A Study on the Effect of Selected Yogic Asanas on the Flexibility of Female Handball Players of Delhi

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Abstract – The purpose of the present study was to study the effect of selected yogic asanas on the flexibility of handball players of Delhi. A total No. of 16 female handball players between 17 to 25 years of age of I.G.I.P.E.S.S were randomly selected as subject for the purpose of the study. The scholar selected the flexibility as a dependant variable. Sit and Reach test was conducted to measure the flexibility. The asana were considered as independent variables: Padmasana, Pashchimatanasana, Katichakrasana, Tadasana, Vrikshasana, Vajrasana, Bhujangasana, Sarvangasana, Gomukhasana, Chakrasana, Matyaasana, Dhanuerasana. Sit and Reach box was used to measure the flexibility of lower hamstring and lower back muscle. The training was designed for eight weeks on alternate days and the duration of one day programme had 45 minutes. The data was collected before the training programme, after two week, four week, sixth week, and eighth week of training program. The data was collected and the same was analyzed by computing the descriptive statistics, whereas to assess the significant effect of training programme on flexibility repeated measure ANOVA was computed the level of significance was set at.05 level. The results reveals that there was a significant difference found between handball players in pre and posttest as the mean and standard deviation value of the pretest was 32.43and 7.305 respectively, whereas the mean and standard deviation values of the post test1, post test2, post test3 and post4 were found to be 34.30and7.507, 35.60and6.946, 36.50and 6.842and 38.53and 7.500 respectively. The values of Repeated Measure One Way Anova of within Subjects shows that the F value of assumed Sphericity was found to be 27.615 against the tabulated value of 2.44 which was significant at 0.05 level.The finding of the present study has strongly indicated that asana training has improved the flexibility of the female handball players. Hence the hypothesis previously said that asana training will improve flexibility of female handball players is accepted.

Keywords: Asanas, Flexibility, Handball.

INTRODUCTION

Today's life is full of stress and strain of tension and nervous irritability of hungry and excitement if anyone put into practice a few of the elementary principle of yoga he will be far better equipped to cope with his complex existence.

The term yoga comes from the words Sanskrit word 'yuj' which means to joint yoke together to unify and to unite as one yoga has existed from the ancient times but was integrated and simplified by patanjali in the fifth A.D century.

With the help of yogic exercises we will increase the flexibility or elasticity of our body and make the body more active and supple. The greater the concentration will be the greater the advantage to the body and mind. Increase the practice body will become more and more elastic and flexible day by day [1].

Swami Sivanand (1987-1963) point out that after doing yogic exercise human body is more powerful as the human 'AURA' is more. And they found that human 'AURA' is more clear and gain flexibility after yogic exercise or activities.

In modern civilization the asana is generally practiced in the form of exercise. Through the practice of asana, one can achieve organic and functional promotion of health fitness (VINEKAR 1975)

Asana means a posture or stance it has three classes of asana cultural meditative and relative asana .Asana has certain special pattern of posture that stabilized the mind and body.

Flexibility can be defined as the ability to execute movement with greater amplitude or range[1]

IMPORTANCE OF FLEXIBILITY FOR HANDBALL PLAYER

Agility and flexibility have a vital importance to player of handball. Agility is required to change the direction, and flexibility is of great importance for the goal keepers and wing players. Flexible and agile handball players would have upper hand over rigid and less flexible players. Players in the game of handball require sprinting speed. The movement of handball players is quite rapid and quick. Sprinting movements involved in handball take quick start and sudden stop with frequent changing of direction. They carry the characteristics of agility & flexibility movement.

A complete measurement of effect of yogic exercise is based on the measurement of all individual flexibility, endurance concentration and memory. It may be more or less effected by selected yogic variable .This will be known from this research work.

OBJECTIVE OF THE STUDY

The objective of the study was asses the effect of asana on flexibility of female handball players.

HYPOTHESIS OF THE STUDY

On the basis of the literature it was hypothesized that there would be significant effect of asanas on the flexibility of the female handball players.

PROCEDURE AND METHODOLOGY

A total No. of 16 female handball players between 17 to 25 years of age of Delhi were randomly selected as subject for the purpose of the study. The scholar selected the flexibility as a dependant variable. Sit and Reach test was conducted to measure the flexibility. The asana were considered as independent variables: Padmasana, Pashchimatanasana, Katichakrasana, Tadasana, Vrikshasana, Vajrasana, Bhujangasana, Sarvangasana, Gomukhasana, Chakrasana, Matyaasana, Dhanuerasana. Sit and Reach box is used to measure the flexibility of lower hamstring and lower back muscle. The training was designed for eight weeks on alternate days and the duration of one day programme had 45 minutes. The data was collected before the training programme, after two week, four week, sixth week, and eighth week of training program.The data was collected and the same was analyzed by computing the descriptive statistics, whereas to assess the significant effect of training programme on flexibility repeated measure ANOVA was computed the level of significance was set at.05 level.

FINDINGS AND DISCUSSION

Table-1

Descriptive Statistics of Pretest and Post tests on Sit & Reach Test

	Mean	Std. Deviation	N
pretest	32.43	7.305	16
post1	34.30	7.507	16
post2	35.60	6.946	16
post3	36.50	6.842	16
post4	38.53	7.500	16

Table no.1 indicates the descriptive statistics value of the sit and reach test, which shows that the mean and standard deviation value of the pre test was 32.43and 7.305 respectively, whereas the mean and standard deviation values of the post test1, post test2, post test3 and post4 were found to be 34.30and7.507, 35.60and6.946, 36.50and 6.842and 38.53and 7.500 respectively

[1] Hardayal Singh "Science Of Sports Training" D.V.S publication 1991;p:p130.

Fig-1

Figure-1 shows comparison between pre test and post test 1, post test 2, post test3 and post test4 on Sit & Reach Test.

Table-3

Repeated Measure One Way Anova Of Sit & Reach Test of Within Subjects

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Sitreach	Sphericity Assumed	631.560	4	157.890	27.615	.000
	Greenhouse-Geisser	631.560	3.250	194.336	27.615	.000
	Huynh-Feldt	631.560	3.709	170.299	27.615	.000
	Lower-bound	631.560	1.000	631.560	27.615	.000
Error(sitreach)	Sphericity Assumed	663.240	116	5.718		
	Greenhouse-Geisser	663.240	94.245	7.037		
	Huynh-Feldt	663.240	107.547	6.167		
	Lower-bound	663.240	29.000	22.870		

Table no.3 indicates the values of Repeated Measure One Way Anova of within Subjects. Which shows that the F value of assumed Sphericity was found to be 27.615 against the tabulated value of 2.44 which is significant at 0.05 level.

Table-4

LSD of Sit & Reach Test among Pretest and Post Tests

(I) Sit and reach test	(J) sit and reach test	Mean Diffrence (I-J)	Std.Error	Sig.[a]
1	2	-1.867	.728	.158
	3	-3.167*	.670	.001
	4	-4.067*	.741	.000
	5	-6.100*	.725	.000
2	3	-1.300	.547	.243
	4	-2.200*	.600	.010
	5	-4.233*	.632	.000
3	4	-.900	.435	.476
	5	-2.933*	.523	.000
4	5	-2.033*	.488	.003

Table no.4 indicates the LSD values of the pretest and the post tests for sit and reach test, which shows that a significant difference was found between the pretest with the posttest 2, posttest 3 and posttest 4 with a mean difference value of 3.167, 4.067and 6.100 and between posttest 1 with posttest 3 and posttest 4 with value of 2.200 and 4.233 and between posttest 2 with posttest 4 with value of 2.933 and between posttest 3 with post 4 with value of 2.033 respectively at 0.05 level.

The result shows there is significant difference was found b/w handball players in pre and posttests . The reason behind that was the subjects were regularly

involved in the physical training for a long time. The another reasons for significant difference may be the interest and curiosity on the behalf of the subjects about performing the asanas. Hence it is evident from the result that the Asanas training have significant effect on flexibility of handball players. so the researcher could conclude that the three may be a positive result in the performance of the players by improving the flexibility.

DISCUSSION OF HYPOTHESIS

The finding of the present study has strongly indicated that asana training has improved the flexibility of the handball players. Hence the hypothesis previously said that asana training will improve flexibility of handball players is accepted.

CONCLUSIONS

Based on the finding of the study, scholars own understanding and based on available literature the following conclusion were drawn:-

1. Significance difference was found between pretest with 2nd week post test, 4th week post test, 6th week post test, and 8th week post test.

2. The result showed the importance of the asana in the game of handball.

3. The training improved the flexibility.

4. A significant difference was found among the mean values of the pre test and the respective post tests.

5. The training of the selected yogic asanas has improved the performance in handball.

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MISCELLANEOUS

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