



P-ISSN: 2394-1685  
E-ISSN: 2394-1693  
Impact Factor (R,JIF): 5.38  
IJPESH 2023; 10(6): 350-351  
© 2023 IJPESH  
[www.kheljournal.com](http://www.kheljournal.com)  
Received: 26-09-2023  
Accepted: 31-10-2023

**S Eswaran**  
Ph.D. Research Scholar,  
(Full-Time), Tamil Nadu  
Physical Education and Sports  
University, Chennai, Tamil  
Nadu, India

**Dr. S Manikandan**  
Professor, Department of  
Physical Education, Tamil Nadu  
Physical Education and Sports  
University, Chennai, Tamil  
Nadu, India

**Corresponding Author:**  
**S Eswaran**  
Ph.D. Research Scholar,  
(Full-Time), Tamil Nadu  
Physical Education and Sports  
University, Chennai, Tamil  
Nadu, India

## Combined effect of specific soccer training and hatha yogic practices on selected motor fitness variables among soccer players

**S Eswaran and Dr. S Manikandan**

### Abstract

The purpose of the study was to find out the combined effect of specific soccer training and hatha yogic practices on selected motor fitness variables among soccer players. To achieve this purpose, thirty male players were selected as subjects, their aged between to 16 to 19 years, they are studying in the various schools in Chengalpattu district. The selected subjects were divided into two equal groups of fifteen subjects each, namely combination of specific soccer training and hatha yogic practices group and control group. The specific soccer training and hatha yogic practices group trained for combination of specific soccer training and hatha yogic practices three sets per exercise per session at 60 to 80% with a progressive increase in load with the number of weeks. Strength endurance and agility were selected as criterion variables and they were tested by using sit-ups and shuttle run respectively. ANCOVA was used to find out the significant difference if any between the groups. The results of the study showed that there was a significant differences on strength endurance and agility between combination of specific soccer training and hatha yogic practices group and control group.

**Keywords:** Specific soccer training, hatha yogic practices, motor fitness, strength endurance, agility

### Introduction

Now a days all football players are facing at source some unique challenges to develop the required motor fitness level to execute the skills while playing or game situation in football. Motor fitness status at each individual is directly related to the skill performance of the soccer. Motor fitness is one of the components of the total fitness of the individual, which also includes mutual, social and emotional fitness. It is one of the basic requirements of life broadly speaking it means the ability to carry out our daily tasks without under fatigue.

Strength endurance is required in all sports movement, whether fast or slow, movements have to be done under lesser or higher conditions of fatigue. Agility is a combination of several athletic traits such as strength, reaction time, speed of movement, power and co-ordination. Its display becomes essential in such movements as dodging, zigzag running, stopping and starting and changing body positions quickly.

### Methodology

The purpose of the study was to find out the combined effect of specific soccer training and hatha yogic practices on selected motor fitness variables among soccer players. To achieve this purpose, thirty male players were selected as subjects, their aged between to 16 to 19 years, they are studying in the various schools in Chengalpattu district. The selected subjects were divided into two equal groups of fifteen subjects each, namely combination of specific soccer training and hatha yogic practices group and control group. The specific soccer training and hatha yogic practices group trained for combination of specific soccer training and hatha yogic practices three sets per exercise per session at 60 to 80% with a progressive increase in load with the number of weeks. After 10 to 15 minutes of warm-up the subjects underwent their respective three sets per exercise per session at 60 to 80% with a progressive increase in load with the number of weeks. The control group did not participate in any specialized training during the period of study.

Strength endurance and agility were selected as criterion variables and they were tested by using sit-ups and shuttle run respectively. ANCOVA was used to find out the significant difference if any between the groups.

**Experimental design and statistical procedure:** The

experimental design used for the present investigation was random group design involving 30 subjects for training effect. Analysis of Covariance (ANCOVA) was used as a statistical technique to determine the significant difference, if any, existing between pretest and posttest data on selected dependent variables separately and presented in Table-I.

**Table 1:** Analysis of Covariance (ANCOVA) was used as a statistical technique to determine the significant difference

Variables	Test		Combination of SST and HYT Training Group	Control Group	Source of Variance	SS	DF	Mean Square	'F' Ratio	
Strength Endurance	Pre test	Mean	48.00	48.27	Between	0.533	1	0.533	0.112	
		S.D	1.93	2.40	Within	142.92	28	4.75		
	Post test	Mean	52.93	47.53	Between	218.700	1	218.7		48.344
		S.D	2.16	2.10	Within	126.67	28	4.53		
	Adjusted Post test	Mean	52.94	47.52	Between	233.785	1	233.785		112.55
			Within	56.081	27	2.077				
Agility	Pre test	Mean	10.95	10.99	Between	0.033	1	0.033	0.742	
		S.D	0.252	0.162	Within	1.259	28	0.03495		
	Post test	Mean	10.74	10.96	Between	0.385	1	0.385		22.049
		S.D	0.133	0.141	Within	0.489	28	0.0175		
	Adjusted Post test	Mean	10.73	10.96	Between	0.336	1	0.336		20.307
			Within	0.446	27	0.01553				

\*SST- Specific Soccer Training, HYT- hatha yogic practices

## Results

The posttest mean of combination of specific soccer training and hatha yogic practices group and control group on strength endurance ( $52.92 \pm 2.16$  vs  $47.53 \pm 2.10$ ) resulted in a 'F' ratio of 48.344. The adjusted posttest mean of combination of aerobic and anaerobic training group and control group on strength endurance ( $52.94$  vs  $47.52$ ) resulted in a 'F' ratio of 112.54. The results of the study indicate that there was a significant difference between combination of specific soccer training and hatha yogic practices group and control group on strength endurance.

The posttest mean of combination of specific soccer training and hatha yogic practices group and control group on agility ( $10.72 \pm 0.123$  vs  $10.95 \pm 0.141$ ) resulted in a 'F' ratio of 22.049. The adjusted posttest mean of combination of a specific soccer training and hatha yogic practices group and control group on agility ( $10.73$  vs  $10.95$ ) resulted in a 'F' ratio of 20.307. The results of the study indicate that there was a significant difference between combination specific soccer training and hatha yogic practices group and control group on agility.

## Conclusion

Based on the results of the study, it was concluded that the combination of specific soccer training and hatha yogic practices has resulted in significant increase in selected motor fitness components such as strength endurance and agility.

## References

1. Cronin JB, Hanse KT. Strength and Power Predictors of Sports Speed. *J Strength Cond. Res.* 2005;19(2):349-57.
2. Donald Chu A. *Jumping into Plyometrics*, New York: Human Kinetics Publishers, 1998, p. 1.
3. Radcliff JC, Partentines RC. *Plyometrics*, Human Kinetics, 1985, p. 3.
4. Bunn JW. *Scientific Principles of Coaching*, (2<sup>nd</sup> ed., Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1972, p. 125.
5. Burkhard P. The Effects of Plyometric Training Drills on the Physical Strength Gains of Collegiate Football Players. *National Strength and Conditioning Association Journal.* 1990;2:13-15.

6. Burger T. *Complex Training Compared to a Combined Weight Training and Plyometric Training Programme*, M.S. Thesis - Abstract, Microform Publication Bulletin, 1999.
7. Bottom WW. *Soccer Coaching*, 2<sup>nd</sup> Ed., London: The Naldrett Press, 1954, p. 54-67.
8. Watson AWS. *Physical fitness and athletic performances*, New York: Longman Inc., 1983.