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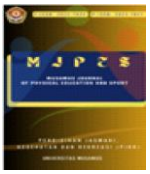

Basic Futsal Skill Profile of Male Extracurricular Participants at UPT SMP Negeri 4 Medan

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Abstract

Objectives: This study described the basic futsal skill profile of male students participating in the futsal extracurricular program at UPT SMP Negeri 4 Medan.

Materials and Methods: A quantitative cross-sectional descriptive survey included all 29 male extracurricular participants. Passing, ball control, dribbling, and shooting were assessed with a timed Futsal Skill Test. Lower completion times represented better performance. Data were summarized using the mean, median, mode, standard deviation, minimum, maximum, frequencies, and percentages.

Results: Completion time ranged from 38.81 to 59.29 seconds (47.91 ± 6.42 seconds; median 48.33). Seven students (24.14%) were classified as excellent, 4 (13.79%) as very good, 4 (13.79%) as good, 5 (17.24%) as fair, 6 (20.69%) as poor, and 3 (10.34%) as very poor. The excellent category was the largest single category, but 9 students (31.03%) were poor or very poor.

Conclusions: The group displayed marked variation in integrated futsal performance. Coaches should use individual times and component errors to provide differentiated practice in passing, control, dribbling, and shooting. The categories are local to this group and should not be interpreted as population norms.

Keywords: extracurricular sport; futsal; skill assessment; students; technical performance

Introduction

Futsal is a five-a-side invasion game characterized by restricted space, rapid transitions, frequent changes of direction, and repeated technical actions under pressure. Reviews describe substantial intermittent physical and physiological demands, but success also depends on executing passing, receiving, dribbling, and shooting quickly and accurately (Naser et al., 2017; Spyrou et al., 2020). These actions are closely linked to perception and decision-making rather than occurring as isolated movements.

School extracurricular programs can provide adolescents with additional opportunities to develop sport-specific competence. For coaching to be responsive, however, training should begin with an objective picture of current ability. Skill testing can identify learners requiring foundational practice and provide a baseline for later evaluation. The Futsal Skill Test is especially relevant because it integrates passing, control, dribbling, and shooting into a timed sequence. Reliability evidence has been reported for male high-school players, and subsequent work has examined its validity and reliability in player assessment (Marhaendro, 2018; Marhaendro et al., 2023).

Technical execution must ultimately transfer to representative play. Among school-age futsal players, receiving and other technical actions have been associated with offensive tactical efficiency (Ueda et al., 2023). Research with novice players similarly emphasizes the need to assess futsal-specific motor skills rather than relying only on general physical tests (Reis et al., 2019). Therefore, an integrated field-test score should be used diagnostically alongside observation of decisions and technique during games.

At UPT SMP Negeri 4 Medan, futsal extracurricular training was conducted once weekly for approximately 90 minutes. Preliminary observations indicated limited equipment, an uneven and undersized playing area, long waiting periods, and a predominantly game-oriented session structure. The 29 participants had not previously completed a comprehensive integrated skill test. This study therefore aimed to describe their basic futsal skill distribution. It was a local cross-sectional profile and did not test the causes of performance differences.

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Materials and Methods

Study Design

A quantitative, cross-sectional descriptive survey design was used. The study measured the current level of integrated basic futsal skills without manipulating training, comparing interventions, or testing causal hypotheses. Data were collected at UPT SMP Negeri 4 Medan in 2026.

Study Participants

The study population consisted of 29 male students enrolled in the school futsal extracurricular program, and all were included through total sampling. The source manuscript did not report age, grade distribution, training history, playing position, attendance, injury status, or explicit inclusion and exclusion criteria. These characteristics should be added from the original records before submission.

Study Organization

Participants completed a timed Futsal Skill Test incorporating passing, ball control, dribbling, and shooting. Performance was recorded in seconds; therefore, a lower time denoted better integrated skill. The source manuscript did not describe the court layout, distances, sequence of stations, number of attempts, penalty-time rules, warm-up, familiarization, equipment, surface, assessor training, or test version. These details must be verified and inserted. Published Futsal Skill Test protocols emphasize standardized performance, minimal errors, and the distinction between raw completion time and penalty time (Marhaendro, 2018; Marhaendro et al., 2023).

Statistical Analysis

Descriptive statistics comprised the mean, median, mode, sample standard deviation, minimum, maximum, frequency, and percentage. The manuscript's six-category time intervals were retained: excellent (<42.22 s), very good (42.23–45.63 s), good (45.64–49.04 s), fair (49.05–52.45 s), poor (52.46–55.86 s), and very poor (>55.87 s). Percentages were calculated as frequency divided by 29 × 100. No inferential statistics were used.

Ethical Considerations

The source manuscript did not report institutional ethics approval, school authorization, parental consent, participant assent, confidentiality procedures, or safety arrangements. Because the participants were minors, these details must be verified and reported before submission. No identifying student information is presented here.

Results

The integrated skill-test time ranged from 38.81 to 59.29 seconds. The mean was 47.91 ± 6.42 seconds, the median was 48.33 seconds, and the mode was 42.46 seconds. Because the outcome was completion time, lower values indicated better performance.

Table 1. Descriptive statistics for the timed Futsal Skill Test (n = 29)

Mean	Median	Mode	SD	Minimum	Maximum
47.91	48.33	42.46	6.42	38.81	59.29

Seven students (24.14%) were classified as excellent, making it the largest single category. However, 6 students were poor and 3 were very poor; together, these lower two categories represented 31.03% of the group. Fifteen students (51.72%) were good, very good, or excellent, while 5 (17.24%) were fair.

Table 2. Distribution of basic futsal skill categories

Time interval (s)	Category	Frequency	Percentage
<42.22	Excellent	7	24.14%
42.23–45.63	Very good	4	13.79%
45.64–49.04	Good	4	13.79%
49.05–52.45	Fair	5	17.24%
52.46–55.86	Poor	6	20.69%
>55.87	Very poor	3	10.34%
—	**Total**	**29**	**100.00%**

The distribution shows substantial within-group variation. The categories should be interpreted as classifications applied to this sample; the manuscript did not provide an independent age-referenced normative source for the thresholds.

Discussion

The main finding was a broad distribution of integrated futsal skill. Although the excellent category contained the largest number of students, nearly one-third of participants were poor or very poor. Consequently, describing the entire group as uniformly "good" would obscure important differences. A diagnostic interpretation is more appropriate: some students appear ready for more representative and tactically demanding tasks, whereas others need concentrated work on ball control and execution speed.

The use of an integrated test is supported by measurement research. Marhaendro (2018) reported acceptable reliability for the Futsal Skill Test in male high-school players, with participants completing passing, control, dribbling, and shooting tasks as quickly and accurately as possible. Marhaendro et al. (2023) further examined the validity and reliability of futsal-player skill measurement, explicitly noting that faster performance reflects higher skill. This directionality is essential when interpreting the present categories and should be explained to coaches and participants.

The lower-performing subgroup may require more structured technical exposure than a predominantly game-based weekly session provides. Biomechanics-informed passing and shooting practice has produced improvements among secondary-school students (Prasetya et al., 2021). Evidence from youth soccer also shows that focused passing instruction with cues, repetition, and feedback can improve accuracy in ways that small-sided games alone may not consistently achieve (Carlsson et al., 2025). Although soccer and futsal differ, both findings support combining targeted technique practice with representative play.

Technical skills should not remain isolated. Ueda et al. (2023) found relationships between technical actions and offensive tactical efficiency among school futsal players, while Ueda et al. (2020) examined core tactical principles and technical efficiency in primary-school futsal. These studies indicate that receiving, passing, dribbling, and shooting should progress from stable tasks to activities requiring perception of space, teammates, and opponents. Small-sided games are useful at this stage because they increase meaningful decision-action opportunities.

The observed heterogeneity may also reflect differences in broader movement competence and developmental experience, neither of which was measured. Duncan et al. (2022) found that fundamental movement skills and perceived competence were associated with soccer-specific technical performance in boys. Systematic work on male futsal talent development similarly identifies technical, tactical, physical, and psychosocial characteristics as interacting components rather than independent attributes (Mendes et al., 2022). Coaches should therefore avoid treating one total test time as a complete account of ability.

Futsal's high-intensity intermittent demands reinforce the need to integrate technique with movement quality and fitness. Reviews describe frequent accelerations, decelerations, sprints, and changes of direction with short recovery periods (Naser et al., 2017; Spyrou et al., 2020). Match analysis also demonstrates the density of physical and tactical demands (Agras et al., 2016; Moore et al., 2014), while professional match-play research shows substantial physiological loading (Castagna et al., 2009). For school participants, conditioning should be age-appropriate and preferably embedded in ball-based tasks rather than copied directly from elite programs.

Testing quality and interpretation remain important. Skill assessments should demonstrate repeatability and clarify whether penalties, time, or accuracy drive the score. Padrón-Cabo et al. (2019) reported test–retest evidence for soccer skill tests, illustrating the need to quantify measurement stability before using small score changes to judge improvement. In the present study, a complete test protocol and primary normative basis were absent; therefore, the classifications should guide local instruction but not talent selection or comparisons with other schools.

Practical Implications

The coach should retain component errors and raw completion times for every student. Those in the poor and very-poor categories can receive high-repetition stations for short passing, first touch, close dribbling, and controlled shooting with immediate feedback. Fair performers can progress to timed combinations and directional pressure. Good-to-excellent performers can undertake small-sided tasks emphasizing scanning, rapid support, and decision-making. Equipment shortages should be addressed by using more balls, smaller groups, and parallel stations to reduce waiting time.

Limitations

The study involved 29 male students from one school and used a cross-sectional descriptive design. Ages, grades, playing experience, attendance, and complete test procedures were unavailable. The category thresholds were not linked to an independently verified age-referenced norm, and component-level scores were not reported. Court quality and limited equipment may have influenced performance. The study did not measure tactical behavior, fitness, maturation, or match performance and cannot establish why students obtained different scores.

Conclusions

Futsal Skill Test times among 29 male extracurricular participants ranged from 38.81 to 59.29 seconds (47.91 ± 6.42). Seven students (24.14%) were excellent, 4 (13.79%) very good, 4 (13.79%) good, 5 (17.24%) fair, 6 (20.69%) poor, and 3 (10.34%) very poor. The excellent category was the largest, but the 31.03% classified as poor or very poor demonstrates substantial heterogeneity. Individual times and error patterns should guide differentiated training, and the same standardized protocol should be repeated after a documented instructional cycle.

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Author Contributions

Mhd. Saleh Faudi Siregar: conceptualization, methodology, investigation, data collection, project administration, and writing—original draft. Eka Abdurrahman: data analysis, interpretation, supervision, and writing—review and editing. Both authors approved the final manuscript and accept responsibility for the integrity of the work.

Conflict of Interest

The authors declare no conflict of interest.

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This research received no external funding.

Data Availability

The aggregate data are presented in this article. De-identified individual results may be made available by the corresponding author upon reasonable request, subject to ethical and institutional requirements.

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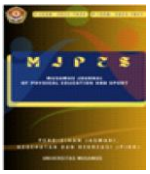

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