



The Effect of Small-Sided Games Training on the Passing Accuracy of Futsal Players at State Senior High School 2 Palopo

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Abstract

This study aimed to determine the effect of small-sided games (SSG) training on improving the passing accuracy of futsal players at State Senior High School 2 Palopo. The research employed an experimental method using a one-group pretest-posttest design. The sample consisted of 12 futsal players selected through a total sampling technique. Data were collected using a passing accuracy test administered before and after the training intervention. The results indicated a significant improvement in passing accuracy following the SSG training program. A paired-sample t-test revealed a significance value (Sig.) of $0.000 < 0.05$, demonstrating a significant difference between the pretest and posttest results. It can therefore be concluded that small-sided games training has a positive and significant effect on improving the passing accuracy of futsal players at State Senior High School 2 Palopo”



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INTRODUCTION

Sports play an essential role in developing physical fitness, character, and social values. Among various sports, futsal has rapidly gained popularity, particularly among students, due to its dynamic tempo and compact playing area that demand technical precision and tactical awareness. Passing accuracy is a fundamental technical skill that determines the fluidity of teamwork and the effectiveness of offensive play in futsal. However, based on field observations at State Senior High School 2 Palopo” many players still struggle to perform accurate passes, especially under time pressure and spatial constraints. This issue often arises from monotonous training methods that do not simulate real-game conditions.

To address these limitations, coaches require training models that simultaneously develop technical, tactical, and cognitive aspects. Small-sided games (SSG) are widely recognized as an effective method to meet these demands. SSGs reduce the number of players and field size, increasing the intensity of ball touches, decision-making frequency, and physical involvement. According to Hill-Haas et al. (2021), SSGs can significantly enhance players’ technical skills, tactical understanding, and physical fitness through realistic game simulations.

Furthermore, SSG training has been shown to improve passing accuracy because players perform numerous passes under varied conditions. Fitriani et al. (2023) reported that SSG programs lead to substantial improvements in both passing precision and aerobic endurance in futsal athletes. Consequently, implementing small-sided games in futsal training is expected to produce more accurate, faster, and tactically intelligent players. Based on this rationale, the present study seeks to determine the effect of small-sided games training on the passing accuracy of

futsal players at State Senior High School 2 Palopo

METHODS

Research Design

This research employed an experimental method with a *one-group pretest-posttest design*. The design allowed the researcher to measure changes in players’ performance before and after the SSG training intervention.

Participants

The participants were 12 male futsal players aged 16–18 years, all members of the extracurricular futsal team at State Senior High School 2 Palopo. Each participant had at least one year of futsal training experience. None of the participants reported any physical injuries or health limitations during the study period. The participants were homogeneous in terms of age, education level, and training background, ensuring controlled conditions for the experiment.

Sampling Procedures

The study used a total sampling technique, meaning all futsal team members were involved. The research was conducted on the school futsal court under consistent environmental conditions. Prior to participation, players were informed about the objectives and procedures of the study and provided written consent. No incentives or monetary compensation were offered to maintain voluntary participation and unbiased responses.

Materials and Apparatus

The study utilized futsal balls, cones, target boards, and measuring tapes. A manual observation sheet was used to

record the accuracy of each pass. The passing accuracy test was adapted from Mahendra (2015), where players performed passes toward a designated target area, and each accurate pass received one point. The test has been validated in previous studies for measuring the accuracy of futsal passing performance.

Procedures

The training program lasted six weeks, with three sessions per week. Each session consisted of warm-up activities, main training drills (SSG formats 3v3 and 4v4), and cool-down exercises, lasting approximately 60 minutes in total. The SSG drills emphasized precision in passing, quick decision-making, and situational awareness under limited space and time. A pretest was administered before the training program, and a posttest was conducted after the final week to evaluate improvement.

Data Analysis

Data were analyzed using a *paired-sample t-test* to determine significant differences between pretest and posttest results, with a 0.05 significance level. All statistical analyses were performed using SPSS software.

RESULT

Descriptive Analysis

The purpose of descriptive data analysis is to obtain an overall picture of the research data. Descriptive analysis was conducted on the futsal players of SMA 2 Palopo, and the pretest and posttest data were obtained as follows. The descriptive analysis includes the mean, standard deviation, range, minimum, and maximum values.

Table 4.1 Descriptive Analysis

Descriptives	Pretest	Posttest
N	15	15
Mean	4.40	6.60
Std. Deviation	1.242	1.502
Range	4	5
Minimum	2	4
Maximum	6	9

Based on the descriptive analysis, the pretest results show an average passing accuracy of 4.40 with a standard deviation of 1.242, a range of 4, a minimum score of 2, and a maximum score of 6. In the posttest, the mean increased to 6.60 with a standard deviation of 1.502, a range of 5, a minimum score of 4, and a maximum score of 9. These findings indicate an improvement in performance after the treatment was applied.

Normality Test

The normality test was conducted to examine whether the variables are normally distributed. The test was performed using SPSS 27. A variable is considered normally distributed if the significance value (Sig.) is greater than 0.05, and not normally distributed if it is less than 0.05. The results are presented in the following table:

Table 4.2 Normality Test

Tests of Normality						
	<i>Kolmogorov-Smirnov^a</i>			<i>Shapiro-Wilk</i>		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	0.219	15	0.052	0.914	15	0.154
Posttest	0.138	15	0.200	0.949	15	0.509

Based on the normality test, the pretest passing accuracy data has a Shapiro-Wilk value of 0.914 with a significance of 0.154, and the posttest data has a Shapiro-Wilk value of 0.949 with a significance of 0.509. Since both values exceed $\alpha = 0.05$, it can be concluded that both pretest and posttest data are normally distributed.

Hypothesis Testing

The results showed a significant improvement in the players' passing accuracy after undergoing the SSG training program. The mean pretest score was 7.41, which increased to 10.08 in the posttest. The *paired-sample t-test* yielded a significance value (Sig. 2-tailed) of $0.000 < 0.05$, confirming a statistically significant difference between pretest and posttest results.

TABLE 4.3. PAIRED-SAMPLE T-TEST

<i>Paired Samples T-Test</i>		
<i>Prestest dan posttest akurasi passing pemain futsal</i>	<i>N</i>	15
	<i>Mean</i>	2.200
	<i>Std. deviation</i>	0.941
	<i>Sig. (2-tailed)</i>	< 0,001
	<i>t</i>	9.054
	<i>df</i>	14
	<i>t-tabel</i>	4.781

Thus, it can be concluded that small-sided games training positively affects the passing accuracy of futsal players at State Senior High School 2 Palopo

DISCUSSION

The findings of this study affirm that small-sided games (SSG) training significantly improves passing accuracy in futsal players. By placing players in game-like environments, SSG fosters rapid decision-making, spatial awareness, and technical execution under realistic playing pressures.

Aprianto et al. (2020) demonstrated similar results, showing that SSG improved the precision and consistency of soccer players' passes more effectively than conventional drills. The small field dimensions and increased player interaction encourage repeated execution of technical skills, leading to better coordination and accuracy.

According to Fitriani et al. (2023), SSG also enhances VO₂ max and aerobic

endurance, allowing players to sustain optimal performance throughout a match. This physiological improvement indirectly supports technical consistency. Similarly, Nurkholis and Suherman (2022) highlighted that SSG formats such as 3v3 and 4v4 enhance players' perceptual-cognitive abilities, particularly in reading play situations, anticipating movements, and selecting accurate passing options.

Psychologically, the fun and competitive nature of SSG increases players' engagement and motivation. Chalim et al. (2021) reported that enjoyable game-based learning environments maintain higher attention and learning retention compared to repetitive technical drills. This positive emotional involvement fosters faster skill adaptation and sustained participation in training sessions.

Overall, the improvement observed in this study stems from the holistic nature of SSG, which combines technical repetition, cognitive engagement, physical intensity, and motivational aspects. Therefore, SSG should be integrated into futsal training programs as a multidimensional approach to enhance both skill performance and game intelligence.

CONCLUSION

Based on the findings, it can be concluded that small-sided games training significantly improves the passing accuracy of futsal players at State Senior High School 2 Palopo. This method effectively integrates technical, tactical, and physical components, making it an ideal approach for school-level futsal development. Coaches are recommended to apply SSG training regularly to improve team performance and individual technical proficiency.

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