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Effect Of Yoga Practices On Leg Strength And Flexibility Among College Basket Ball Players

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Abstract:

The purpose of study was to find out the effect of yogic practices on leg strength and flexibility among college Basket Ball players. In order to achieve the purpose of the study 24 college Basket ball 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 Basket ball practices and in addition the experimental group undergone yogic practices for one hour before morning before starting the Basket ball 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 college Basket ball players.

Keywords: *Yogic practices, Leg strength and Flexibility*

1.Introduction

The word yoga derived from the sanskirit 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 respiratory, circulatory, digestive and hormonal system (Kurland. Zack, 2007)

Basket ball is a strenuous game which 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 thw aim to important fitness qualities througt 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 exercise program me 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 Basket ball performance.

2.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 soft ball 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 soft ball 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 aerobi**c** exercise had significantly improved the motor fitness and physiological variables among school boys.

3.Methodology

The purpose of this study was to investigate the effect of yogic practices on Leg strength and Flexibility among Basket ball players. In order to achieve the purpose of the study 24 college Basket ball players were selected randomly and they were equally divided in to two groups of 2 each as experimental and control group. The experimental group and control group undergone normal routine Basket ball practices and in addition the experimental group (EG) undergone yogic practices for one hour in the morning before starting the Basket ball 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.

4.Criterion Measures

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

Table 1

5.Training Programme

The eight weeks yogic practices included the following

Warm up = 10 Mins

Surys Namaskar = 15 Mins (10 Round)

- Vibabhadrasana = 6 Mins – 5 Sets
- Natarajasana = 6 Mins – 5 Sets
- Utkatasana = 6 Mins – 5 Sets
- Trikonasana = 6 Mins – 5 Sets
- Virksasana = 6 Mins – 5 Sets
- Relaxation = 5 Mins

Total = 1 Hr

6.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 2 and Table 3

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	790.09	21	37.63	
Mean diff	2.50	17.08					

Table 2 :Analysis of covariance of Experimental and Control groups on Leg strength
Significant at 0.05 level of confidence. Df (1 and 22) = 4.04 and df (1 and22) = 4.05

The table 2 shows the F value of pre test, post test and adjusted means of experimental and control groups. The F valvue of pre test was 0.03 (df 1 and 22=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 1 and 22 – 4.04) 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 college Basket ball play

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					

Table 3: Analysis of covariance of Experimental and Control Groups on Flexibility
**Significant at 0.05 level of confidence. Df (1and22) =24=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 groups. 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 and22-4.04) and adjusted post test mean was 36.20 (df 1and22=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 college basket ball players.

7.Discussion

In the recent 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)

8.Conclusion

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

- The yogic practices had significantly improved the leg strength and flexibility of Basket ball players.
- There was significant difference among the adjusted post test mean of experimental group and on leg strength and flexibility**.**

9.Reference

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