
ANALYSIS OF BASIC TECHNICAL ABILITIES OF FUTSAL PLAYERS AGED 10-13 YEARS AT MERPATI MUDA FUTSAL SCHOOL

Dinovanto Acarya Putra¹, Agus Wiyanto², Buyung Kusumawardana³

¹Universitas PGRI Semarang, Physical Education Health and Recreation, Semarang, Indonesia

²Universitas PGRI Semarang, Physical Education Health and Recreation, Semarang, Indonesia

³Universitas PGRI Semarang, Physical Education Health and Recreation, Semarang, Indonesia

*Coessponding Author. Email: dinovantoap01@gmail.com

*Email Author: dinovantoap01@gmail.com, aguswiyanto@upgris.ac.id,
buyungkusumawardhana@upgris.ac.id

Received: September 2025, Revised: November 2025, Accepted: January 2026

Abstract

Futsal is a sport that demands high levels of speed, coordination, agility, and mastery of basic technical skills, particularly for players in the early developmental stages. However, training programs for young futsal players are often implemented without being preceded by an objective assessment of their basic technical abilities. This condition may lead to training that is less effective and not aligned with the developmental needs of the athletes. Therefore, it is important to analyze the basic technical abilities of young futsal players as a foundation for designing appropriate and systematic training programs. This study aims to analyze the basic technical abilities of futsal players aged 10–13 years at the Merpati Muda Futsal School in Tangerang City. This research employed a quantitative descriptive research design. The subjects of the study were futsal players aged 10–13 years who were actively training at the Merpati Muda Futsal School. Data were collected through observation, documentation, and standardized basic futsal skills tests. The instrument used in this study was the Young Futsal Specific Test Battery (YFSTB), which consists of five components: dribbling, passing, ball control, zigzag dribbling, and shooting. The collected data were analyzed using descriptive statistical techniques to describe the level of players' basic technical abilities. The results of this study are expected to provide an objective and comprehensive profile of the basic technical abilities of early-age futsal players. These findings can be used as a reference for coaches and trainers in evaluating athletes' technical skills and in planning age-appropriate, targeted, and effective training programs. In addition, this study is expected to contribute to the development of early-age futsal coaching, particularly in optimizing the technical development of young players.

Keywords: Futsal, Basic Technical Skills, Young Players, Skill Assessment, YFSTB

INTRODUCTION

Sport is a physical activity carried out in a planned, systematic, and sustainable manner with the aim of improving physical fitness, maintaining health, and developing individual skills and social aspects. Sporting activities not only impact physical condition but also encompass psychological and social dimensions that play a vital role in character building, teamwork, and self-

confidence. According to Subekti et al. (2021), sport is a multidimensional activity that simultaneously combines cognitive, affective, and psychomotor elements. This is reinforced by Badaru and Sufitriyono (2021), who emphasized that sport involves not only physical abilities but also the ability to think quickly, make decisions, and adapt to changing game situations.

One sport that has seen significant growth in Indonesia, particularly among children, is futsal. Futsal is a modification of soccer played on a small field with five players per team and using a low-bounce ball. This game requires mastery of basic techniques such as passing, dribbling, shooting, and ball control, as well as good body coordination. According to Rozikin et al. (2023), futsal is effective in improving children's basic motor skills, body balance, and agility. In addition to training physical abilities, futsal also fosters teamwork and discipline, thus playing a role in character development from an early age.

Sports activities such as futsal also provide extensive physical and mental health benefits. Susilawati and Suparni (2023) explain that exercise is an important tool in preventing non-communicable diseases and improving immunity. Meanwhile, Putri et al. (2024) add that regular physical activity can improve mental health, reduce stress, and strengthen individual self-confidence. Therefore, early childhood futsal development is not only oriented towards achievement but also focuses on developing physical and psychological balance in children.

The development of youth futsal in Indonesia, including in Tangerang City, shows a positive trend. The increasing number of futsal academies, youth tournaments, and community participation demonstrates the importance of early sports development (Irawan, 2025). Merpati Muda Futsal School is one institution actively developing the 10–13 age group. However, initial observations revealed significant variations in basic technical abilities among players. Some players demonstrated strong passing and dribbling skills, while others required additional training to achieve technical stability. This situation highlights the need for objective evaluation to measurably identify players' basic technical abilities.

Several researchers have previously conducted studies on basic futsal skills. Ramdan et al. (2025) examined the influence of basic futsal techniques on playing skills in elementary school athletes and found a significant relationship between mastery of basic techniques and playing performance. However, this study did not conduct a measurable mapping of basic technique proficiency levels based on specific age groups. Rusydy et al.'s (2024) research also confirmed that mastery of basic techniques has a strong relationship with game effectiveness, but the focus of the study was on adolescent athletes, not young athletes. Doewes et al. (2023) later developed the Young Futsal Specific Test Battery (YFSTB) as a valid and reliable instrument to assess basic futsal skills in 10–13-year-olds. However, the study focused only on the validity and reliability of the



instrument, not its application in the context of club coaching.

In the context of early-age sports development, systematic evaluation of basic technical skills is a crucial component in ensuring that training programs align with athletes' growth and developmental stages. Young players aged 10–13 years are in a critical period for motor skill development, where proper technical foundations strongly influence long-term performance and injury prevention. Nevertheless, many futsal schools and clubs still rely on subjective observations rather than standardized measurement tools to assess players' technical abilities. This condition creates a gap between training implementation and evidence-based evaluation, potentially limiting the effectiveness of coaching programs.

Furthermore, the availability of standardized instruments such as the Young Futsal Specific Test Battery (YFSTB) provides an opportunity to conduct objective and structured assessments of young players' technical skills. However, empirical studies that apply this instrument directly in real coaching environments, particularly at the club level, remain limited. Most existing studies emphasize theoretical development or validation of instruments rather than their practical application to map athletes' skill profiles. As a result, there is a lack of empirical data that coaches can use to identify strengths, weaknesses, and training priorities for early-age futsal players.

Thus, this study aims to address this research gap by directly applying the YFSTB instrument to analyze the basic technical abilities of futsal players aged 10–13 at the Merpati Muda Futsal School in Tangerang City. This research is expected to provide an accurate empirical picture of the children's basic skill levels and serve as a basis for developing more effective and adaptive training programs tailored to the players' needs.

METHODOLOGY

This study uses a quantitative descriptive approach to objectively describe the basic technical abilities of futsal players aged 10–13 in Tangerang City. This approach was chosen because it is able to present numerical data that can describe phenomena factually and systematically (Sugiyono, 2019). The study was conducted in May–June 2025 with a sample of 15 players from the Merpati Muda Futsal School. Data were collected through direct observation, documentation, and testing of basic futsal skills, including passing, dribbling, ball control, and shooting.

The research instrument used was the Young Futsal Specific Test Battery developed by Doewes et al. (2023). This instrument consists of five main tests: running with the Ball, wall pass test, checking off, zig-zag dribbling, and shooting accuracy. Each component is assessed based on objective criteria on a 1–5-point scale with a maximum total score of 25. Data were analyzed using descriptive statistics in the form of averages, percentages, and standard deviations (Arikunto, 2019).



RESULTS

This study aims to analyze the basic technical abilities of futsal players aged 10–13 years at the Merpati Muda Futsal School in Tangerang City using the Young Futsal Specific Test Battery (YFSTB) instrument developed by Doewes et al. (2023). This instrument assesses five components of basic futsal skills, namely running with the ball (dribbling), wall pass test (passing), checking off (ball control), zigzag dribbling, and shooting accuracy.

The research was conducted on October 8, 2025, involving 15 futsal players. Each player completed a series of tests and received a score between 1 and 5 on each component, with a maximum total score of 25 points.

Table 1. Descriptive Analysis

Statistik	Nilai
Jumlah Sampel	15 pemain
Rata-rata Total Skor	20,47
Standar Deviasi	1,77
Skor Tertinggi	25
Skor Terendah	17

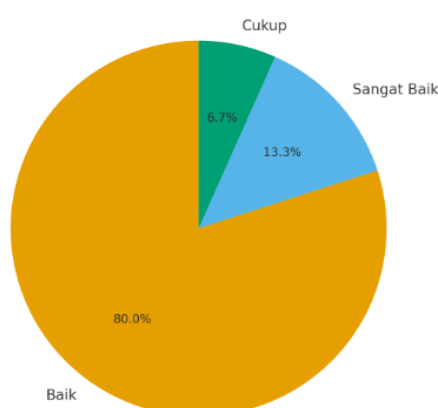
The results of the descriptive analysis show that the average total score of basic technical ability is 20.47 with a standard deviation of 1.77, the highest score is 25, and the lowest score is 17. Based on the YFSTB assessment criteria, the score range of 18–21 is included in the “Good” category. Thus, it can be concluded that in general the basic technical ability of futsal players at Merpati Muda Futsal School is in the good category.

Table 2. Distribution Table

Kategori	Jumlah Pemain	Persentase
Sangat Baik (22–25)	2 pemain	13,33%
Baik (18–21)	12 pemain	80,00%
Cukup (14–17)	1 pemain	6,67%
Kurang (10–13)	0 pemain	0%
Sangat Kurang (≤ 9)	0 pemain	0%

The category distribution table shows that 80% of players are in the "Good" category, 13.3% are in the "Very Good" category, and 6.7% are in the "Fair" category. No players were found in the "Poor" or "Very Poor" categories. These results indicate that the basic technique development process at the Merpati Muda Futsal School is effective and systematic.





Picture 1. U10-13 futsal player category results diagram

DISCUSSION

The results of this study indicate that the basic technical skills of futsal players aged 10–13 at the Merpati Muda Futsal School are in the good category. This indicates that the basic technical training provided at the academy has been systematic and effective. Basic technical skills such as passing, dribbling, ball control, and shooting are fundamental aspects that influence futsal performance (Rusydy et al., 2024). Players who master basic techniques will be able to adapt more easily to dynamic game situations and contribute to team effectiveness.

These findings align with research by Doewes et al. (2023), which explains that the YFSTB instrument is a valid and reliable measurement tool for assessing basic futsal skills in players aged 10–13. Using the YFSTB allows coaches to objectively evaluate players' basic technical abilities and develop appropriate training programs. The results of this study also support Taufik et al.'s (2022) opinion that small-sided games or small-scale training games are effective for improving basic technical skills such as passing, dribbling, and shooting because they create game conditions that resemble real matches and involve quick decision-making.

In addition, the good category of basic technical skills achieved by the players reflects the consistency and suitability of the training methods applied at the Merpati Muda Futsal School. Training that emphasizes repetition, variation of basic movements, and progressive difficulty is particularly effective for players aged 10–13 years, as it supports the consolidation of fundamental motor patterns. This finding suggests that age-appropriate training design plays a crucial role in optimizing technical development and ensuring that young players acquire correct movement mechanics from an early stage.

From a practical perspective, the results of this study provide important implications for

coaches and futsal academies, especially in early-age coaching contexts. The use of objective assessment tools such as the YFSTB enables coaches to identify individual differences in players' technical abilities, allowing training programs to be tailored more precisely to players' needs. By systematically mapping players' strengths and weaknesses, coaches can design targeted interventions that not only improve performance but also prevent stagnation and reduce the risk of incorrect technique development.

However, this study also has certain limitations that should be considered when interpreting the findings. The research was conducted in a single futsal school with a limited sample size, which may restrict the generalizability of the results to other training contexts or regions. Future studies are recommended to involve a larger and more diverse sample, as well as to incorporate longitudinal designs to examine the development of basic technical skills over time. Despite these limitations, the present study provides valuable empirical evidence on the application of standardized skill assessment in early-age futsal coaching.

Furthermore, according to the motor development theory presented by Wijayanti & Kushartanti (2014), the ages of 10–13 are the golden age for children to develop basic motor skills and sports techniques. During this phase, appropriate training stimuli will significantly impact long-term skill mastery. Overall, the results of this study illustrate that futsal coaching at the Merpati Muda Futsal School in Tangerang City has been running well and in accordance with the principles of early childhood training, namely focusing on developing basic techniques, coordination, and strengthening children's motoric aspects

CONCLUSION

Based on the results of the research and the descriptive analysis conducted, it can be concluded that the basic technical abilities of futsal players aged 10–13 years at the Merpati Muda Futsal School are generally in the “Good” category, with an average score of 20.47 out of a maximum score of 25. Most players (80%) fall into the “Good” category, while 13.3% are categorized as “Very Good” and only 6.7% are in the “Fair” category, with no players classified as “Poor” or “Very Poor.” In addition, the use of the Young Futsal Specific Test Battery (YFSTB) has proven effective in providing an objective and comprehensive assessment of young players' basic technical skills. Overall, these findings indicate that the basic technical development program implemented at the Merpati Muda Futsal School has been carried out effectively and is aligned with the developmental characteristics of players aged 10–13 years



REFERENCE

- Arikunto, S. (2019). Prosedur Penelitian Suatu Pendekatan Praktik Penelitian : Suatu Pendekatan Praktik. In Jurnal Universitas Udayana. (Vol. 2302, p. 8556).
- Badaru, B., & Sufitriyono, S. (2021). Analisis Vo2 Max Tim Futsal Sma Negeri 22 Makassar. *Sportive: Journal Of Physical Education, Sport and Recreation*, 5(1), 64. <https://doi.org/10.26858/sportive.v5i1.19545>
- Doewes, R. I., Elumalai, G., & Azmi, S. H. (2023). Validity and Reliability of the Young Futsal Specific Test Battery (Yfstb) To Measure the Skills Performance of Futsal Players. *Revista Iberoamericana de Psicologia Del Ejercicio y El Deporte*, 18(2), 238–240.
- Irawan, Y. F. (2025). Manajemen Pembinaan Ekstrakurikuler Sepak Bola di SD Negeri 1 Bancar Tahun 2025. 9, 10467–10473.
- Mahindru, A., Patil, P., & Agrawal, V. (2023). Role of Physical Activity on Mental Health and Well-Being: A Review. *Cureus*. <https://doi.org/10.7759/cureus.33475>
- Prasetyo, M. A., Supriatna, S., & Taufik, T. (2023). Survey of mastery of basic skills of playing futsal in 15-17 year old futsal athletes. *Indonesian Journal of Research in Physical Education, Sport, and Health (IJRPESH)*, 1(1), 58–65. <https://doi.org/10.17977/um086v1i12023p58-65>
- Putri, A. O. C., Wirawan, H., Rafsanjani, M. A., & Yahya, R. T. (2024). Pentingnya Motivasi Berolahraga dan Kesehatan Mental Bagi Mahasiswa. *Pubmedia Jurnal Pendidikan Olahraga*, 1(2), 7. <https://doi.org/10.47134/jpo.v1i2.286>
- Ramdan, F. M., Kurniawati, A., & Sonjaya, A. R. (2025). Pengaruh Teknik Dasar Futsal Terhadap Keterampilan Bermain Pada Atlet Sekolah Dasar. *Jurnal Kepelatihan Olahraga*, 17(March), 42–49.
- Rohman, A., Ismaya, B., & Syafei, M. M. (2021). Survei Teknik Dasar Passing Kaki Bagian dalam Peserta Ekstrakurikuler Futsal SMK Pamor Cikampek. *Jurnal Ilmiah Wahana Pendidikan*, 7(6), 357–366. <https://doi.org/10.5281/zenodo.5632568>
- Rozikin, M. K., Roesdiyanto, R., Supriatna, S., & Rahayuni, K. (2023). Survei Minat Masyarakat Untuk Melakukan Aktivitas Olahraga Setelah PPKM di Stadion Maulana Yusuf Serang. *Sport Science and Health*, 5(3), 345–352. <https://doi.org/10.17977/um062v5i32023p345-352>
- Rusydy, F. H. F., Fatoni, M., & Sistiasih, V. S. (2024). Analisis Teknik Dasar Olahraga Futsal. *Jurnal Porkes*, 7(2), 1002–1012. <https://doi.org/10.29408/porkes.v7i2.26015>
- Setiawan, W. A., Festiawan, R., Heza, F. N., Kusuma, I. J., Hidayat, R., & Khurrohman, M. F. (2021). Peningkatan Keterampilan Dasar Futsal Melalui Metode Latihan Passing Aktif dan Pasif. *Jurnal Pendidikan Kesehatan Rekreasi*, 7(2), 270–278. <https://ojs.mahadewa.ac.id/index.php/jpkr/article/view/1066>



- Subekti, A. A., Doewes, M., & Likustyawati, H. (2021). A Study on the Development of a Futsal Sports Attack Strategy Exercise Model. *International Journal of Social Sciences and Humanities Invention*, 8(10), 6684–6692. <https://doi.org/10.18535/ijsshi/v8i10.09>
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, Dan R & D*. In Bandung, Alfabeta (Vol. 11, Issue 1). Bandung, Alfabeta.
- Susilawati, A., & Suparni, S. (2023). Upaya Pencegahan Penyakit Tidak Menular (PTM) pada Pekerja Kantoran dengan Olahraga. *Jurnal Sehat Masada*, 17(1), 8–18. <https://doi.org/10.38037/jsm.v17i1.416>
- Taufik, M. S., Widiastuti, W., Setiakarnawijaya, Y., & Dlis, F. (2022). *Buku Panduan Futsal (Metode Latihan) Small Side Games*. Rajawali Pres. Jakarta, 67.
- Toha, M. (2020). Pengertian Futsal. *Educative Sportive*, 1(01), 6–12.
- Travassos, B., Araújo, D., Davids, K., Esteves, P. T., & Fernandes, O. (2012). Improving Passing Actions in Team Sports by Developing Interpersonal Interactions between Players. *International Journal of Sports Science & Coaching*, 7(4), 677–688. <https://doi.org/10.1260/1747-9541.7.4.677>
- Wijayanti, D. I. P. R., & Kushartanti, B. M. W. (2014). Model Tes Keterampilan Dasar Futsal Bagi Pemain Ku 10-12 Tahun. *Jurnal Keolahragaan*, 2(1), 32–45. <https://doi.org/10.21831/jk.v2i1.2601>
- Yolanda, S., & Bahtra, R. (2023). Analisis Keterampilan Teknik Dasar Futsal Pemain Futsal Putri Padang Futsal Akademi (PFA) Kota Padang. *Jurnal Speed (Sport, Physical Education, Empowerment)*, 6(01), 67–72. <https://doi.org/10.35706/jurnalspeed.v6i01.8780>

