Musamus Journal of Physical Education and Sport (MJPES)
http://ejournal.unmus.ac.id/index.php/physical
Volume 8, No. 2, April 2026 , Pg. 1052-1059
DOI: 10.35724/mjpes.v8i2.8155

Effect of Structured Training on Passing Ability in the Futsal Club at Pertiwi Private Elementary School, Medan

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Abstract
Objectives: This study aiming to determine the impact of structured training on the passing skills of students in the futsal extracurricular program.
Materials and Methods: This study used an experimental method with a One Group Pretest Posttest Design to determine the effect of triangle training on passing ability in futsal players. The population and sample consisted of all 20 fifth grade students participating in the futsal extracurricular program at Pertiwi Private Elementary School Medan, using a saturated sampling technique. The study was conducted at Pertiwi Private Elementary School Medan.
Results: Research results and hypothesis testing demonstrated that the average futsal passing skill score among students was 7.2 prior to the fixed passing training and rose to 9.6 afterward, indicating an improvement. Similarly, hypothesis testing showed that the average passing skill score was 7.8 before the variable passing training and increased to 9.8 afterward.
Conclusions: Both fixed and varied passing training significantly improved futsal passing ability. Fixed passing training showed a greater improvement (33.33%) than varied passing training (25.64%). Therefore, fixed passing training was more effective in improving passing ability among futsal extracurricular participants at Pertiwi Private Elementary School Medan.
Keywords: Elementary school students, extracurricular sports, futsal, passing ability, structured training

Introduction

Futsal is one of the sports that has become increasingly popular among various groups, including elementary school students worldwide. This game has several differences from soccer, particularly in its smaller field size and fewer players. These conditions require futsal players to demonstrate speed, accuracy, and good technical skills. One of the most important techniques in futsal is passing, as a teams success in building attacks and creating scoring opportunities largely depends on the quality of passing performed by its players.

In practice, many elementary school students participating in futsal extracurricular activities still experience difficulties mastering passing techniques. This is due to their lack of structured playing experience and limited training in basic techniques. Most students play futsal informally without clear guidance, resulting in insufficient understanding of proper passing techniques in terms of accuracy, power, and timing. Consequently, passing errors frequently occur, such as passes that fail to reach teammates, passes that are too strong or too weak, and inaccurate passing directions. On the other hand, sports are increasingly recognized as an important part of education because they can develop students physical, social, and mental abilities. Therefore, structured training programs are necessary to help students improve their futsal skills optimally, particularly passing techniques. Well designed training that meets students needs is expected to help them understand and master basic techniques more effectively.

This study aims to determine the effect of structured training on improving passing ability among futsal extracurricular students at Pertiwi Private Elementary School Medan. Through systematic and varied training, students are expected to improve their passing quality, making their gameplay more organized and effective. Furthermore, this study is

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expected to provide insights for schools and coaches regarding the importance of implementing appropriate training methods in sports activities.

The rapid development of futsal is closely related to technological advances and changes in modern lifestyles. Futsal has become a popular sport because it is easy to play, does not require a large playing field, and can be played indoors. This sport can be enjoyed by various groups, ranging from children to adults, both male and female. Its accessibility and flexibility have contributed to its increasing popularity among the wider community. In general, futsal is a game played by two teams, each consisting of five players, including a goalkeeper, with the objective of scoring goals against the opposing team. The game requires a high level of technical proficiency because of its fast pace and limited playing space. Therefore, every player must master basic futsal techniques, such as passing, control, dribbling, shooting, and other techniques, to perform effectively.

Among these basic techniques, passing plays a vital role. Passing not only functions to distribute the ball among players but also serves as a key element in building teamwork. A significant portion of futsal gameplay involves passing activities, both in attacking and defending situations. Therefore, good passing ability greatly determines a teams success in maintaining possession and scoring goals.

However, in reality, many students are still unable to perform passing techniques correctly. Based on observations at Pertiwi Private Elementary School Medan, various errors were identified, such as inaccurate passes, poor control of ball power, and limited understanding of teammates positions. Furthermore, monotonous training methods cause students to feel bored and less motivated to improve their abilities.

To overcome these problems, variations in training methods are necessary, particularly in passing and control exercises. Varied training can not only improve students technical abilities but also reduce boredom during the training process. Coaches need to design engaging and challenging training programs and combine technical exercises with games to encourage students to become more active and enthusiastic.

Regular training, for example three times a week, is also expected to accelerate students skill development. With sufficient training frequency and appropriate methods, students can consistently repeat passing movements, allowing correct techniques to become well established. High repetition during training will help students improve their passing accuracy, power, and speed.

Materials and Methods

Study Design

The research used an experimental method with a OneGroup Pretest Posttest Design, in which participants were given a pretest before treatment and a posttest after treatment. Research methods are scientific approaches used to obtain valid data and develop knowledge. This study aimed to determine the effect of triangle training on passing skills among fifth grade students participating in the futsal extracurricular program at SD Swasta Pertiwi Medan by comparing their performance before and after the treatment.

Study Participants

The population and sample consisted of all 20 fifth grade students participating in the futsal extracurricular program at Pertiwi Private Elementary School Medan, using a saturated sampling technique. The study was conducted at Pertiwi Private Elementary School Medan.

Study Organization

The research instrument was a low pass passing test, with a validity coefficient of 0.710 and a reliability coefficient of 0.703, to measure futsal passing skills. The test was conducted before and after the treatment, with each participant performing ten kicks toward a target located 18 meters away. Successful kicks received a score of 1, while unsuccessful kicks received a score of 0, resulting in a maximum score of 10 and a

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minimum score of 0. The treatment consisted of triangle training involving groups of three players who passed the ball sequentially. The test results were classified into five categories: very low (0–2), low (3–4), moderate (5–6), good (7–8), and very good (9–10).

Statistical Analysis

Data were analyzed using descriptive and inferential statistics with computer software. Descriptive analysis was used to summarize the research variables, while inferential analysis included the Kolmogorov Smirnov test for normality and the homogeneity test to determine whether the data were normally distributed and the samples were homogeneous. Finally, a paired samples t test was used to determine the effect of triangle training on inside foot passing skills among students participating in the futsal extracurricular program at SD Swasta Pertiwi Medan.

Results

Descriptive data from the initial futsal passing ability test, conducted prior to the implementation of fixed and variable passing training for students participating in the extracurricular futsal program at SD Swasta Pertiwi Medan. Table 1 presents the list of students and their initial futsal passing test results, recorded before they underwent fixed and variable passing training.

Table 1. List of Students and Initial Futsal Passing Test Results Prior to Fixed Passing Training

No	Nama	Chance			The highest score	Group
		1	2	3		
1	M. Alif Ramadhan	6	5	7	7	A
2	Ahmad Fadli Pratama	7	6	9	9	B
3	Rizky Maulana	6	8	7	8	B
4	M. Arsyad Fikri	6	5	7	7	A
5	Daffa Al Ghifari	5	5	7	7	A
6	Farhan Akbar	6	5	6	6	B
7		7	7	9	9	B
8	Reyhan Saputra	6	6	9	9	A
9	M. Iqbal Fauzan	8	9	9	9	A
10	Naufal Ramadhan	6	6	6	6	B
11	Zidan Alfarizi	8	8	10	10	B
12	Fajar Maulana	5	5	7	7	A
13	Hafiz Al Hakim	5	6	5	6	A
14	Azzam Rizqullah	7	7	9	9	B
15	Raka Prasetya	6	5	7	7	B
16	Ilham Syahputra	5	7	8	8	A
17	Bagas Dwi Saputra	5	5	5	5	A
18	Yusuf Abdillah	6	5	6	6	B

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19	Dimas Arya Pratama	6	6	8	8	B
20	Galang Nugroho	6	6	7	7	A

Based on Table 1 (initial test) above, the futsal passing ability of the 20 students who serve as the study sample is assessed. This sample will be divided into two groups: 10 individuals will undergo fixed passing training, and 10 individuals will undergo variable passing training. The division will be conducted using the ABBA technique, resulting in Group A (fixed passing) and Group B (variable passing).

Table 2. The ABBA Technique Used to Form Experimental Group 1 (Fixed Passing) and Experimental Group 2 (Variable Passing)

No	Experimental Group 1 Fixed Passing	Nilai	No	Experimental Group 2 Variable Passing	Nilai
1	M. Alif Ramadhan	7	1	Ahmad Fadli Pratama	9
2	M. Arsyad Fikri	7	2	Rizky Maulana	8
3	Daffa Al Ghifari	7	3	Farhan Akbar	6
4	Reyhan Saputra	9	4	Aditya Putra Nugraha	9
5	M. Iqbal Fauzan	9	5	Naufal Ramadhan	6
6	Fajar Maulana	7	6	Zidan Alfarizi	10
7	Hafiz Al Hakim	6	7	Azzam Rizqullah	9
8	Ilham Syahputra	8	8	Raka Prasetya	7
9	Bagas Dwi Saputra	5	9	Yusuf Abdillah	6
10	Galang Nugroho	7	10	Dimas Arya Pratama	8

Based on Table 2 (initial test) above, the futsal passing ability of students participating in the extracurricular program at SD Swasta Pertiwi Medan prior to the implementation of stationary passing training showed a high score of 9 and a low score of 5 among the 10 students; meanwhile, prior to the implementation of moving passing training, the same 10 students recorded a high score of 10 and a low score of 6.

Table 3. Data from the final futsal test for participants in the extracurricular program at SD Swasta Pertiwi Medan, regarding their futsal passing ability following fixed position passing training.

Table 3. Data from the Final Futsal Test for Participants in the Extracurricular Program at SD Swasta Pertiwi Medan, Regarding Their Futsal Passing Ability Following Fixed Position Passing Training.

No	Name	Final Test			The highest score
		1	2	3	
1	M. Alif Ramadhan	6	7	9	9
2	M. Arsyad Fikri	7	6	8	8
3	Daffa Al Ghifari	6	8	10	10
4	Reyhan Saputra	8	9	11	11
5	M. Iqbal Fauzan	9	10	13	13

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6	Fajar Maulana	6	6	8	8
7	Hafiz Al Hakim	6	7	9	9
8	Ilham Syahputra	7	8	10	10
9	Bagas Dwi Saputra	6	8	9	9
10	Galang Nugroho	7	7	9	9
∑					96

Based on Table 3 (Final Test) above, the futsal passing ability of the 10 students following 6 weeks of fixed (static) passing drills showed a high score of 13 and a low score of 8.

Table 4. Data on Final Futsal Test Results for Extracurricular Participants at SD Swasta Pertiwi Medan, Regarding Futsal Passing Ability After Undergoing variable (dynamic) Passing Drills

No	Name	Final Test			The highest score
		1	2	3	
1	Ahmad Fadli Pratama	9	9	11	11
2	Rizky Maulana	9	8	10	10
3	Farhan Akbar	8	7	10	10
4	Aditya Putra Nugraha	7	8	9	9
5	Naufal Ramadhan	8	7	8	8
6	Zidan Alfarizi	9	10	14	14
7	Azzam Rizqullah	8	9	9	9
8	Raka Prasetya	7	7	9	9
9	Yusuf Abdillah	8	7	9	9
10	Dimas Arya Pratama	8	8	9	9
∑					98

Based on Table 4 (Final Test) above, the ability to perform futsal passing following a 6 week passing training program showed that among the 10 students, the highest score obtained was 14 and the lowest was 8.

Discussion

The results showed that both fixed position passing and changing position passing drills significantly improved futsal passing skills among students participating in the extracurricular program at SD Swasta Pertiwi Medan. The fixed position passing group demonstrated an increase in the mean score from 7.2 in the pretest to 9.6 in the posttest, representing an improvement of 33.33%. Meanwhile, the changing position passing group improved from a mean score of 7.8 to 9.8, representing an increase of 25.64%. These findings indicate that both training methods can improve passing performance, although the magnitude of improvement differed between the two groups.

Fixed position passing is a training method in which players form a square and repeatedly pass the ball to teammates who remain in predetermined positions. This exercise allows players to focus on the accuracy, direction, and strength of each pass without having to

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continuously adjust to changing teammate positions. Repeated practice also helps players develop ball control, coordination between the eyes and feet, and ball feeling, which is the ability to regulate the force and direction of a pass according to the distance between players. These skills are essential in futsal because accurate passing helps maintain possession, supports effective teamwork, and creates opportunities to develop attacks. This finding is consistent with Mielke (2007), who emphasized the importance of passing variations in creating advantageous positions for teammates, and with Wiranto et al. (2021), who reported that triangle passing drills influence passing technique.

Changing position passing also produced a significant improvement in passing skills, with the mean score increasing from 7.8 to 9.8. In this exercise, players form a square and rotate positions while passing the ball alternately to their teammates. Unlike fixed position passing, this method requires players to adapt continuously to changing positions and passing targets. Consequently, players must demonstrate better visual awareness, foot coordination, directional accuracy, and the ability to adjust the strength of their passes. This training method can help prepare players for match situations, where teammates and opponents frequently change positions. However, its implementation may be more challenging for elementary school students because they must coordinate their movements while identifying new passing targets. The findings support the theoretical perspective of Scheunemann (2005), which highlights the importance of eye foot coordination in producing accurate passes toward changing targets. Similarly, Zulhendra and Effendi (2021) reported an influence of diamond passing training on passing ability.

The hypothesis testing results further confirmed that both training methods had statistically significant effects. Fixed position passing produced a t count of 21.81, while changing position passing produced a t count of 10.00. Both values exceeded the critical t table value of 2.262 at the 5% significance level with 9 degrees of freedom. Therefore, the null hypothesis stating that the respective training methods had no effect was rejected. These results provide statistical evidence that repeated passing practice can improve students futsal passing skills. The improvements may be associated with repeated technical execution, opportunities to correct errors, and the development of more consistent ball contact and directional control.

When comparing the two methods, fixed position passing demonstrated a greater percentage improvement than changing position passing, with increases of 33.33% and 25.64%, respectively. One possible explanation is that fixed position passing provides a more predictable training environment, allowing students to concentrate on the fundamental mechanics of passing before progressing to more complex exercises. Repeatedly passing toward stationary teammates may help students develop consistent technique and improve their ability to control the ball. In contrast, changing position passing introduces additional coordination and decision making demands, which may require more time for students to master. Nevertheless, the higher percentage improvement in the fixed position group does not, by itself, establish that this method is statistically superior to changing position passing. A direct statistical comparison between the two groups would be required to confirm whether the difference in their effects is significant.

Overall, the findings suggest that fixed position and changing position passing drills can be incorporated into futsal training programs for elementary school students. Fixed position passing may be appropriate during the initial stages of technical development because it emphasizes repetition, accuracy, and ball control. Once students demonstrate sufficient consistency, changing position passing can be introduced to develop adaptability and coordination under more demanding conditions. Combining both methods may provide a balanced approach to improving fundamental passing skills and

preparing students for the dynamic situations encountered during futsal matches. However, these conclusions should be interpreted within the context of the study population and training conditions at SD Swasta Pertiwi Medan. Further research involving larger samples and direct comparisons between training methods would help clarify their relative effectiveness.

Conclusions

The results showed that both fixed and varied passing training significantly improved futsal passing ability. Fixed passing training achieved a t count of 21.81 > 2.262, with an improvement of 24 points, a mean deviation of 2.4, and a percentage increase of 33.33%. Varied passing training also showed a significant improvement, with a t count of 10 > 2.262, an improvement of 20 points, a mean deviation of 2.0, and a percentage increase of 25.64%. Therefore, structured fixed passing training was more effective in improving passing ability among futsal extracurricular participants at Pertiwi Private Elementary School Medan.

Acknowledgments

The author expresses gratitude to SD Swasta Pertiwi Medan and the Bina Guna College of Sports and Health, as well as to the researchers and authors who participated in and provided support for this research project.

Conflict of Interest

The authors declare no conflict of interest.

Funding

This research received no external funding.

References

Agus Susworo D. M, Saryono, & Yudanto. (2022). "Tes Ketrampilan Dasar Bermain Futsal." Jurnal IPTEK Olahraga. Vol. 11. No. 2. Hlm. 144- 156.

Arikunto. (2019). Prosedur Penelitian: Suatu Pendekatan Praktek. Jakarta:Rineka Cipta Arikunto, Suharsimi. 2019. Prosedur Penelitian Suatu pendekatan Praktek. Jakarta: Rineka Cipta.

Chan. D. (2023). Pengaruh latihan Variasi Passing Terhadap Keterampilan Teknik Dasar Sepak Bola Pada Siswa Putra SMP Negeri 14 Kota Jambi. Skripsi Program Studi Pendidikan Olahraga Dan Kesehatan, FKIPUniversitas Jambi. Tidak diterbitkan

Danny Mielke. (2022). "Dasar-dasar Sepakbola". Bandung: Pakar Raya.

Galih Beekp. (2024). Pengertian Futsal, Teknik Dasar Futsal, dan Skill. [Online]. Tersedia: http://pengertianfutsalteknikmaindanskill.blogspot.co.id/2024/09/ a.html [2 Januari 2024]

Huda, M. K., et al (2021). Perbedaan Pengaruh latihan passing Menggunakan Target Dan Latihan Passing Berpasangan Terhadap Kemampuan Passing Pada Sekolah Sepak Bola (Ssb) Putra Mojosongo Club Tahun 2020. JURNAL ILMIAH PENJAS (Penelitian, Pendidikan Dan Pengajaran), 7(2), 24-34.

Idris K.S Addy (2023). Pengaruh Latihan Passing Berpasangan Terhadap Kemampuan Passing Bawah Siswa Sekolah Sepakbola Kalasan Usia 10-12 Tahun. Pada Skripsi: Prodi Pendidikan Jasmani Kesehatan Dan Rekreasi Jurusan Pendidikan Olahraga Fakultas Ilmu Keolahragaan Universitas Negeri Yogyakarta. Tidak diterbitkan

Kresna Ardi, P. 2022. "Pengaruh Latihan Passing Receiving Posisi Tetap Dan Berpindah Terhadap Ketepatan Ground Passing Pemain Ssb Apacinti Ku13 Tahun 2022". Skripsi. Program Sarjana Universitas Negeri Semarang ekstrakurikuler.

Lhaksana, Justinus. 2019. Taktik dan Strategi Futsal Modern. Jakarta: Be Champion

Michael Octavianus. (2024). Teknik Mengumpan (passing) Pola Latihan Push pass & 1-2 combination pass. pada tanggal 06 Desember 2023, jam 23.00 WIT.

Muhammad Iqram. (2022). Pengaruh Latihan Small Side Games Terhadap Kemampuan Teknik Passing-Stopping Bermain Futsal Pada Siswa SMP Negeri Model Terpadu Madani. Tadulako Journal Sport Sciences And.

Mulyono, M. A. 2019. Buku Pintar Panduan Futsal. Jakarta: Niaga Swadaya. Nanang Indardi. (2019). Journal Of Sport Sciences and Fitnes. Vol. 3 No. 2.

Nurhasan. (2022). Tes dan Pengukuran. Jakarta: Karunika Jakarta Indonesia Terbuka

Scheuneman, T. (2022). Dasar Sepak Bola Modern Untuk Pemain Dan Pelatih. Malang: Dioma

Seta, Hendrajid Kumala. (2022). "Pengaruh Latihan Passing Berpasangan Arah Tetap Dan Passing Kelompok Mengubah Posisi Terhadap Akurasi Short Passing SSB U-12 Di Kota Rembang".

Sugiyono. (2019). Metode penelitian pendidikan pendekatan Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta

Sukadiyanto. (2019). Pengantar Teori Dan Metodologi Melatih Fisik. Bandung: CV Lubuk Agung.

Wahyu Nugroho. (2021). Pengaruh Latihan Passing Bervariasi Posisi Tetap Dan Berbah Terhadap Hasil Akurasi Short Passing Siswa Ku-14 Ssb Apacinti Tahun 2021. Skripsi Jurusan PKLO Fakultas Ilmu Keolahragaan Universitas Negeri Semarang.

Wiranto, E., Prastiwi, B. K., & Fahmi, D. A. (2021). Pengaruh latihan passing segitiga dan passing zig-zag untuk meningkatkan teknik passing pada and Sports (JPAS), 2(2), 189-194. ekstrakurikuler futsal SMA Negeri 2 Kendal. Journal of Physical Activity

Zulhendra,R., & Effendi,H. (2021). Pengaruh latihan passing diamond terhadap kemampuan passing dan control atlet club dilaraf fc padang panjang. JURNAL STAMINA,4(1), 9-19.