



Kinestetik : Jurnal Ilmiah Pendidikan Jasmani 9 (3) (2025)

Kinestetik : Jurnal Ilmiah Pendidikan Jasmani

<https://ejournal.unib.ac.id/index.php/kinestetik/index>

DOI : 10.33369/jk.v9i3.43794



Analysis Of The Technical Ability Of Shooting and Passing of Extracurricular Futsal Students At Nur Hidayah Kartasura Senior High School

Usaid Syahrul Mubarak*¹, Pungki Indarto², Nurhidayat³

^{1,2,3} Pendidikan Jasmani, FKIP, Universitas Muhammadiyah Surakarta, Indonesia

Article Info

Article History :

Received : July 2025

Revised : September 2025

Accepted : September 2025

Keywords:

Extracurricular,
Futsal,
Passing,
Shooting.

Abstract

This study aims to evaluate the shooting and passing technique abilities of students who take part in futsal extracurricular activities at Nur Hidayah Kartasura Senior High School. A quantitative approach was employed, using a test method to collect data. The population comprised 40 students, while a purposive sampling technique was applied to select a sample of 25 students. The primary variables examined were the students' competencies in performing shooting and passing techniques in futsal. The findings revealed that in the shooting technique test, 60% (15 students) achieved the "fair" category, 28% (7 students) reached the "good" category, and 12% (3 students) fell into the "poor" category. Regarding the passing technique, 56% (14 students) were classified as "good," 36% (9 students) as "very good," and 8% (2 students) as "poor." These results indicate that most students possess adequate technical abilities. Nevertheless, continuous and well-structured training programs remain essential to further enhance their performance and ensure sustained skill development over time.

OPEN ACCESS



*Corresponding email : a810190064@student.ums.ac.id

ISSN 2685-6514 (Online)

ISSN 2477-331X (Print)

INTRODUCTION

Futsal is an exciting and dynamic sport, primarily due to the small size of the playing field, which allows the ball to move quickly from one player to another. This sport demands a high level of technical skill from players. One of the distinctive features of futsal is the fast-paced nature of the game, where situations change rapidly and every position shifts quickly before transitioning to the next phase (Praniata et al., 2019). Therefore, players must possess excellent and responsive abilities in a short period of time.

In terms of technique, skills in futsal are quite similar to those in soccer. However, the main difference lies in the use of the sole of the foot to control or stop the ball (Meria, 2018). Given the hard surface of futsal courts, players must keep the ball close to their feet, as letting it drift too far away gives the opponent a greater chance to intercept it, especially considering the smaller size of futsal courts compared to soccer fields (Mubarak et al., 2022). Every player naturally aspires to achieve high performance in futsal; therefore, they need to hone their technical playing skills (Widowati & Rinata, 2020). Several factors influence technical ability in futsal, including passing, control, dribbling, and shooting (Kamil & dkk, 2021; Mahendra et al., 2022; Sanggita & Nurhidayat, 2022). These skills are interrelated in creating a good and effective game, with common errors often rooted in basic technical mistakes.

Passing and shooting are two fundamental techniques that play a crucial role in futsal (Syahrana & Nurhidayat, 2022). Strong and accurate passing is needed to ensure the ball travels parallel to the player's heels, especially in tight spaces (Saminan, 2019). The success of passing greatly depends on the quality of execution during the game. Meanwhile, shooting is a vital technique as scoring opportunities and winning chances depend on effective shooting ability (Priyo Utomo & Indarto, 2021).

Players are required to master shooting techniques to maintain quick and accurate ball circulation during both offensive and defensive plays, and to boost self-confidence when making decisions on the field (Supiana et al., 2019). Previous studies on futsal skill assessment such as those by Hasanah, (2019) and Juniar, (2017) have primarily focused on competitive teams or professional athletes, while research examining the technical abilities of high school students involved in extracurricular programs remains limited.

This creates a gap in understanding how basic futsal techniques are developed at the school level, particularly in non-formal training environments. Addressing this gap is essential because early identification of students' technical strengths and weaknesses can guide coaches in designing more targeted and effective training sessions. Mastering these basic techniques is therefore not only critical to improving individual and team

performance in extracurricular activities at Nur Hidayah Kartasura Senior High School, but also urgent to foster long-term player development and to prepare students for higher levels of competition in Sukoharjo Regency.

Nur Hidayah Kartasura Senior High School offers a futsal extracurricular program that emphasizes mastering basic techniques such as shooting and passing so that students can perform optimally. Therefore, it is important to conduct an analysis of these technical abilities to improve training quality and match performance and to produce more competent athletes (Dandi & Nurhidayat, 2022). Through this analysis, various issues in shooting and passing techniques can be identified and addressed, helping students understand their individual abilities, including strengths and areas for improvement. Besides technical skills, mental aspects such as self-confidence, concentration, and psychological endurance also influence performance on the field. Developing basic techniques is not only essential at the school level but also serves as a crucial foundation for students aiming to pursue a professional career in futsal (Purnamaningsih, 2021). With opportunities expanding from local to international levels, mastering passing and shooting not only enhances individual skills but also strengthens team coordination, improves playing patterns, and increases goal-scoring chances, which positively impacts overall team motivation.

In addition to individual skills, character building such as discipline,

teamwork, sportsmanship, and responsibility is also a valuable benefit of futsal extracurricular activities. Through training and competition, students learn to appreciate the process, respect teammates and opponents, and manage emotions in various match situations. These experiences help develop positive character traits that are beneficial not only in sports but also in everyday life.

According to Ibrohim, the futsal extracurricular coach at Nur Hidayah Kartasura Senior High School, "The shooting and passing techniques of each student still need to be improved in order to perform these techniques better." By identifying students' strengths and weaknesses in both technical and mental aspects, efforts can be made to enhance training quality, provide tailored instruction, and support the development of both individuals and the team as a whole.

LITERATURE REVIEW

Futsal

Futsal is a sport derived from the combination of the words "futbol" (football) and "sala" (room) in Spanish, as well as "futebol" in Portuguese. It was first introduced in the 1930s by Juan Carlos Ceriani in Uruguay as a solution to limited training opportunities due to weather conditions. This game requires a high level of ball control, strong teamwork, and well-developed strategies, as it is played on a small field that minimizes room for error. Basic techniques such as shooting and passing are key to maintaining ball possession

and creating opportunities, making them essential skills for every player. At Nur Hidayah Kartasura Senior High School, futsal is a popular extracurricular activity; however, there are differences in students' abilities regarding these basic techniques. Therefore, an analysis of shooting and passing skills is necessary to identify each individual's strengths and weaknesses as a foundation for developing more targeted and effective training programs. Through this evaluation, coaches and the school can design appropriate development strategies to improve the quality of students' futsal performance.

Extracurricular Activities

Extracurricular activities are non-formal educational programs conducted outside regular school hours, either within the school environment or outside educational institutions. These activities aim to develop students' potential, interests, and talents through various fields such as sports, arts, religion, leadership, and practical skills. In addition to complementing the learning process, extracurricular activities also play a strategic role in shaping students' character by instilling values such as responsibility, discipline, teamwork, and sportsmanship. These programs are organized by competent educators in accordance with the needs and characteristics of the students and are designed as a means of applying classroom knowledge in real-life contexts. Based on the Regulation of the Minister of Education and Culture No. 62 of 2014, every educational institution is

required to organize extracurricular activities as a medium for personal development and the social, emotional, and spiritual actualization of students (Gumantan et al., 2020).

Basic Shooting and Passing Techniques in Futsal

In futsal, shooting and passing techniques are fundamental skills that significantly determine the quality of team play (Wijaya Kusuma, 2021). Shooting, or the technique of kicking the ball to score goals, requires precision, power, and high focus. Several shooting techniques include the instep kick, which produces a fast and powerful ball trajectory; the inside-foot kick, which is more accurate and suitable for short distances; the outside-foot kick, which is useful for deceiving opponents; and the toe kick, which results in a straight and powerful shot (Abdillah, 2021; Asriady Mulyono, 2014; Syamsuryadin & Wahyuniati, 2017). On the other hand, passing functions as the connection between players and is the main foundation for building attacks. According to Dedi, (2019) and Purwanto, (2019), passing techniques can be performed using various parts of the foot, such as the inside for short, easily controlled passes; the outside for cross or through passes; the sole for short-distance passes under pressure; and the chip technique to loft the ball over opponents. Both shooting and passing techniques require continuous practice so that players can execute them effectively in various match situations.

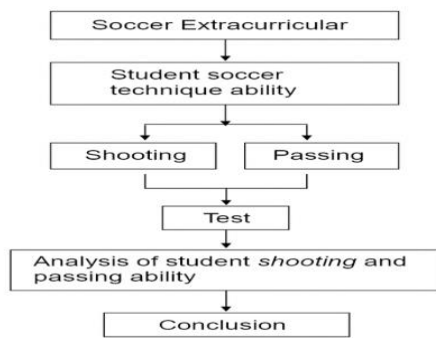


Figure 1. Thinking Framework

Futsal is an indoor sport played on a smaller field compared to soccer, which requires quick movements, sprints, dribbling, and intense changes of direction, all of which physically benefit heart health, lung function, and the cardiovascular system. In addition to strengthening muscles, improving coordination, agility, and speed, futsal also develops basic skills such as dribbling, passing, shooting, and ball control. The limited space of the court and the small number of players force players to think and act quickly, demanding high precision in decision-making. Passing and shooting are two key techniques that determine the quality of play; passing plays an important role in maintaining ball possession and building attacks, while shooting is essential for scoring goals effectively. Each student's futsal technical ability varies, particularly in the aspects of passing and shooting, which affects match scores. To assess these abilities, this study uses test methods that include direct observation, recording, and video analysis during training or matches to objectively evaluate the strengths and weaknesses of students' techniques in these two areas.

Hypothesis

Based on the theoretical analysis and framework previously presented, the resulting hypothesis is that students participating in the futsal extracurricular activity at Nur Hidayah Kartasura Senior High School have varying levels of technical ability in shooting and passing.

METHODS

This quantitative descriptive study aimed to assess the shooting and passing technical abilities of students in the futsal extracurricular program at Nur Hidayah Kartasura Senior High School. The research involved a population of 40 students, from which 25 active male participants aged 15–17 years were selected through a combination of total sampling and purposive sampling based on their regular attendance in futsal training sessions. Data collection was conducted at LIBERO Futsal Arena Kartasura in a single session after the school administration officially granted research permission. Before the tests began, the researcher explained the objectives and procedures of the study and obtained informed consent from both the participants and their parents or guardians. The instruments used included official futsal balls, a standard futsal court, cones, a stopwatch, a measuring tape, a whistle, a rope, and assessment sheets for documenting the test results. The shooting ability test required each participant to kick the ball from a distance of 10 meters toward the goal five times, with performance evaluated based on

both accuracy and power. The passing ability test asked participants to pass the ball from a distance of 9 meters into a small goal five times, and success was measured by whether the ball struck the designated target. All data were analyzed descriptively using the mean, range, and standard deviation to describe the distribution and level of students' technical abilities without making generalized conclusions (Retnawati Heri, 2018). Ethical considerations were maintained throughout the process: approval was obtained from the school authority, informed consent was collected, and all personal data were kept confidential and used solely for academic purposes.

RESULT

Description of Research Site and Time

The research titled "Analysis of Shooting and Passing Technical Skills of Futsal Extracurricular Students at Nur Hidayah Kartasura Senior High School" was conducted at Libero Futsal Arena, located at Jalan Wimbohharsono No. 4, Dusun III, Kartasura, Sukoharjo, Central Java, approximately 1.4 km from the school. The research activities took place from September 21 to November 9, 2023, with the shooting and passing tests conducted from 16:00 to 17:00. The entire data collection process was carried out within the futsal arena and supervised by the futsal coach of Nur Hidayah Kartasura Senior High School, Mr. Ibrohim Hanif Abdulloh.

Description of Research Subjects

Table 1. Characteristics of Respondents
Based on Age

Age	Number	Percentage
16 Years	11	44%
17 Years	14	56%
Total	25	100%

Source: Processed Secondary Data, 2024

From Table 1, it can be seen that out of 25 students participating in the futsal extracurricular activity at Nur Hidayah Kartasura Senior High School, 11 students (44%) were 16 years old and 14 students (56%) were 17 years old.

Based on the descriptive statistical analysis of 25 futsal extracurricular students at Nur Hidayah Kartasura Senior High School, the average shooting skill score was 19.00, with a score range of 18 (minimum 9 and maximum 27), a standard deviation of 4.320, and a variance of 18.667. These figures indicate a wide score dispersion, reflecting varied shooting abilities among students and suggesting the need for more structured and intensive shooting training to enhance accuracy and consistency. In contrast, the passing skill had an average score of 3.88, with scores ranging from 2 to 5, a narrower range of 3, and lower dispersion as shown by a standard deviation of 1.013 and a variance of 1.027. This indicates that most students have relatively consistent and good passing abilities, suggesting the existing passing technique training is effective. However, individual evaluations remain necessary to sustain and further improve the quality of play. Overall, students' passing skills appear more stable compared to their shooting abilities, which still require focused improvement.

Table 2. Results of the Shooting Technique Ability Test for Futsal Extracurricular Students at Nur Hidayah Kartasura Senior High School

	Category	Number	Percentage
Shooting Technique	Very Good	0	0%
	Good	7	28%
	Fair	15	60%
	Poor	3	12%
	Very Poor	0	0%
	Total	25	100%

Source: Processed Secondary Data, 2024

Based on the obtained data, the shooting technique ability of futsal extracurricular students at Nur Hidayah Kartasura Senior High School is mostly in the fair category, with 15 out of 25 students, equivalent to 60%. Meanwhile, students categorized as good totaled 7 individuals (28%), and the remaining 3 students (12%) were in the poor category. These percentages were calculated by dividing the number of students in each category by the total number of students: $7/25$ for the good category, $15/25$ for the fair category, and $3/25$ for the poor category. The distribution of these categories can be visualized in the following chart.

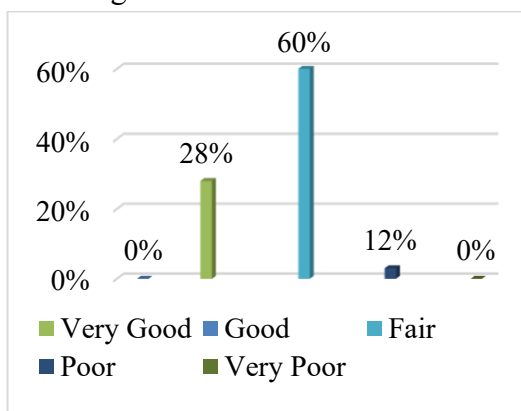


Figure 2. Frequency Distribution Graph of Students' Shooting Technique Ability in the

Futsal Extracurricular at Nur Hidayah Kartasura Senior High School

Table 3. Results of the Passing Technique Ability Test in the Futsal Extracurricular at Nur Hidayah Kartasura Senior High School

	Category	Number	Percentage
Passing Technique	Very Good	9	36%
	Good	14	56%
	Not Good	2	8%
	Total	25	100%

Source: Processed Secondary Data, 2024

Based on Table 3, the majority of students participating in the futsal extracurricular at Nur Hidayah Kartasura Senior High School demonstrated good passing technique skills, namely 14 students (56%), followed by very good category with 9 students (36%), and poor category with 2 students (8%). These percentages were obtained from calculating the proportion of each category to a total of 25 students, namely: very good ($9/25 \times 100\% = 36\%$), good ($14/25 \times 100\% = 56\%$), and poor ($2/25 \times 100\% = 8\%$). A visual comparison between the passing technique categories is presented in the following graph.

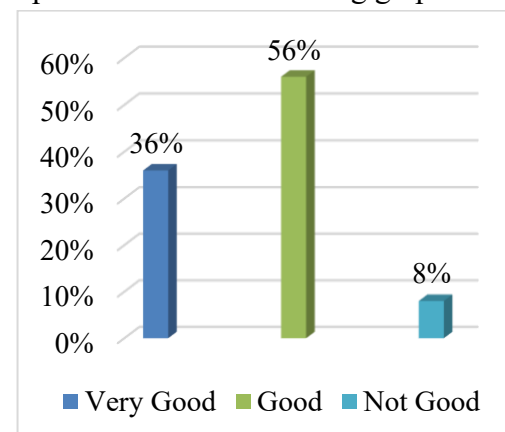


Figure 3. Frequency Distribution Graph of Passing Technique Ability Level of Futsal Extracurricular Students at Nur Hidayah Kartasura Senior High School.

DISCUSSION

Shooting ability in futsal is generally assessed through the number of goals scored, the accuracy of shots, and the power generated. Mastery of these basic techniques particularly shooting and passing serves as a foundation for understanding more complex tactical strategies. Players who lack proper preparation in these fundamental aspects often face obstacles in progressing toward advanced or professional levels, while those who master basic skills tend to play more efficiently and commit fewer errors on the field. Therefore, consistent and continuous training in basic techniques remains crucial for both novice and experienced players. The descriptive statistical tests in this study reveal the shooting and passing abilities of futsal extracurricular students at Nur Hidayah Kartasura Senior High School, as illustrated in the comparison graph of student scores, as displayed in a comparison graph of scores between students:



Figure 4. Comparison of scores between students

Shooting Technique

Regarding shooting technique, the results show that 28% of students fall into

the “good” category, 60% into the “fair” category, and 12% into the “poor” category. Students in the “good” category consistently scored goals from a 10-meter distance with high accuracy and sufficient power, often using the instep technique that produces stronger and more precisely directed shots. Those in the “fair” category managed to score goals but lacked consistency in both accuracy and power, mainly due to imperfect foot–ball contact. Meanwhile, students in the “poor” category struggled significantly with accuracy and power, leading to frequent failed goal attempts. Although these findings indicate that most students possess adequate basic skills, there is a clear need to strengthen technique through targeted training. Similar patterns were reported by (Umiyati, 2021), who found that high school futsal players often show moderate shooting accuracy because of limited structured practice. However, unlike Ahmad et al., the present study highlights that even students in the “fair” group display potential power in their kicks, suggesting that power development is less problematic than accuracy, thus identifying a specific area for focused improvement.

Passing Technique

In terms of passing technique, 36% of the students were in the “very good” category, 56% in the “good” category, and only 8% in the “poor” category. Students categorized as “very good” demonstrated excellent accuracy and consistency when making 9-meter

passes, mainly using the inside of the foot, which enabled the ball to reach teammates accurately and be easily controlled. Students in the “good” category successfully completed three to four passes out of five attempts but still required improvement in pass power and stability of direction. The two students categorized as “poor” succeeded only once or twice out of five attempts due to lack of focus and suboptimal technique. Overall, the inside-foot passing technique proved to be both accurate and efficient. These results correspond to the findings of (Ardiyanto et al., 2021; Nugraha, 2022), who reported that inside-foot passing tends to yield higher accuracy than outside-foot techniques in youth futsal players. Nevertheless, our findings differ slightly from those of Santoso and Wirawan in terms of the proportion of players achieving very high accuracy; their study reported only about 20% in the top category, while our data show 36%, possibly due to more regular extracurricular training sessions in our school context.

The combination of these findings underscores the need for continuous, well-structured practice sessions focusing on shooting accuracy and passing stability. Compared with previous research, the present study not only confirms the importance of fundamental skills but also identifies a specific gap: while power in shooting seems relatively adequate, accuracy lags behind, suggesting that targeted drills focusing on precision could yield substantial performance gains. This highlights the

necessity for coaches to design training programs that emphasize accuracy enhancement without neglecting the maintenance of power.

CONCLUSION

Based on the research results, it can be concluded that the shooting technique ability of futsal extracurricular students at Nur Hidayah Kartasura Senior High School is in the “fair” category, with 60% of students at this level, while 28% demonstrated good ability, and 12% were in the poor category. For passing technique, the majority of students, 56%, had good ability, 36% were very good, and 8% were in the poor category. The shooting technique using the instep and the passing technique using the inside of the foot were considered effective and accurate in futsal gameplay.

These findings can serve as a consideration for the school in developing futsal extracurricular training programs, particularly to strengthen students' basic skills in shooting and passing. In addition, this data can be used by teachers and coaches to adjust training approaches with a more focused direction. This study also emphasizes the importance of systematic basic futsal technique development to support the overall improvement of team performance.

For students, these results are expected to serve as motivation to continue enhancing their technical skills through consistent practice both inside and outside formal training hours.

Physical education teachers are encouraged to utilize these findings as a reference in teaching and training processes, considering technical, mental, and tactical aspects in the game. The school is advised to pay more attention to the systematic training of basic futsal techniques, as passing and shooting play a crucial role in supporting team performance and gameplay effectiveness.

ACKNOWLEDGEMENT

The author would like to express sincere gratitude to the Faculty of Teacher Training and Education (FKIP), Universitas Muhammadiyah Surakarta, especially the Physical Education Study Program, for the academic guidance and support provided throughout the completion of this research. Appreciation is also extended to all individuals and institutions involved in facilitating the data collection and contributing to the success of this study.

REFERENCES

- Abdillah, R. (2021). Survei Keterampilan Shooting Siswa Ekstrakurikuler Futsal Smp Negeri 1 Cisaat Kabupaten Sukabumi Tahun 2018/2019. *Jurnal Utile*, VII(1), 34–41. DOI: <https://doi.org/10.37150/jut.v7i1.1224>
- Ardiyanto, M. D., Januarto, O. B., & Yudasmara, D. S. (2021). Peningkatan Keterampilan Dasar Passing Futsal Memakai Metode Drill Bervariasi. *Sport Science and Health*, 3(11), 921–928. <https://doi.org/10.17977/um062v3i112021p921-928>
- Dandi, M., & Nurhidayat, N. (2022). Analisis Tingkat Kedisiplinan Siswa dalam Mengikuti Kegiatan Ekstrakurikuler. *Jurnal Porkes*, 5(1), 272–282. <https://doi.org/10.29408/porkes.v5i1.5739>
- Dedi. (2019). Pengaruh Latihan Target Terhadap Akurasi Shooting Futsal. *Progress in Retinal and Eye Research*, 561(3), S2–S3. DOI: <https://doi.org/10.59024/atmosfer.v2i1.712>
- Gumantan, A., Sina, I., & Pratiwi, E. (2020). Olahraga Rekreasi dalam Peningkatan Prestasi Olahraga. *SPORT-Mu: Jurnal Pendidikan Olahraga*, 1(2), 103–114. <https://doi.org/10.32528/sport-mu.v1i2.8857>
- Gunawan, I., & Hasanah, H. (2019). Kuantitatif Imam Gunawan. *At-Taqaddum*, 8(1), 29. DOI:10.21070/ups.1721
- Ine Rahayu Purnamaningsih, M. (2021). Jurnal Ilmiah Wahana Pendidikan. *Jurnal Ilmiah Wahana Pendidikan* <https://Jurnal.Unibrah.Ac.Id/Index.Php/JIWP>, 7(1), 1–7. <https://doi.org/10.5281/zenodo.5632568>
- Kamil, A. F., & dkk. (2021). Analisis Teknik Dasar Futsal Pada Ekstrakurikuler di Sekolah SMPIT AL ARABI. *Jurnal Ilmiah Wahana Pendidikan*, 7(8), 269–273. <https://doi.org/10.5281/zenodo.5763941>
- Mahendra, B. Y., Irawan, F. A., Pratiwi, T. A. S., & Trans, M. N. Le. (2022). Analisis shooting dan passing terhadap akurasi tendangan pada tim U-19 Sheyfa Futsal Academy Kendal. *Sepakbola*, 2(2), 40. <https://doi.org/10.33292/sepakbola.v2i2.175>
- Meria, A. (2018). Ekstrakurikuler Dalam Mengembangkan Diri Peserta Didik

- Di Lembaga Pendidikan. *Turast : Jurnal Penelitian Dan Pengabdian*, 6(2).
<https://doi.org/10.15548/turast.v6i2.70>
- Mubarak, Niaty Sauria, K., Anita Rosanty, La Ode Muhammad Ady Ardyawan, I Wayan Romantika, Nina Indriyani Nasruddin, Abdul Patawari, Muh. Jasmin, A., & Firman, Reni Devianti U, Eman Rahim, Dian Rosmala Lestari, H. (2022). Anatomi Fisiologi Tubuh Manusia. In *Edisi Revisi*.
- Narlan, A., & Juniar, D. T. (2017). Pengembangan Instrumen Keterampilan Olahraga Futsal. *Jurnal Siliwangi*, 3(2), 245. DOI: <https://doi.org/10.37058/jspendidikan.v3i2.268>
- Nugraha, D. (2022). *Keterampilan Dasar Bermain Futsal : Bagaimana Keterampilan Passing, Controlling, Dribbling, Dan Shooting Siswa Ekstrakurikuler*. 1–23.
- Praniata, A. R., Kridasuwarto, B., & Puspitorini, W. (2019). Model Latihan Passing Futsal Berbasis Small Sided Games Untuk Siswa Sekolah Menengah Atas. *Journal Sport Area*, 4(1), 191. [https://doi.org/10.25299/sportarea.2019.vol4\(1\).2364](https://doi.org/10.25299/sportarea.2019.vol4(1).2364)
- Priyo Utomo, N., & Indarto, P. (2021). Analisis Keterampilan Teknik Dasar Passing dalam Sepak Bola. *Jurnal Porkes*, 4(2), 87–94. <https://doi.org/10.29408/porkes.v4i2.4578>
- Purwanto, N. (2019). Variabel Dalam Penelitian Pendidikan. *Jurnal Teknodik*, 6115, 196–215. <https://doi.org/10.32550/teknodik.v0i0.554>
- Retnawati Heri. (2018). Teknik Pengambilan Sampel. *Ekp*, 13(3), 1576–1580.
- Saminan. (2019). Efek Obstruksi Pada Saluran Pernapasan Terhadap Daya Kembang Paru. *Jurnal Kedokteran Syiah Kuala*, 16(1), 36–39. <http://jurnal.unsyiah.ac.id/JKS/article/download/5010/4441>
- Sanggita, M., & Nurhidayat, N. (2022). Efektivitas Latihan Menggunakan Sasaran Terhadap Ketepatan Shooting Sepak bola. *Jurnal Porkes*, 5(2), 541–550. <https://doi.org/10.29408/porkes.v5i2.6251>
- Supiana, S., Hermawan, A. H., & Wahyuni, A. (2019). Manajemen Peningkatan Karakter Disiplin Peserta Didik Melalui Kegiatan Ekstrakurikuler. *Jurnal Isema : Islamic Educational Management*, 4(2), 193–208. <https://doi.org/10.15575/isema.v4i2.5526>
- Syahrana, D. A., & Nurhidayat, N. (2022). Analisis Keterampilan Shooting dan Passing Pada Sekolah Sepak Bola Jurnal Porkes (Jurnal Pendidikan Olahraga Kesehatan & Rekreasi). *Jurnal Porkes*, 5(2), 706–716. <https://doi.org/10.29408/porkes.v5i2>
- Syamsuryadin, S., & Wahyuniati, C. F. S. (2017). Tingkat Pengetahuan Pelatih Bola Voli Tentang Program Latihan Mental Di Kabupaten Sleman Yogyakarta. *Jorpres (Jurnal Olahraga Prestasi)*, 13(1), 53–59. <https://doi.org/10.21831/jorpres.v13i1.12884>
- Umiyati, H. (2021). Populasi dan Teknik Sampel (Fenomena Pernikahan dibawah Umur Masyarakat 5.0 di Kota/Kabupaten X. *Universitas Islam Negeri Alauddin Makassar, June*, 2–25. https://www.researchgate.net/profile/Hisam-Ahyani-2/publication/352642302_POPULASI_DAN_TEKNIK_SAMPEL_Fenomena_Pernikahan_dibawah_Umur_Masyarakat_50_di_KotaKabupaten_

X/links/60d19d7492851ca3acbb406
e/POPULASI-DAN-TEKNIK-
SAMPEL-Fenomena-Pernikahan-
dibawah-Um

Widowati, H., & Rinata, E. (2020). Bahan
Ajar Anatomi. In *UMSISDA press*.
DOI:
[https://doi.org/10.21070/2020/978-
623-6833-12-4](https://doi.org/10.21070/2020/978-623-6833-12-4)

Wijaya Kusuma, I. D. M. A. (2021).
Teknik yang paling dominan pada
pertandingan futsal putra
profesional. *Jurnal Keolahragaan*,
9(1), 18–25.
[https://doi.org/10.21831/jk.v9i1.318
53](https://doi.org/10.21831/jk.v9i1.31853)