THE EFFECT OF SELECTED YOGIC PRACTICES UPON FLEXIBILITY AND AGILITY OF KHO-KHO PLAYERS

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Abstract

The study was focused on yogic practices have become popular throughout the world due to its utility. Physical educationists have realised its importance and have also tried to explore the effects towards physical fitness.

Flexibility and Agility is one of the important components of physical fitness. The present study was under taken on 40 Kho-Kho players, which were equally divided in to experimental group (N=20) and controlled group (N=20) on the random basis. Sit and reach test and shuttle run were applied to measure flexibility and agility of Kho-Kho players respectively. The test was applied before and after the training period of eight weeks.

During the training session it was observed by the researcher that the subjects belonging to experimental group practiced yogic asanas for a period of eight weeks. Subject was shown significant improvement in their flexibility and agility in comparison to the controlled group. Significant difference was also observed between pre and post test data of experimental and controlled group. Hence it is concluded that yogic practices for eight weeks brings significant changes in flexibility and agility of Kho-Kho players.

Keywords: Agility, Flexibility, Yogic Practices, Kho-Kho Players.

"Yoga is the cessation of the movements of mind. Then there is abiding in the Seer's own form".

- Patanjali

INTRODUCTION

Today Yoga is most popular in the world. "Yoga" is recognised as one of the most important heritage of India. Traditionally it was said that Lord Shiva is believed to be the originator or inventor of Yoga. Our ancestors spent a lot of time in practicing yoga for their health and happiness.

It is very much believed that the word Yoga is derived from the Sanskrit word "Yuj" means to join, bind, attach and concentrate ones attention on particular things. Today Yoga therapy has got high status in our day to day life, because of the fact that neither it has side effect and nor it is costly. The art of Yoga has purely originated in India and now has been spread all over the world. Yoga is one of the ways as per Indian philosophy to reach the divine, God. 'Brahma'.

Now-a-days yoga, the ancient practice of postures, breathingand meditation is gaining a lot of attention from healthcare Professionals. With increasing scientific research in yoga, its therapeutic aspects are also being explored. The word "yoga" has come to describe a means of uniting or a method of discipline: to join the body to the

mind and together join to the self (soul), or the union between the individual self and the transcendental self. Ayurvedic texts describe 8 components or arms of Yoga that encompass a philosophy of life: (a) yama (self-restraint); (b) niyama (routines); (c) asana(postures and physical exercises); (d) pranayama (use of breathing to achieve focus); (e) pratyhara (withdrawal of mind from sense organs); (f) dharana (concentration); (g) dhyana (meditation); and (h) samadhi (emancipation). Asana and pranayama have been incorporated alongside Ayurvedic medicine as the basis of a system of medical therapy. Hatha Yoga has become increasingly popular in western countries as a method for coping with stress and as a means of exercise and fitness training. The present study was undertaken by the researcher to find out the effect of selected yogic practices on flexibility and agility of Kho-Kho players.

HYPOTHESIS

It was hypothesized that Yogic practices have effect on flexibility and agility of Kho-Kho players.

DELIMITATIONS

1. The present study was delimited to 40 Kho-Kho players of Lucknow University.
2. The study was further delimited to components of physical fitness namely flexibility and agility.
3. The age of the subjects ranges between 18 to 25 years.
4. Duration of the experimental period was delimited to 08 weeks.
5. The yogic practices were delimited to selected yogic asanas.

LIMITATIONS

All the subjects belong to different socioeconomic background, therefore, their interest, attitude and dietary habits were different and this limitation was recognized by the researcher.

SIGNIFICANCE OF THE STUDY

a) The practice of yoga promotes the health of the subject.
b) This study provides information and throwslight upon the effect of yoga practices on flexibility and agility of the Kho-Kho players of Lucknow University.
c) Today 21st century has made our life so busy, fast due to which the muscles, body and mind get tensed. Here come our traditional ancient culture yoga practices which provide us the ground to tackle and overcome this complex.

METHODS

The researcher has taken 40 Kho-Kho players belonging to Lucknow University, Lucknow were acted as subject on random basis for this study. The average age of the subject were lying between 18-25 years. Subjects were divided into two groups of 20 each i.e. experimental group and control group. The experimental group was assigned to asana such as Paschimotanasana, Halasana, Padmasana, Vajrasana, Supta Vajrasana, Chakrasana, Viparitakarani, Dhanurasana, Naukasana, Padahastasana. The yogic practices were selected by consulting different yoga books suggested by different authors. The training period was conducted in the morning

session of one hour duration from 07:00 A.M. to 08:00 A.M. thrice a week for duration of eight weeks. The researcher taught the yoga practices and takes the help of yoga expert in conducting the training session smoothly. Each asana were demonstrated by the researcher himself before the subjects and were asked to perform the same. All the asanas were practiced two times in one training session.

The control group enjoyed their usual daily routine programme during the training program. Flexibility and agility of the Kho-Kho players were tested by Sit and Reach test and Shuttle Run test before and after experiment period. The results of Flexibility and Agility of the controlled and experimental group were equated on the basis of respective mean, standard deviation, analysis of variance between two groups (t-test) statistics was employed as the statistical treatment in order to find out the existence of the significance differences if any between pre- test and post-test data of the experimental group on flexibility and agility, pre test and post test on controlled group and the post data between experimental and controlled group on flexibility and agility of Kho-Kho players. The progression of yogic practices over a period of eight weeks is presented in table-1.

Sit and reach test

1) Objective: The Sit and Reach Test measure the flexibility of the lower back and hamstrings.

2) Required Resources: To undertake this test you will require:

• Sit and Reach box about 30cm.

• A meter rule top

3) Test Procedure

The subject sits on floor with shoes off. Subject places bottom of feet (10 to 12 inches apart) against side of box (approximately 12" or 30 cm high) with knees straight. Tester places measuring stick on box parallel to subject's legs; 15" or 38 cm at edge of box closest to subject and end of measuring stick ("0") toward subject. Subject places hand over hand and reach as far as possible over measuring stick without bending knees. Best of three tries is recorded.

Table-1Eight weeks training programme on experimental group

s.no.	Asana	1st week	2nd week	3rd week	4th week	5th week	6th week	7th week	8th week
1	Padmasana	3	3	5	7	8	12	14	16
2	Vajrasana	3	4	4	7	9	10	16	18
3	Pascimottanasana	2	3	4	5	6	8	12	14
4	SuptaVajrasana	2	2	4	5	7	8	8	8
5	Viparitakarani	5	5	7	7	8	10	12	16
6	Halasana	3	3	5	5	7	10	12	14
7	Chakrasana	3	3	4	4	4	6	8	8
8	Dhanurasana	2	2	3	4	5	6	8	9
9	Naukasana	6	6	7	8	8	10	12	14
10	Padahastasana	2	2	3	4	5	6	8	9

ANALYSIS OF RESULTS

The mean difference of pre test scores of experimental group and control group and differences exhibited by these groups after the experimental sessions of eight weeks treatment condition were analysed by applying't' test are presented in the following tables.

Table-2

Sit and Reach test for Flexibility of Experimental group and Control group

Group	M1	M2	d	SE	't' Ratio
Experimental-A	14.65	12.00	2.65	1.06	2.50*
Control-B	10.10	10.00	0.10	0.71	0.14

**Significant at 0.05 level of confidence.*

Table 2 shows that in case of flexibility measured with the help of Sit and Reach test of group A and B were 12.00 and 10.00 respectively whereas the final mean value of flexibility of group A and B were 14.65 and 10.10 respectively at the conclusion of eight weeks of experimental session. Thus the resultant increase in means of group A and B were 2.65 and 0.10 respectively. The difference was found statistically significant at "t" test. The "t" test value obtained in respect of group A was 2.50 and in respect of B was 0.14 at 0.05 level of confidence.

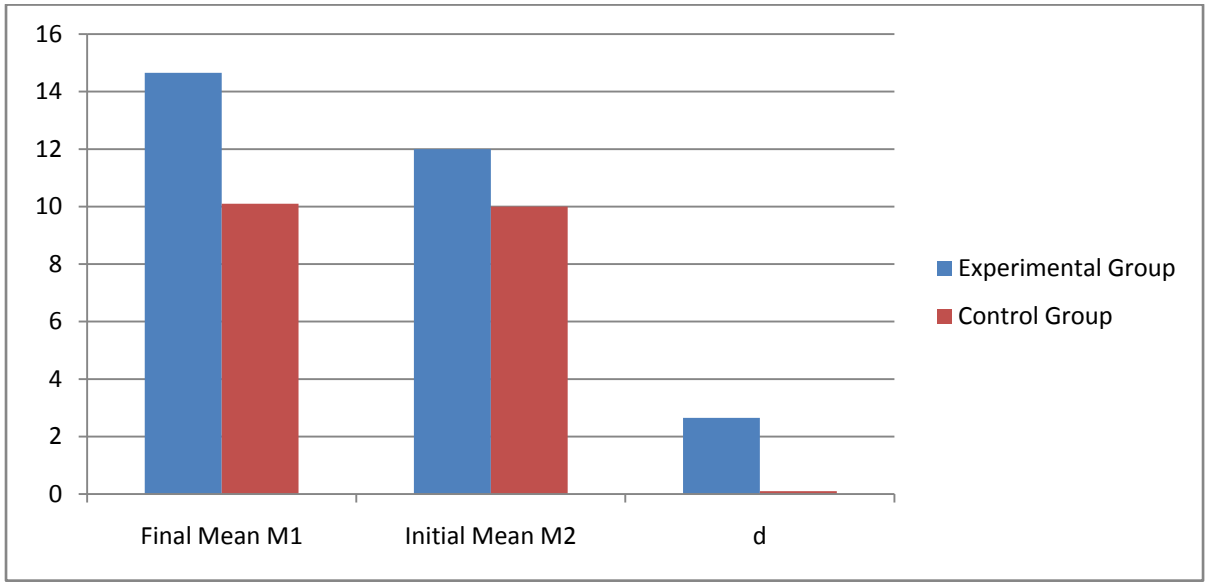

Fig.1 Graphical representation of Experimental & Control group regarding Sit and Reach test.

Table-3

Shuttle Run test for Agility of Experimental group and Control group

Group	M1	M2	d	SE	"t" Ratio
Experimental-A	9.87	10.31	0.44	0.14	3.14*
Control-B	10.42	10.38	0.04	0.14	0.28

**Significant at 0.05 level of confidence.*

Table 3 reveals that the initial mean value in case of Agility which was measured with the help of shuttle run test of experimental group A and control group B were 10.31 and 10.38 respectively. Further it also shows that the final mean value of shuttle run group A and group B were 9.87 and 10.42 respectively at the completion of eight weeks of experimental session. Thus the resultant increase in mean of group A and B were 0.44 and 0.04 respectively. As far as experimental group is concerned it shows a significant improvement as the obtained value 3.14 is significant at 0.05 level of confidence. "t" value obtained must be greater than 2.03 but no significant improvement observed in case of control group as the value 0.28 is less than tabulated value 2.03.

Thus this shows that the mean gain in Agility could be increased significantly by administering a programme of yogic exercises on experimental group.

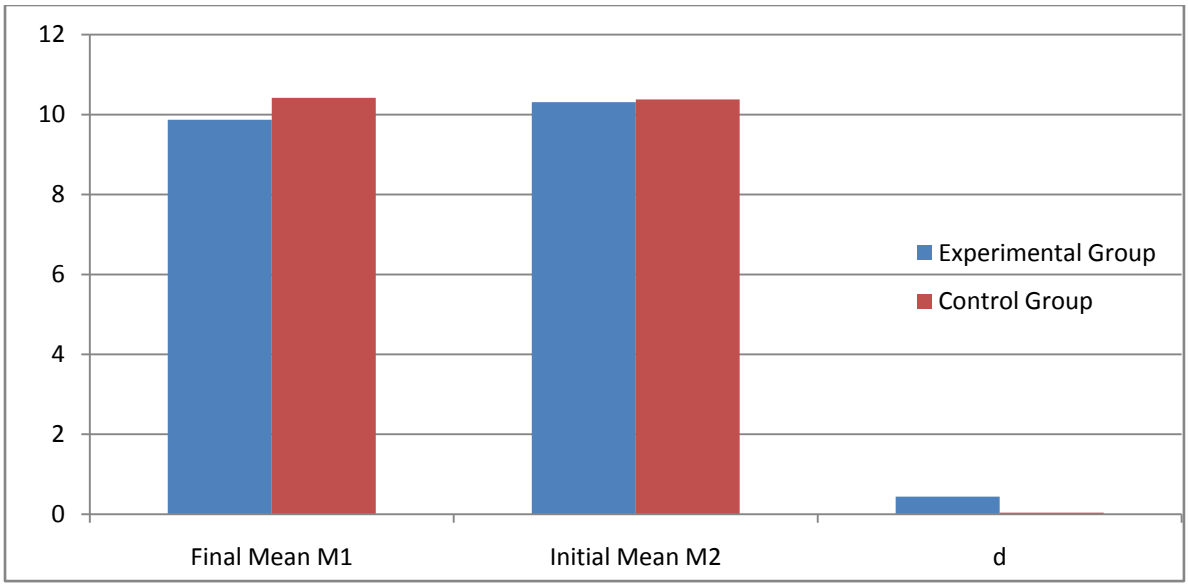

Fig.2 Graphical representation of Experimental & Control group regarding Shuttle Run test.

DISCUSSION OF FINDINGS

After analysing the data it was evident that the mean of group A shows improvement in the scores of Sit and Reach test and Shuttle Run test. All these changes appear in variable was found statistically significant at 0.05 level of confidence and become clear as the initial and final test scores of group A were computed by "t" ratio.

Depending upon the analysis of data the null hypothesis in relation to yogic practices to produce or give an impact to the flexibility and agility were rejected as the training method of yogic practices shows significant gain on variables in conclusion. We can conclude that yogic practices had a good effect on flexibility and agility of Kho-Kho players.From the results it is evident that the six week of yogasanas training programme showed significant improvement in agility and flexibility level.

The findings is supported by the study conducted by Galantino ML, Bzdewka TM, Eissler-Russo JL, Holbrook ML, Mogck EP, Geigle P, Farrar FT. to evaluate a possible design for a 6-week modified hatha yoga protocol tostudy the effects on Twenty-two

participants (M = 4; F = 17), between the ages of 30 and 65 with chronic low backpain showed improved balance and flexibility. Likewise M.DiBenedetto, K.Innes, A.Taylor, P.Rodeheaver, J.Boxer, H.Wright, D.Kerrigan conducted the studytitled "Effect of a Gentle Iyengar Yoga Program on Gait in the Elderly: An Exploratory Study" on Twenty-three healthy adults (age range, 62–83y) who were naive to yoga were recruited; 19participants completed the program. An 8-week Iyengar Hatha yoga program specifically tailored to elderly persons and designed to improve lower-body strength and flexibility. Findings of this exploratory study suggest that yoga practice may improve hip extension, increase stride length, and decrease anterior pelvic tilt in healthy elders.

CONCLUSION

Findings of this exploratory study suggest that the treatment of eight week yoga practices training programme showed significant improvement in agility and flexibility level. Thus it may be concluded that the yogic practices undertaken for this study for eight weeks duration results in the development of flexibility and Agility of Kho-Kho players.

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