



# DESIGN AND DEVELOPMENT OF FORWARDERS SPECIFIC SKILL TRAINING ON PHYSICAL FUNCTIONAL AND PERFORMANCE VARIABLES AMONG FOOTBALL PLAYERS (A PILOT STUDY)

**N.Kodeeswaran<sup>1</sup>, Dr.K.Murugavel<sup>2</sup>**

<sup>1</sup>Ph.D, Research Scholar, Department of Physical Education, Bharathiar University, Coimbatore, Tamilnadu, India.

<sup>2</sup>Senior Professor and Head, Department of Physical Education, Bharathiar University, Coimbatore, Tamilnadu, India.

## ABSTRACT

The perseverance of this study was to find out the effect of forwarder specific skill Training on physical functional and Performance Variables of School level football players. The research was carried out on a sample of 15 sub junior school students selected from various academy in coimbatore district and their aged between 14 and 17 years. Single group design. The pretests were conducted for all subjects on all selected variables to collect data. Forwards specific skill training group (5) would be undergone period of four weeks. All selected physical and functional variables were assessed by standard tests; speed by 50 meter dash, agility by 4x10meter shuttle run, flexibility through sit and reach test, balance by stroke balance test, leg explosive power through standing broad jump, Vo2 Max by cooper test, resting pulse rate by bio monitor, breath holding time through breath holding test, dribbling by Ronaldo speed dribbling test, passing by sir bobby Christo skill test, shooting by soccer assessment skill test and kicking McDonald soccer test. The four week forwards specific skill training was conducted followed by post-test for all selected variables. Hence, the forwards specific skill training program appears to be an effective way of improving physical functional and performance variables of school level football players.

**KEYWORDS:** Physical, Functional, Performance variables, Forwards Specific Skill Training, Football Players.

## INTRODUCTION

Football requires peak physical conditioning of its player to be played at the highest level. The only way to achieve this level of conditioning training, specifically football and the amount of running done in a match. Also, the better conditioned a player is the more likely perform with the same amount of skill necessary when passing, dribbling, kicking and shooting at the end of the game as the beginning. At any level above a school level, football limits the amount of substitutions a team can make. Football soccer is truly a global game. However, as a topic of scholarly research, the sport is still in its infancy. Its history is often examined and understood in local terms, rather than national or international ones. Even international competitions are often as not described as 'Us versus them' or as a chance to make contact with a distant other as in the proposed U.S.A v Iran match. Football players must work with strength training program as it brings about beneficial changes on the adaptation process had proved the implication of the positive relation between leg strength and kick performance. Before addressing specific positions, it's important to note that a given player should not initially focus too much on one position. Player should give themselves the flexibility of trying various positions; it will help them greatly down the road. This generalist approach allows a player to see how his strengths and weakness fit into the different positions in the game. All positions require players to both defend and attack, so the general principles of attacking and defending (discuss later in the book) will always apply. Coaches are now also beginning to train players across different team roles such as attackers and defenders as recent studies have advocated for this. **Laakso et al., (2019)** suggests that the manipulation of different team positions on the pitch should be practiced in training, as defenders have the capabilities to attack and dribble past the opposition.

**TABLE-I**

Characteristics of training groups (N=20) at pre training mean

Variable	FSST
Age (Y)	14-16
Height (cm)	150.30
Weight (kg)	51

**METHODOLOGY**

The impression of the study was to find out the forwarders specific skill training on physical, functional and skill performance variables among school level football players.. Five Physical active and interested school level football players were randomly selected as subjects and their age ranged between 14 and 17 years. Single group design was used. Forwarders specific skill training pilot study group (n = 5) would be undergone for a period of four weeks.

**CRITERION MEASURES**

The subjects of forwarders specific skill training pilot study would be assessed on the selected variables by the standardized test items before and after the training period of four weeks.

**TABLE - II**

S.No	Criterion Variables	Test items	Unit of measurements
<b>PHYSICAL VARIABLES</b>			
1.	Speed	50 Meter Dash	In seconds
2.	Agility	4x10meter Shuttle run	In seconds
3.	Flexibility	Sit and Reach Test	In Centimeters
4.	Balance	Stork Balance test	In Seconds
5.	Leg Explosive Power	Standing Broad Jump	In Meters
<b>PHYSIOLOGICAL VARIABLES</b>			
6.	Vo <sub>2</sub> max	Coopers Vo <sub>2</sub> Max Test	MI/kg/min
7.	Breath Holding Time	Breath Holding test	Seconds
8.	Resting Pulse Rate	Digital Heart Rate	Beats/min
<b>SKILL PERFORMANCE VARIABLES</b>			
9.	Dribbling	Ronaldo Speed Test	In Seconds
10.	Passing	Sir Bobby Charlton Soccer School of Australia test for Passing	In Points
11.	Shooting	Soccer-Team Skills Assessment Test	In Points
12.	Kicking	McDonald Soccer Skill Test	In Counts

**TRAINING PROGRAMME**

The forwarders specific skill training group underwent the experimental treatment for 4 weeks, 5 days and a session on each day with 60min duration. The training programme was lasted for 60 minutes for a session in a day, 5 days in a week for a period of 4 weeks duration. These 60 minutes included position wise specific skill training for 40 to 50 minutes and 10 minutes warm-up, and 10 minutes warm down. Four weeks of specific skill training was given to the selected subjects. Their training days and hours every week were from Monday to Friday from 6.00 to 7.30 am.

**TABLE – III  
TRAINING SCHEDULE FOR FORWARDERS SPECIFIC SKILL TRAINING**

I to IV Week	
1. Dribble and release	4. Around the world
2. Pressure Shots	5. Grid Passing game
3. Throw ins pass & score	6. Sudden deth
<b>Repetition</b>	5-6
<b>Sets</b>	4
<b>Rest in Between sets</b>	90 Seconds
<b>Rest in between Exercises</b>	45 Seconds
<b>Total</b>	60 Minutes

**STATISTICAL ANALYSIS**

The means and standard deviations of forwarders specific skill training groups were calculated for physical, functional and performance variables for the pre as well as posttests. Statistical significance was set to a priority at  $p < 0.05$ . All statistical tests were calculated using the statistical package for the social science (SPSS).

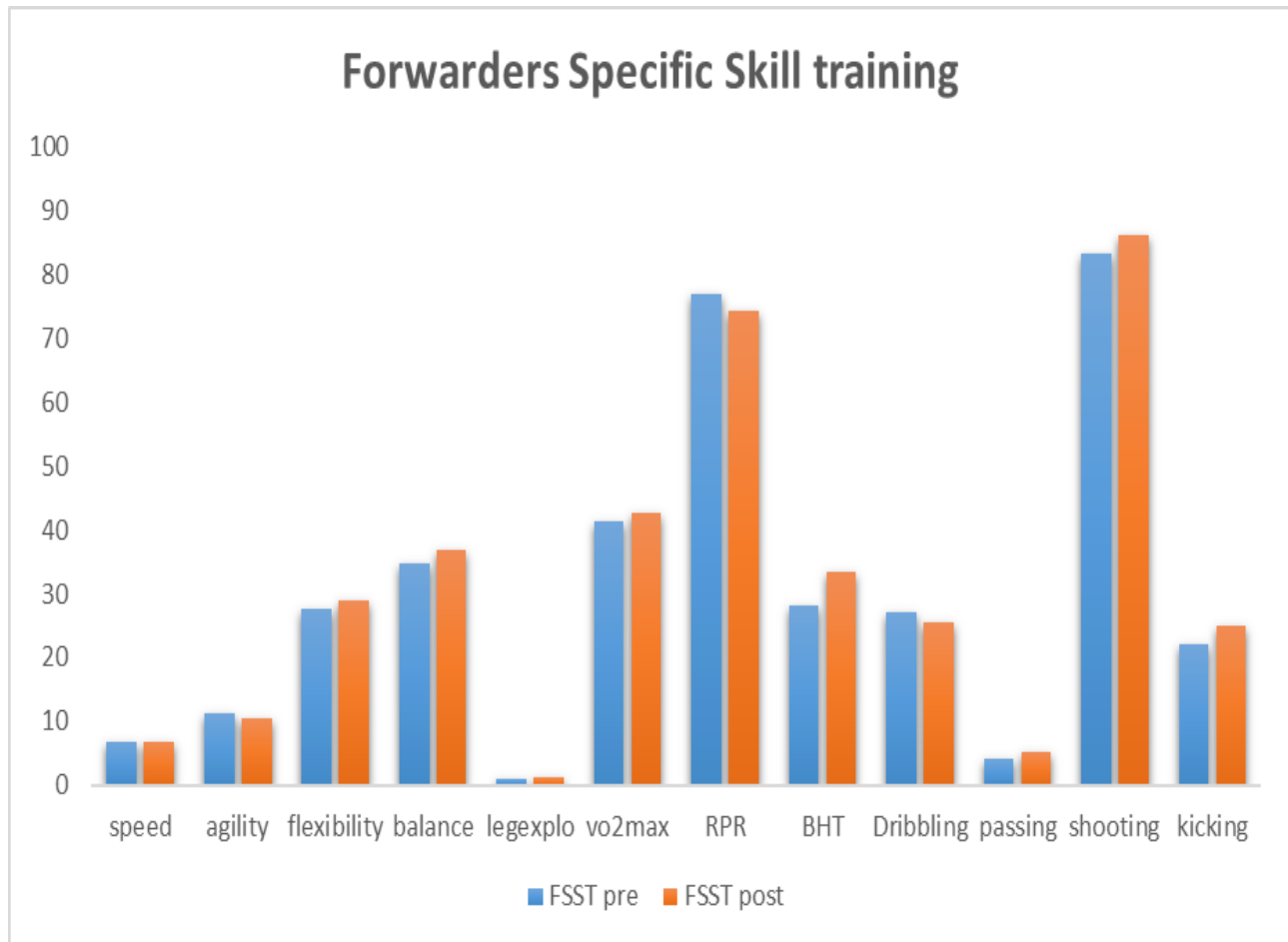
**TABLE - IV****COMPUTATION OF 'T' RATIO ON PHYSICAL FUNCTIONAL AND PERFORMANCE VARIABLES OF FOOTBALL PLAYERS ON FORWARDERS SPECIFIC SKILL TRAINING GROUP**

(Scores in beat/min/seconds)

S.No	Test items	Pre	Post	Standard Deviation	T ratio
1	Speed	6.91	6.69	0.13	2.85*
2	Agility	11.38	10.62	0.20	5.88*
3	Flexibility	27.69	29.07	0.91	5.12*
4	Balance	34.80	36.80	1.30	7.30*
5	Leg Explosive power	1.13	1.26	0.036	6.74*
6	Vo2 Max	41.41	42.62	0.35	3.97*
7	Resting Pulse rate	76.81	74.29	0.47	6.25
8	Breath Holding time	28.27	33.42	1.02	7.25*
9	Dribbling	27.03	25.53	0.93	8.04*
10	Passing	4.20	5.16	0.11	16.63*
11	Shooting	83.20	86.00	1.30	3.25*
12	Kicking	22.20	25.00	1.30	7.48*

\*significant level 0.05 level (degree of freedom 2.77, 1 and 4)

Table II reveals the computation of mean, standard deviation and 't' ratio on Speed, Agility, Flexibility, Balance, Leg explosive Power, Vo2max, Resting Pulse Rate, Breath Holding Time, Dribbling, Passing, Shooting And Kicking of experimental and control group. The obtained 't' ratio on cardiorespiratory endurance were 2.85, 5.88, 5.12, 7.30, 6.74, 3.97, 6.25, 7.25, 8.04, 16.63, 3.25 and 7.48 respectively. The required table value was 2.77 for the degrees of freedom 1 and 4 at the 0.05 level of significance. Since the experimental group 't' values were greater than the table value of 2.77, it was found to be statistically significant.



**FIGURE- I**  
**BAR DIAGRAM SHOWING THE MEAN VALUES ON PHYSICAL FUNCTIONAL AND PERFORMANCE VARIABLES OF FOOTBALL PLAYERS ON FORWARDERS SPECIFIC SKILL TRAINING GROUP**

### DISCUSSION ON FINDINGS

Position specific individual training is key to challenge, support and develop players. As we learn from all sports, marginal gains are key at the elite level and giving our players the best chance to be successful by preparing them for the game is vital. Allowing players to focus on their specific position played on the pitch is incredibly important for a coach to identify their strengths and weaknesses, in order for sessions to be adjusted and tailored towards players needs so that developments are seen. The present-day study considered the influence of four weeks of forwarders specific skill training on selected physical, functional and skill performance variables of footballers. The results of this study designated that forwarders specific skill training is more efficient to bring out desirable changes over the physical functional and skill performance variables of the footballers. Investigators have extended their interest to consider the speed, agility, balance, flexibility, leg explosive power Vo2 max, resting pulse rate, breath holding time, dribbling, passing shooting and kicking commencement from the way a footballers approaches the forwarders specific skill training.

**Ahmed et al., (2022)** At the end of 4 weeks of training, both groups showed improvement in their skills; however, the improvement in the experimental group was significantly better than in the control group. Core training improves football-specific Speed dribbling skills hence core training should be added to regular training of players.



**Bush et al., (2015)** The data demonstrates that evolving tactics in the EPL have impacted on the physical demands of wide players and the technical requirements of central players. These findings could be used for talent identification or position-specific physical and technical training.

**Carling (2011)** In general, the findings suggest that physical performance in the reference team was not greatly affected by opposition team formation. In contrast, skill-related demands varied substantially according to opponent formation and may have consequences for tactical and technical preparation and team selection policies.

**Dellal et al., (2012)** Subsequently, it is of importance for coaches to understand the different physiological demands imposed upon players by varying the rules of SSGs and to understand the differences between positional roles.

**Kishore et al., (2016)** From the result of the study it is speculated that skills and drills practice training is more efficient to bring out desirable changes over the kicking ability of High School Level male football players.

**Miller et al., (2002)** When individual training data were analyzed longitudinally, a nonlinear increase in performance in the PC, BP, and SQ was observed as training time increased, with the greatest rate of change occurring between the first and second semesters of training.

**Robbins et al., (2011)** The results of the present research present position-specific profiles for each of 15 positions. Coaches and practitioners will be able to use the findings of this research to better prepare athletes for entry into the NFL

**Shendkar et al., (2011)** While there was no significant difference found between positions in 10X 4 shuttle run and sit & reach. Hence it was concluded that there was difference in various components of fitness between the three positions.

**Yuvaraj et al., (2020)** The result revealed that there is no significant difference in coordinative ability variables, and there was a significant difference between the playing positions on anthropometric variables namely body height, body weight and leg length. It was observed that the defensive players are taller, heavier and have long leg than the players of other positions.

## CONCLUSIONS

Based on the findings and within the limitation of the study it is noticed that practice of forwarders specific skill training helped to improve physical, functional and performance variables of football players at grassroots level. It was also seen that there is progressive improvement in the selected criterion variables of forwarders specific skill training group of football players after four weeks of specific skill training programme.

From the results of the present study, it is very clear that school level football players significantly difference in forwarders specific skill training of speed, agility, flexibility, balance, leg explosive power, vo2max, resting pulse rate, breath holding time, dribbling, passing, shooting and kicking.

## REFERENCE

1. Ahmed, S., Zutshi, K., & John, S. (2022). *Effect of core training on football specific skills speed dribbling*.
2. Bush, M, Barnes, C, Archer, DT, Hogg, B and Bradley, PS (2015) *Evolution of match performance parameters for various playing positions in the English Premier League*. *Human Movement Science*, 39, pp. 1-11. ISSN 01679457.
3. Carling, C. (2011). *Influence of opposition team formation on physical and skill-related performance in a professional soccer team*. *European Journal of Sport Science*, 11(3), 155-164.
4. Dellal, A., Owen, A., Wong, D. P., Krusturup, P., Van Exsel, M., & Mallo, J. (2012). *Technical and physical demands of small vs. large sided games in relation to playing position in elite soccer*. *Human movement science*, 31(4), 957-969.
5. Di Salvo, V., Baron, R., Tschan, H., Montero, F. C., Bachl, N., & Pigozzi, F. (2007). *Performance characteristics according to playing position in elite soccer*. *International journal of sports medicine*, 28(03), 222-227.
6. Joo, C. H., & Seo, D. I. (2016). *Analysis of physical fitness and technical skills of youth soccer players according to playing position*. *Journal of exercise rehabilitation*, 12(6), 548.
7. Karahan, M. (2020). *Effect of skill-based training vs. small-sided games on physical performance improvement in young soccer players*. *Biology of Sport*, 37(3), 305-312.
8. Kamal Mushaffa Nazar (2016). *The Effect of Training on Physical and Physiological Abilities and Their Relationship to Skill Performance among Junior Football players*. *International Journal of Research*, 3(5),539-549.
9. Kishore, S., Radhakrishnan, T., & Karthick, M. (2016). *Impact of skills and drills practice training on positional requirements of defenders midfielders and forwards on kicking ability of high school level football players*. *International Journal of Applied Research*, 2(7), 591-594.
10. Laakso, T, Davids, K, Liukkonen, J & Travasso B 2019, 'Interpersonal dynamics in 2-vs-1 contexts of football: the effects of field location and player roles', *Movement Science and Sport Psychology*, 10, pp. 1-8, doi: 10.3389/fpsyg.2019.01407.
11. Manickam V.A.(2015) *A effect of football training program eon selected physical fitness variables of school boys*, *International Journal of Scientific Research*, 4: 595-597.
12. Miller, T. A., White, E. D., Kinley, K. A., Congleton, J. J., & Clark, M. J. (2002). *The effects of training history, player position, and body composition on exercise performance in collegiate football players*. *The Journal of Strength & Conditioning Research*, 16(1), 44-49.



13. Mohammed, M., & Deshpande, M. (2015). *Effect of football training program on technical performance of short pass and receiving the ball of maharashtriya mandals pune vyayamshala players. International Journal of Science and Research (IJSR), 4(7).*
14. O'Reilly, J., & Wong, S. H. (2012). *The development of aerobic and skill assessment in soccer. Sports medicine, 42(12), 1029-1040.*
15. Ravi, N., Rameshkumar, S., Balasundar, G., & Sankar, A. (2021). *Effect of specific skill training with plyometric training and specific skill training with interval training on selected physiological variables of college male handball players. Ovidius University Annals, Series Physical Education and Sport/Science, Movement and Health, 21(2 SI), 376-382.*
16. Robbins, D. W. (2011). *Positional physical characteristics of players drafted into the National Football League. The Journal of Strength & Conditioning Research, 25(10), 2661-2667.*
17. Shendkar, D., & Hamad, S. H. (2011). *Comparative study of soccer player's physical fitness playing at different positions of play from Pune city.*
18. Wang, Y. C., & Zhang, N. (2016). *Effects of plyometric training on soccer players. Experimental and therapeutic medicine, 12(2), 550-554.*
19. William, R. R., Kirubakar, S. G., & Margaret, J. G. D. (2022) *Single Leg, Double Leg and Combined Plyometric Training Implications on Skill Performance Among Football Players. International Journal of Health Sciences, (III), 2514-2520.*
20. Yuvaraj, D., Prasad, R. G. S., & Suresh, N. (2020) *Position-Wise Analysis Of Coordinative Ability And Anthropometric Variables Among College Level Football Players.*