ball (Lau, 2020). Physical factors in the game of football such as calf length, thigh length, leg explosive power, abdominal muscle strength, and ankle coordination can affect the ability to kick the ball.

Football is a sport that requires a lot of basic technical skills. According to Haris Iskandar (2017) there are three types of kick techniques that players need to master: kicks with the inside of the foot, kicks with the outside of the legs, and kicks with the instep. Kicking is a skill that is needed to score goals. Shooting is one of the football skills that is very important to improve in sports because, to be able to score goals against a soccer player, he must have a good, fast, and precise kick. (Tamammudin & Widodo, 2020). According to Anggara (2020), there is an influence of the training of the outer leg kicks on the accuracy of the 30-metre free kick, meaning that the more routine and often the intensity of the training will result in a good 30-metre free kick. The kick technique with the inside of the foot is more effectively used in kick accuracy compared to the kick technique with the outer legs and back (Amin, 2018). From this description, in playing soccer, players need to master kick techniques, both inside leg kicks, outside leg kicks, and insteps. To master these techniques, regular training is needed.

The ability to kick in soccer plays an important role in players being able to master the game through the kick training method in Football games. Through Modification of Target exercises, which can improve Shooting skills (Pratiko et al., 2021), the learning model for basic football passing techniques is very effective and efficient to do (Yunisal, 2020). According to Candra (2016), there is a significant effect of kicking practise using imagery on the accuracy of kicks on goal. To master good kicking techniques in football, of course, followed by training,

Accuracy is a very important indicator in a kick in order to reach the desired point (Ariwijaya et al., 2021). There is a significant relationship between leg length and leg muscle explosive power on kicking ability in players (Fahkruzzaman & Zulfikar, 2015), whereas according to Setiawan & Bawono (2016), leg muscle strength and balance have a level of contribution to kick accuracy and kick distance. The variable contribution of the explosive

power of the leg muscles to the accuracy of kicks on goal is 44%, the contribution of eyefoot coordination to the accuracy of kicks on goal is 16%, and the contribution of the explosive power of the leg muscles together to the accuracy of kicks on goal is 49% (Hendra & Mutalib, 2016). Leg length, muscle explosive power, and eye-foot coordination contribute to the accuracy of a player's kicks.

# CONCLUSION

Based on the analysis and discussion above, it can be concluded that the ability to kick the inner leg, instep, and outer leg of the Samustida FC team is as follows: 1) The ability to kick in the leg gets a very good category value with a percentage of 27%. 2) Medium category of instep kick ability with a percentage of 27% 3) The ability to kick the outside leg is very good, with a percentage of 20%. So the result of kicking the inside leg is better than the outside leg and instep.

Based on the results of the research that has been done, the researchers hope to provide suggestions. It is necessary to conduct development research by increasing the population or research variables so that scientific studies and problems are more complex. For players who have the ability to kick the inside leg, back foot, and outside leg with less value, it is expected that they are always serious when practising. For coaches to always provide coaching to players so that players' abilities are better.

## **CONFLICT OF INTEREST**

There are no conflicts of interest in this article.

## REFERENCES

- Adi, I.H., Moh. Agung Setiabudi, & Danang Ari Santoso. (2019). Perbandingan Kecepatan Dan Ketepatan Menendang Bola Dengan Menggunakan Awalan 1 Meter, 2 Meter, 3 Meter, 4 Meter. Jurnal Kejaora (Kesehatan Jasmani Dan Olahraga), 4(1). https://doi.org/10.36526/kejaora.v4i1.616
- Amin. (2018). Perbandingan Akurasi Long Pass Menggunakan Kaki Bagian Dalam , Kaki Bagian Luar dan Punggung Kaki Terhadap Siswa Ekstrakulikuler Sepakbola SMA Negeri 3 Kota Sukabumi Tahun 2018. Seminar Nasional Pendidikan Jasmani, 1(1).
- Amrullah, G. W. S., & Widodo, A. (2017). Kontribusi power dan kekuatan otot tungkai dengan jauhnya tendangan (longpass) dalam permainan sepakbola pada SSB PSP JEMBER U-15 Ghany. *Jurnal Kesehatan Olahraga, 5*(1).
- Anggara, A. (2020). Pengaruh Latihan Tendangan Kaki Bagian Luar Dan Latihan Tendangan Kaki Bagian Dalam Terhadap Akurasi Tendangan Bebas 30 Meter. *Journal of SPORT* (Sport, Physical Education, Organization, Recreation, and Training), 4(2), 90–100. <u>https://doi.org/10.37058/sport.v4i2.1989</u>
- Ariwijaya, A., Arya T Candra, & Ach. Zayul Mustain. (2021). Analisis Biomekanika Akurasi Tendangan Sudut Berdasarkan Variasi Titik Impact. SPRINTER: Jurnal Ilmu Olahraga, 2(1). <u>https://doi.org/10.46838/spr.v2i1.99</u>
- Badissalam, I. M., Rusdiana, A., & Sultoni, K. (2016). Perbandingan Hasil Tendangan Penjaga Gawang Antara Teknik Half Volley, Drop Kick, Dan Forward Kick Dalam Permainan Sepakbola. *Jurnal Terapan Ilmu Keolahragaan*, 1(2). <u>https://doi.org/10.17509/jtikor.v1i2.2652</u>

- Budiyono, K., Yusuf, M., & L, R. P. (2018). Hubungan Kekuatan Otot Tungkai, Kelentukan dan Pergelangan Kaki Terhadap Tendangan Jarak Jauh pada Klub Sepak Bola SSB UTP Surakarta. *Jurnal Ilmiah SPIRIT*, *18*(1).
- Candra, A. (2016). Pengaruh Latihan Menendang Menggunakan Imageri Terhadap Akurasi Tendangan Ke Gawang. *JOURNAL SPORT AREA, 1*(1). <u>https://doi.org/10.30814/sportarea.v1i1.371</u>
- Ditya, M. Y. (2013). Kontribusi Panjang Betis, Panjang Paha, dan Daya Ledak Tungkai terhadap akurasi menendang pada pemain sepakbola BIMA AMORA U-16 Gresik. *E-JOURNAL UNESA KONTRIBUSI, 2*(1).
- EFENDI, Y., & WIDODO, A. (2019). Uji Validitas Dan Reliabilitas Instrumen Tes Shooting Sepak Bola Pada Pemain Tim Persiwu Fc Jatiyoso. *Jurnal Kesehatan Olahraga*, 7(2).
- Fahkruzzaman, Dian Zulfikar, A. (2015). Hubungan antara panjang tungkai dan daya ledak otot tungkai terhadap kemampuan menendang pada pemain SSB Aneuk Rencong Banda Aceh tahun 2010. *Ilmiah Mahasiswa Pendidikan Jasmani, Kesehatan Dan Rekreasi Fakultas Keguruan Dan Ilmu Pendidikan Unsyiah*, 1(2).

Haris Iskandar. (n.d.). *Tim Kesebelasan Sepak*.

- Hendra, J., & Mutalib, A. (2016). Kontribusi Daya Ledak Otot Tungkai Dan Koordinasi Mata-Kaki Terhadap Akurasi Tendangan Ke Gawang (Psgm) Junior Kecamatan Pangkalan. *Muara Pendidikan*, 1(1).
- Kristian Pratiko, L., Razali, & Iqbal, M. (2021). Meningkatkan Hasil Belajar Menendang (Shooting) Sepak Bola Melalui Modifikasi Latihan Target. *INSPIREE: Indonesian Sport Innovation Review*, 2(2). <u>https://doi.org/10.53905/inspiree.v2i2.44</u>
- Lau, B. (2020). Hubungan Kekuatan dan Koordinasi terhadap Jauhnya Tendangan dalam Pemainan Sepakbola. *Biormatika : Jurnal Ilmiah Fakultas Keguruan Dan Ilmu Pendidikan*. <u>https://doi.org/10.35569/biormatika.v6i02.816</u>
- Mahardika, G. P., & Parlindungan, D. P. (2021). Model latihan passing (wp) permainan sepakbola untuk tingkat pemula siswa sma. *Sport science and education journal, 2*(1). <u>https://doi.org/10.33365/ssej.v2i1.1011</u>
- Mu'is, A. (2014). Analisis Kondisi Fisik Terhadap Keterampilan Menendang Bola Ke Arah Gawang (Shooting). *Jurnal Kesehatan Olahraga, 02*(03).
- Muhammad Sidik, N., Kurniawan, F., & Effendi, R. (2021). Pengaruh Latihan Sepakbola Empat Gawang Terhadap Kemampuan Passing Stopping Sepakbola Ekstrakurikuler di SMP Islam Karawang. *Jurnal Literasi Olahraga*, *2*(1). <u>https://doi.org/10.35706/jlo.v2i1.4434</u>
- Penjasorkes. (2021). *3 Teknik Dasar Menendang Bola (Kaki Dalam, Kaki Luar dan Punggung Kaki) Penjasorkes*. Minggu, 03 Januari 2021.
- Putri, D. S., Yarmani, Y., & Aliman, A. (2019). Studi Kemampuan Slalom Dribbling Dan Long Passing Pada Klub Sepakbola Wanita Di Kota Bengkulu. *KINESTETIK*, 3(2). <u>https://doi.org/10.33369/jk.v3i2.8913</u>
- Pratama, S. (2020). Perbandingan Ketepatan Menendang Kearah Gawang Dengan Menggunakan Kura-Kura Bagian Dalam Dan Kura-Kura Bagian Luar Kelas Xi Putra Sma Negeri 1 Dompu Tahun Pelajaran 2018/2019. *INSPIREE: Indonesian Sport Innovation Review*, 1(1). <u>https://doi.org/10.53905/inspiree.v1i1.3</u>

- Qohhar, W., & Pazriansyah, D. (2019). Pengaruh Model Pembelajaran Kooperatif Tipe Teaching Games For Understanding (TGFU) Terhadap Peningkatan Hasil Belajar Teknik Dasar Sepakbola. *Physical Activity Journal*. https://doi.org/10.20884/1.paju.2019.1.1.1998
- Rapandy, B., & Aufan, R. (2021). Pengembangan Media Pembelajaran Passing Sepakbola (Back Passer) Di SMA. *JURNAL PRESTASI*, *5*(1). https://doi.org/10.24114/jp.v5i1.25402
- Setiawan, R., & Bawono, M. N. (2016). Kontribusi Kekuatan Otot Tungkai dan Keseimbangan Terhadap Kemampuan Akurasi Tendangan (Studi Terhadap Pemain SSB Mitra Krian 14-15 Tahun). *Jurnal Kesehatan Olahraga*, *06*(2).
- Simanjorang, E. K., Wahjoedi, W., & Spyanawati, N. L. P. (2021). Pengembangan Video Tutorial Materi Passing Sepakbola Mata Pelajaran Pjokuntuk Kelas X Sma/Smk. Jurnal Pendidikan Jasmani, Olahraga Dan Kesehatan Undiksha, 8(3). https://doi.org/10.23887/jjp.v8i3.33762
- Sugiyono. (2017). *Metode penelitian kuantitatif, kualitatif dan R&D* (Cet.26). Alfabeta.
- Surahman, Rachmat, M., & Supardi, S. (2015). Metodelogi pendidikan. In *Modul Bahan Ajar Farmasi* (p. 132).
- Tamammudin, M., & Widodo, A. (2020). Pengaruh Latihan Metode Circuit Training Terhadap Keterampilan Shooting Dalam Permainan Sepakbola Pada Sekolah Sepakbola Akrab Kresna. *Jurnal Kesehatan Olahraga*, *8*(1).
- Yunisal, P. (2020). Model Pembelajaran Teknik Dasar Passing Sepakbola untuk Sekolah Menengah Pertama. *JPOE*, *1*(1). <u>https://doi.org/10.37742/jpoe.v1i1.7</u>