

# **Effect of Yogic Practices on Leg Strength and Flexibility among School Football Players**

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## **Abstract**

The purpose of the study was to find out the effect of yogic practices on leg strength and flexibility among school football players. In order to achieve the purpose of the study 24 school football players were selected randomly and they were equally divided in to two groups of 12 each as experimental and control group. The experimental group and control group undergone normal routine football practices and in addition the experimental group undergone yogic practices for one hour in the morning before starting the football practices. The control group was not given any special training. The period of training was 8 weeks in a schedule of weekly 5 days. The data were collected on the selected variables before and after the training period. Analysis of Covariance (ANCOVA) was used to analyze the data. To test the significance 0.05 level of confidence was fixed. Based on the results the study it was concluded that the Yogic practices were significantly improved the leg strength and flexibility among School football players.

**Key words:** Yogic practices, Leg strength, Flexibility

## **Introduction**

The word yoga derived from the sanskrit root 'yuj' meaning to bind; join; and yoke; to direct and concentrates one's attention on; to use; and apply. It is also means union or communication. It is the true union of our will with the will of god. Yoga is a practical aid, not a religion. Yoga is an ancient art based on a harmonizing system of development for the body, mind and spirit. The continued practice of yoga will lead you to a sense of peace and well being and also a feeling of being at one with the environment the practice of yoga makes the body strong and flexible. It also improves the functioning of the respiratory, circulatory, digestive and hormonal systems. (Kurland.Zack, 2007)

Football is a strenuous game which requires all the physical fitness qualities. To improve the physical fitness qualities they involved in various training programme. The present study was also with the aim to improve the physical fitness qualities through Yogic practices. With analyzing various important fitness qualities of the leg strength and flexibility were selected as criterion variables. In the present study Leg exercise tone and strengthen powerful muscle groups that you use every day. A well-considered Leg exercise programme will result in improved athletic performance, as well as over all fitness. (Uppal A.K, 1983).Flexibility refers to the absolute range of movement in a join or series of

joints that is attainable in a momentary effort with the help of a partner or a piece of equipment flexibility in some joints can be increased to a certain degree by stretching. (John W. Burn, 1964). The qualities of leg strength and flexibility are essential for Football performance.

### **Reviews**

Sosamma John et al., (2011) were examined that the Yoga practices Weight training and Iron Yoga on Strength, Endurance, Flexibility and Vital capacity among college Softball players. To achieve the purpose forty male students were selected randomly and divided into four groups namely experimental groups I, II & III and control group. Each group consists of ten subjects. The period of study was 24 weeks. ANCOVA was used for statistics. It was concluded that the yoga practices, weight training and iron yoga had significantly improved the strength, endurance and flexibility and vital capacity among college softball players.

Backialakshmi., (1990) conducted a study of influence of selected asanas and aerobic exercise on selected motor fitness and physiological variables among school boys. The purpose the study was to find out whether asanas and aerobic exercise have any influential effect on motor fitness and physiological variables for achieving the purpose of the study twenty subjects were selected from Kendra Vidyalaya, Karaikudi, and they were divided into three homogeneous groups. Based on their initial performance group 'A' is control group 'B' and 'C' were given treatment for forty minutes daily in a schedule five days in a week for a period of six weeks. The analysis of variables and scheffe's post hoc test was used to analysis the mean and the difference between the means of the various groups. Through the statistical technique it was concluded that asanas and aerobic exercise had significantly improved the motor fitness and physiological variables among school boys.

### **Methodology**

The purpose of this study was to investigate the effect of Yogic practices on Leg strength and Flexibility among school Football players. In order to achieve the purpose of the study 24 school football players were selected randomly and they were equally divided in to two groups of 12 each as experimental and control group. The experimental group and control group undergone normal routine football practices and in addition the experimental group (EG) undergone Yogic practices for one hour in the morning before starting the football practice. The control group (CG) was not given any special training. The period of training was 8 weeks in a schedule of weekly 5 days. The data were collected on the selected variables of leg strength and flexibility before and after the training period. Analysis of Covariance (ANCOVA) was used to analyze the data. To test the significance 0.05 level of confidence was fixed.

## Criterion Measures

Table - I

Variables	Test	Measurers in Unit
Leg Strength	1 RM	Kilograms
Flexibility	Sit and Reach	Centimeters

## Training Programme

The eight weeks yogic practices included the following

Warm up	=	10 Mins
Surya Namaskar	=	15 Mins (10 Rounds)
1. Virabhadrasana	=	6 Mins – 5 Sets
2. Natarajasana	=	6 Mins – 5 Sets
3. Utkatasana	=	6 Mins – 5 Sets
4. Trikonasana	=	6 Mins – 5 Sets
5. Virksasana	=	6 Mins – 5 Sets
6. Relaxation	=	5 Mins
<b>Total</b>	=	<b>1 Hr</b>

## Results and Discussion

The analysis of covariance on the data obtained on Leg strength, Flexibility of Experimental and Control groups have been analyzed and tabulated in Table-II and Table-III.

Table-II  
Analysis of covariance of Experimental and Control  
Groups on Leg strength

TEST	CG	EG	SV	SS	DF	MS	F
Pre test	125.00	130.83	Between	204.17	1	204.17	0.30
			Within	14991.67	22	681.44	
Post test	127.50	147.92	Between	2501.04	1	2501.04	4.12*
			Within	13347.92	22	606.72	
Adjusted mean	130.17	145.25	Between	1345.72	1	1345.72	35.76*
			Within	790.19	21	37.63	
Mean diff	2.50	17.08					

\*Significant at 0.05 level of confidence.  $df(1 \text{ and } 22) = 4.04$  and  $df(1 \text{ and } 22) = 4.05$

The table-II shows the F value of pre test, post test and adjusted mean of experimental and control group. The F value of pre test was 0.03 (df 1and22 =4.04) and it was lower than the table value which indicates that there was no significant difference in pre test. The F value of post test was 4.12 (df 1and22 =4.04) and adjusted mean was 35.76 (df 1and22 =4.05). Both the F value of post test and adjusted post test were more than the table value the and it indicates that there was a significant difference in the post test as well as adjusted post test.

The results of this study revealed the influence of yogic training in improving Leg strength among school football players.

**Table-III**  
**Analysis of covariance of Experimental and Control Groups on Flexibility**

TEST	CG	EG	SV	SS	DF	MS	F
Pre test	31.08	32.50	Between	12.04	1	12.04	0.84
			Within	313.92	22	14.27	
Post test	32.33	36.25	Between	92.04	1	92.04	9.17*
			Within	13347.92	22	10.04	
Adjusted mean	32.89	35.69	Between	45.34	1	45.34	36.20*
			Within	26.31	21	1.25	
Mean diff	1.25	3.75					

\*Significant at 0.05 level of confidence. df (1and22)=4.04 and df (1and22)=4.05

The table- III shows the F value of pre test, post test and adjusted mean of experimental and control group. The F value of pre test was 0.84 (df 1and22 =4.04) and it was lower than the table value which indicates that there was no

significant difference in pre test. The F value of post test was 9.17 (df 1 and 22 = 4.04) and adjusted post test mean was 36.20 (df 1 and 22 = 4.05) and it indicates that there was a significant difference in the post test as well as adjusted post test.

The results of this study revealed the influence of yogic training in improving Flexibility among school football players.

### **Discussion**

In the present times Yogic practices is offered as a better method for developing leg strength and flexibility. The results and discussion of the present study proved that the said training procedure was beneficent for improving the leg strength and flexibility. The result of the present study was supported with previous study of Sosamma John et al., (2011) and Backialakshmi., (1990)

### **Conclusion**

On the basis of results and discussion of the study following conclusion were drawn.

1. The Yogic practices had significantly improved the leg strength and flexibility of school football players.
2. There was significant difference among the adjusted post-test mean of experimental group and control group on leg strength and flexibility.

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