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# Small Side Game: Effectiveness of Increasing Futsal Passing

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**ABSTRACT:** This study aimed to determine the effect of small-sided game training on passing skills. This type of research is experimental. The population used is the female futsal athletes of Parda Sleman, totaling 20 people. Instruments to determine the ability to pass using tests of passing and controlling the ball (passing-controlling). The small-sided game exercise was carried out for 18 meetings. The results showed a significant effect of small-sided game training on passing skills, with an increase of 14.55%. This research can be useful and serve as additional material for studies on small side games training and passing skills as the basis for making training programs to improve player performance, as well as providing theoretical and practical evidence for coaches, as well as futsal practitioners to pay more attention to small side games training programs in practice passing skills.

KEYWORDS: small-sided game, passing, futsal.

#### **INTRODUCTION**

Futsal is a sport growing rapidly in the community, both in the general public, education, and offices. Futsal is not only used as a recreational sport but has become a competitive sport in various regional, national, and international matches. Futsal is a very fast and dynamic game. Futsal is a dynamic sport and prioritizes changing positions quickly to find space by running (De Jong et al., 2022); (Doewes et al., 2022); (Ari, 2020). In a relatively small field, there is almost no room for mistakes. Therefore, cooperation between players is required through accurate passing.

Basic techniques must be mastered well because in futsal sports games, are required not to linger when carrying the ball; fast play is needed, strong defense, and structured attack, so it takes the ability to master the basic techniques of playing futsal perfectly. Ability to master basic futsal techniques, such as (a) passing, (b) chipping, (c) dribbling, (d) control, and (e) shooting (Sabdono et al., 2019); (Taufik et al., 2021); (Aryanti & Pangestu, 2021); (Sullivan et al., 2021).

In futsal games, the fast movement of players also causes players to be precise in passing, it is not surprising that in the futsal game, passing has an important role to pass the opponent or dismantle the opponent's defense. This is because in futsal games players always go with the philosophy of 100% ball possession (Marhaendro, 2018); (Ridlo & Bakti, 2021). A good pass will bring an open direction and can control the game when building a defense or attack strategy. In order for futsal passing to be mastered properly, there must be a continuous training process with the aim of automating futsal passing skills. Exercise is a systematic process of practicing, which is done repeatedly, increasing the training load day by day (Tibana et al., 2019); (Clemente, Clark, et al., 2019). The exercise here must pay attention to and refer to the principles of practice. An effective form of practice is to resemble a real match, one of which is small-sided games.

Small-sided games are games on a small field and played by less than eleven players (Gómez-Carmona et al., 2018); (Sarmento et al., 2018); (Clemente et al., 2021); (Bujalance-Moreno et al., 2019); (Bennett et al., 2018); (Hammami et al., 2018). Each player in the practice of small-sided games is involved in the game and has more contact with the ball. This is because the size of the field used is less, and the number of players is not the same as in the original match. Small-sided game exercises can develop players' technical skills, tactics, mental, and physical condition (Selmi et al., 2018).

In the practice of small-sided games, in general, there are many variations of the form of exercise, this is so that the futsal game does not cause saturation. One thing that can be done to relieve boredom is to practice futsal small-sided games 3v3 and 4v4. Small-sided games are a suitable training tool or method to improve technique. The lower the number of players, the higher the number of technical actions (passes, dribbles, and shots) and contact with the ball (Clemente, Sarmento, et al., 2019). Small-sided games can be meaningful when players do it in 3v3 because athletes have more passing, dribbling, and shooting. The more often the player passes, dribbles, and kicks, the stronger endurance is automatically needed (Sgrò et al., 2018).

(Fernández-Espínola et al., 2020) his research showed that SSG can be used as an interesting methodological resource for training techniques and tactics in team sports at a young age. To do so, it is necessary to define the goals to be achieved and which variables to change, and how, some of the most decisive are the number of players, the size of the field area, and the manipulation of certain rules. In general, most studies agree that a reduction in the number of players leads to an increase in technical action. In this case, it is important to note that this is the frequency of the technical element per player. In this sense, (Clemente & Rocha, 2012) analyzed the effect of the number of players in handball and concluded that reducing it (eg, from 4 vs. 4 to 2 vs. 2) increases the number of ball contacts, interceptions, and dribbles per player. (Coutinho et al., 2019) stated that the provision of small-sided game exercises increases the movement of players' positions that are better and more structured.

#### **METHOD**

This type of research is experimental. The experimental method is defined as a systematic method to build a relationship that contains a causal-effect relationship phenomenon. The population used is the female futsal athletes of Porda Sleman totaling 20 people. Instruments to determine the ability of passing using tests of passing and controlling the ball (passing-controlling). This instrument has a validity of 0.812 (Narlan, et al., 2017: 243). The procedure for carrying out the test is as follows: (1) Implementation Instructions: (1) The testee stands behind the shooting line at a distance of 3 meters from the wall/board, may be with the right foot ready to kick or vice versa. In front of the right/left of the Testee, there are futsal cones (the funnel) that are parallel to the firing line as an obstacle that must be passed during the test. (2) At the signal "Yes", the Testee kicks at the target/wall/board that has been marked with a 3 m x 50 cm rectangle. Then the Testee holds it back using the sole of the foot or the inside of the foot behind the kick line. (3) After holding the ball, the Testee shifts the ball with his right foot to the left of the futsal cones (the funnel) if the Testee starts kicking the ball to the right of the futsal cones (the funnel). Vice versa, if the Testee starts kicking on the left side of the futsal cones (the funnel) with his left foot. (4) Perform this activity alternately between the right and left legs for 30 seconds. (5) If the ball goes far from the soccer area, then the Testee uses the reserved ball that has been provided. Data analysis techniques include descriptive analysis, prerequisite test (normality and homogeneity test), and hypothesis testing using paired sample test. Analysis using SPSS 23 software.

#### **FINDING**

The research process was carried out in 18 meetings. The results of the statistical descriptive analysis of the pretest and posttest of passing ability are presented in Table 1:

Table 1. Results of Descriptive Statistical Analysis of Pretest and Posttest Ability of Passing

Passing Ability	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	10	8,00	22,00	16,50	4,93
Posttest	10	9,00	26,00	18,90	6,30

Based on Table 1, shows that the average passing ability during the pretest was  $16.50 \pm 4.93$ , while at the posttest, after being given small-sided games training, it increased by an average of  $18.90 \pm 6.30$ .

Test the normality of the data using the Shapiro-Wilk method. The normality test of the data carried out in each analysis group was carried out with the SPSS version 20.0 software program for windows with a significance level of 0.05, the results are in Table 2:

**Table 2. Results of Normality Test Analysis** 

Muscle Strongth	Shapiro-Wilk				
Muscle Strength	Statistic	df	Sig.		
Pretest	0,910	10	0,280		
Posttest	0,898	10	0,207		

Based on the statistical analysis of the normality test that has been carried out using the Shapiro-Wilk test, data on passing ability during pretest and posttest obtained normality test results with a significance value of p> 0.05, which means the data is normally distributed.

The homogeneity test is intended to test the similarity of variance between the pretest and posttest. Homogeneity test using Levene Test using SPSS 23, the results are in Table 3:

Table 3. Results of Homogeneity Test Analysis

Test of Homogeneity of Variances					
Pretest-Posttest					
Levene Statistic	df1	df2	Sig,		
1,683	1	18	0,211		

Based on the analysis results in Table 3, it can be seen that the pretest-posttest of passing abilities obtained a sig. p > 0.05, so the data is homogeneous.

The hypothesis was carried out to test the effect of small-sided game training on passing skills. The analysis used the paired sample t test (df = n-1) using SPSS 23 at a significance level of <0.05. The results of hypothesis testing are presented in Table 4:

Table 4. Analysis Results of Paired Sample T Test

Paired Samples Test								
	Paired Differences							
Pair	Mean	Std, Deviation	Std, Error Mean	95% Confidence Interval of the Difference		t	df	Sig, (2- tailed)
				Lower	Upper			
Pretest -	-2.40	1,58	0,50	-3,53	-1,27	4,811	9	0,001
Posttest	-2,40	1,50	0,50	-3,33	-1,21	4,011	9	0,001

Based on the results of the analysis in Table 4, the t-count value is 4.811, with a p significance value of 0.000 < 0.05. Then these results indicate that there is a significant difference. Thus, the alternative hypothesis, "There is a significant effect of small-sided game training on passing ability," is **accepted**. The increase in passing ability after being given small-sided game training is 14.55%.

#### **DISCUSSION**

Based on hypothesis testing, it is known that there is a significant effect of small side game training on the passing ability of the female futsal athlete of Porda Sleman with an increase of 14.55%. Given the training for 18 meetings, the treatment clearly provides new knowledge in terms of training football passing techniques and also provides its own experience for athletes and gives a good impact, especially on passing skills.

Small-Sided Games are a training method that presents game situations like real games that make players gain mastery of technical, tactical, and physical aspects (Doewes et al., 2020); (Souabni et al., n.d.). A small side game is played on a field smaller than football in general, using modified rules and involving a number of players that are smaller than the actual number of players (García-Angulo et al., 2020). A small side game is a football game played on a smaller field with fewer than eleven players and is the best way for players to combine almost all elements of the game (Pellegrino et al., 2020).

In this study, the researcher gave a rule where participants were only allowed to make two touches per player, and after the team made five passes, the player who touched the last ball was required to shoot at the goal. The practice of small-sided games is very good because these exercises focus more on players with the rules that apply. The small side game exercise that is carried out gives more touches to the ball by players playing the game. Every player controlling the ball makes them calmer because there are more players involved in the game, and they can also improve their passing skills; the increase in the percentage of players' passing abilities is due to the small-sided games training method that requires players to increase their touch on the ball, then with the size of the ball. A reduced field, a faster and more measured touch to the ball, and more decision-making so that they can train mentally, physically, technically, and tactically. When the player touches the ball a lot, it results in being able to increase the ability to do passing, so initially, the student's movement in doing rigid passing becomes more and more maximal.

Small-Sided Games have commonly used modified games that take place in narrow spaces, involve a small number of players, and with modified game rules) they have been proposed to be an effective methodological tool for optimizing tactics and behavior (Práxedes et al., 2018); (Klingner et al., 2022); (Evangelio et al., 2019). The game also promotes the development of technical actions such as passing, dribbling, and shooting (Santos et al., 2020); (Trecroci et al., 2020), and has been shown to result in higher levels of sporting expertise in athletes because they simultaneously work on the two components of the action; decision-making

process and technical implementation (Pizarro et al., 2019).

(Fernández-Espínola et al., 2020), in his research, showed that SSG could be used as an interesting methodological resource for training techniques and tactics in team sports at a young age. To do so, it is necessary to define the goals to be achieved, which variables to change, and how some of the most decisive is the number of players, the size of the field area, and the manipulation of specific rules. In general, most studies agree that a reduction in the number of players leads to increased technical action. In this case, it is essential to note that this is the frequency of the technical element per player. In this sense, (Clemente & Rocha, 2012) analyzed the effect of the number of players in handball. It concluded that reducing it (e.g., from 4 vs. 4 to 2 vs. 2) increases the number of ball contacts, interceptions, and dribbles per player. (Coutinho et al., 2019) stated that the provision of small-sided game exercises increases the movement of players' positions that are better and more structured.

#### **REFERENCES**

- 1) Ari, Y. (2020). The relationship between anthropometric characteristics and motoric performance of female futsal players. *International Journal of Applied Exercise Physiology*, *9*(9), 11–17.
- 2) Aryanti, S., & Pangestu, E. (2021). Uphill running exercise of speed on futsal extracurricular high schools. *Journal of Physics: Conference Series*, 1832(1), 12057.
- 3) Bennett, K. J. M., Novak, A. R., Pluss, M. A., Stevens, C. J., Coutts, A. J., & Fransen, J. (2018). The use of small-sided games to assess skill proficiency in youth soccer players: a talent identification tool. *Science and Medicine in Football*, 2(3), 231–236.
- 4) Bujalance-Moreno, P., Latorre-Román, P. Á., & García-Pinillos, F. (2019). A systematic review on small-sided games in football players: Acute and chronic adaptations. *Journal of Sports Sciences*, *37*(8), 921–949.
- 5) Clemente, F. M., Afonso, J., & Sarmento, H. (2021). Small-sided games: An umbrella review of systematic reviews and meta-analyses. *PLoS One*, *16*(2), e0247067.
- 6) Clemente, F. M., Clark, C., Castillo, D., Sarmento, H., Nikolaidis, P. T., Rosemann, T., & Knechtle, B. (2019). Variations of training load, monotony, and strain and dose-response relationships with maximal aerobic speed, maximal oxygen uptake, and isokinetic strength in professional soccer players. *PLoS One*, *14*(12), e0225522.
- 7) Clemente, F. M., & Rocha, R. F. (2012). The effects of task constraints on the heart rate responses of students during small-sided handball games. *Kinesiologia Slovenica*, 18(2).
- 8) Clemente, F. M., Sarmento, H., Costa, I. T., Enes, A. R., & Lima, R. (2019). Variability of technical actions during small-sided games in young soccer players. *Journal of Human Kinetics*, *69*(1), 201–212.
- 9) Coutinho, D., Gonçalves, B., Travassos, B., Abade, E., Wong, D. P., & Sampaio, J. (2019). Effects of pitch spatial references on players' positioning and physical performances during football small-sided games. *Journal of Sports Sciences*, *37*(7), 741–747.
- 10) De Jong, J.-P. J., Caetano, F. G., De Jong, L. M. S., Da Silva, V., Bueno, M. J. D. O., Santiago, P. R. P., Vieira, L. H. P., Nakamura, F. Y., & Moura, F. A. (2022). The influence of the futsal outfield goalkeeper on players running performance. *Human Movement*, 23(3).
- 11) Doewes, R. I., Elumalai, G., & Azmi, S. H. (2022). ANALYSIS OF DRIBBLING-DISTANCE COVERAGE PERFORMED BY FUTSAL ATHLETES INDONESIAN FUTSAL LEAGUE 2021. *Revista Brasileira de Medicina Do Esporte*, *28*, 440–445.
- 12) Doewes, R. I., Purnama, S., Syaifullah, R., & Nuryadin, I. (2020). The effect of small sided games training method on football basic skills of dribbling and passing in indonesian players aged 10-12 years. *Int J Adv Sci Technol*, 29(3), 429–441.
- 13) Evangelio, C., Sierra-Díaz, M. J., González-Víllora, S., & Clemente, F. M. (2019). 'Four goals for three players': using 3 vs. 3 small-sided games at school. *Human Movement*, *20*(4), 68–78.
- 14) Fernández-Espínola, C., Abad Robles, M. T., & Giménez Fuentes-Guerra, F. J. (2020). Small-sided games as a methodological resource for team sports teaching: a systematic review. *International Journal of Environmental Research and Public Health*, 17(6), 1884.
- 15) García-Angulo, A., Ortega-Toro, E., Giménez-Egido, J. M., García-Angulo, F. J., & Palao, J. M. (2020). Short-term effect of competition rule changes on collective effectiveness and self-efficacy in youth football players. *Psychology of Sport and Exercise*, 49, 101688.
- 16) Gómez-Carmona, C. D., Gamonales, J. M., Pino-Ortega, J., & Ibáñez, S. J. (2018). Comparative analysis of load profile between small-sided games and official matches in youth soccer players. *Sports*, *6*(4), 173.
- 17) Hammami, A., Gabbett, T. J., Slimani, M., & Bouhlel, E. (2018). Does small-sided games training improve physical-fitness and specific skills for team sports? A systematic review with meta-analysis. *Journal of Sports Medicine and Physical Fitness*, *58*(10), 1446–1455.

- 18) Klingner, F. C., Huijgen, B. C. H., Den Hartigh, R. J. R., & Kempe, M. (2022). Technical–tactical skill assessments in small-sided soccer games: A scoping review. *International Journal of Sports Science & Coaching*, 17(4), 885–902.
- 19) Marhaendro, A. S. D. (2018). Reliability of Futsal Skill Test for High School Players. 2nd Yogyakarta International Seminar on Health, Physical Education, and Sport Science (YISHPESS 2018) and 1st Conference on Interdisciplinary Approach in Sports (ColS 2018), 160–165.
- 20) Pellegrino, G. C., Paredes-Hernández, V., Sánchez-Sánchez, J., García-Unanue, J., & Gallardo, L. (2020). Effect of the fatigue on the physical performance in different small-sided games in elite football players. *The Journal of Strength & Conditioning Research*, 34(8), 2338–2346.
- 21) Pizarro, D., Práxedes, A., Travassos, B., del Villar, F., & Moreno, A. (2019). The effects of a nonlinear pedagogy training program in the technical-tactical behaviour of youth futsal players. *International Journal of Sports Science & Coaching*, 14(1), 15–23.
- 22) Práxedes, A., Moreno, A., Gil-Arias, A., Claver, F., & Del Villar, F. (2018). The effect of small-sided games with different levels of opposition on the tactical behaviour of young footballers with different levels of sport expertise. *PloS One*, *13*(1), e0190157.
- 23) Ridlo, A. F., & Bakti, A. P. (2021). The Influence Of Imagery Training On The Passing Ability Of Futsal Players, Islamic University 45 Bekasi. *JIPES-JOURNAL OF INDONESIAN PHYSICAL EDUCATION AND SPORT*, 7(02), 43–50.
- 24) Sabdono, A., Sutapa, P., & Phytanza, D. T. P. (2019). Development of skills training model attacking futsal by using small game-side 3 vs 3 to improve basic skills on high school students. *ScienceRise*, 7, 45–49.
- 25) Santos, S., Coutinho, D., Gonçalves, B., Abade, E., Pasquarelli, B., & Sampaio, J. (2020). Effects of manipulating ball type on youth footballers' performance during small-sided games. *International Journal of Sports Science & Coaching*, 15(2), 170–183.
- 26) Sarmento, H., Clemente, F. M., Harper, L. D., Costa, I. T. da, Owen, A., & Figueiredo, A. J. (2018). Small sided games in soccer—a systematic review. *International Journal of Performance Analysis in Sport*, 18(5), 693–749.
- 27) Selmi, O., Gonçalves, B., Ouergui, I., Sampaio, J., & Bouassida, A. (2018). Influence of well-being variables and recovery state in physical enjoyment of professional soccer players during small-sided games. *Research in Sports Medicine*, 26(2), 199–210.
- 28) Sgrò, F., Bracco, S., Pignato, S., & Lipoma, M. (2018). Small-sided games and technical skills in soccer training: Systematic review and implications for sport and physical education practitioners. *Journal of Sports Science*, *6*(1), 9–19.
- 29) Souabni, M., Hammouda, O., Souabni, M., Romdhani, M., Souissi, W., Ammar, A., & Driss, T. (n.d.). Nap improved game-related technical performance and physiological response during small-sided basketball game in professional players. *Biology of Sport*, 40(2), 389–397.
- 30) Sullivan, M. O., Woods, C. T., Vaughan, J., & Davids, K. (2021). Towards a contemporary player learning in development framework for sports practitioners. *International Journal of Sports Science & Coaching*, *16*(5), 1214–1222.
- 31) Taufik, M. S., Solahuddin, S., Pratama, R. R., Iskandar, T., & Ridlo, A. F. (2021). The Effect of Virtual Media-Based Obstacle Run Training on Woman Futsal Player's Dribbling Ability During Covid-19 Pandemic. *Teorià Ta Metodika Fizičnogo Vihovannâ*, 21(4), 299–303.
- 32) Tibana, R. A., Sousa, N. M. F. de, Prestes, J., Feito, Y., Ernesto, C., & Voltarelli, F. A. (2019). Monitoring training load, well-being, heart rate variability, and competitive performance of a functional-fitness female athlete: a case study. *Sports*, 7(2). 35.
- 33) Trecroci, A., Boccolini, G., Duca, M., Formenti, D., & Alberti, G. (2020). Mental fatigue impairs physical activity, technical and decision-making performance during small-sided games. *PLoS One*, *15*(9), e0238461.



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