



Effect of six weeks yogic exercise training program on selected physical fitness variable of Boys and Girls player of Basketball of Bareilly Uttar Pradesh

- 1- **Pro. Vishan Singh Rathore**, Prof. Department of physical education, and Dean of education Guru Ghasidas Vishwavidyalaya Bilaspur Chhattisgarh
- 2- **Jasmati, Research scholar** Department of physical education Guru Ghasidas Vishwavidyalaya Bilaspur Chhattisgarh.

Abstract

Purpose of the study:- The purpose was this study to determine the Effect of six weeks yogic exercise training program on selected physical fitness variable of Boys and Girls player of Basketball of Bareilly Uttar Pradesh.

Selection of subjects: - total 20 state level players of basketball were randomly selected 10 Boys and 10 Girls. Age range between 15 to 17.

Selection of variables:- the variables selected for the study were yogic exercises training as independent variables, medicine ball put and standing broad jump as dependent variables.

Methodology:- for the study pre-test, post-test randomized group design, which consists 2 groups of 20 players, 10 players in boys group and 10 in girls group. Data were collected through the pre-test before the training and post-test after six weeks of yogic exercise training.

Statistical technique:- to find out the comparative effect of yogic exercise training on medicine ball put and standing broad jump. The pre-test and post-test scores were analyzed by using paired t-test was used, the data analyzed with the help of SPSS (16.0 version) software and the level of significance was set at 0.05 level of confidence.

Result:- the result of the study showed that there was significant difference between pre-test and post-test of boys group on medicine ball put and standing broad jump was found and insignificance difference found between the girls group on medicine ball put and standing broad jump.

Conclusion:- it can be concluded that yogic exercise training were useful to develop medicine ball put and standing broad jump but in terms of girls there is no effect of yogic exercise training on medicine ball put and standing broad jump.

Key words: yogic exercise training, medicine ball put, standing broad jump

Introduction

The word of “Yoga” comes from the Sanskrit root “yuj” which means union, or yoke, to join, and to direct and concentrate one’s attention.[1, 2] regular practice of yoga promotes strength, endurance, flexibility, balance, co-ordination and cardiovascular efficiency.

Yoga is a form of mind-body fitness that involves a combination of muscular activity and an internally directed mindful focus on awareness of the self, the breath, and energy.[3] Iyengar style of yoga places an emphasis on standing poses to develop strength, stability, stamina, concentration and body alignment. Props are utilized to facilitate learning and to adjust poses and instruction is given on how to use yoga to ease various ailments and stressors.

Yoga involves instruction in yogic practices and teachings to prevent reduce or alleviate structural, physiological, emotional and spiritual pain, suffering or limitations. Yogic practices enhance muscular strength and body flexibility, promote and improve respiratory and cardiovascular function, promote recovery from an treatment of addiction, reduce stress, anxiety, depression, and chronic pain, improve sleep patterns, and enhance overall well-being and quality of life.[1,4,5-6]

Increasing evidence suggests that complementary and alternative approaches that encourage increased physical activity and reduce sedentary behaviors might confer health benefits. Originated in India, yoga has become increasingly popular in western countries.[7] as a means of exercise primarily using gentle static stretching postures with minimal physical exertion and conscious breathing to promote flexibility and relaxation. Of the various branches of yoga (Hata, Raja, and Mantra yoga), Hata yoga is perhaps the most widely practiced, which consist of elements of physical postures, conscious breathing, and meditation.[8]

Yogic asana:- meaning full posture known as asana.

Strength:- it is the ability of muscles to exert force against resistance.

Objective of the study

The objective of the study is Effect of six weeks yogic exercise training program on selected physical fitness variable of Boys and Girls player of Basketball of Bareilly Uttar Pradesh. This study was conducted in Sports Stadium of Bareilly. With 10-10 Boys and Girls participants who are State level players. Random sampling was followed for the study. Age range between 15 to 17.

Selection of variables

Keeping the feasibility criterion in mind, the researcher selected the following variables for the present study.

Independent variable:-

Yogic asana

Dependent variable:-

1. Standing broad jump
2. Medicine ball put

Table 1 :- pre-test and post-test randomized group data design

Group	Observation	Treatment	Observation
Boys	O1	T	O2
Girls	O1	T	O2

Where O1 is pre observation, O2 is the post observation and T is training.

Collection of data

Before the administration of yogic asana training, the pre-test data of standing broad jump, and medicine ball put were taken of both boys and girls group. After the completion of six weeks yogic asana exercise training again the same test were conducted to collect the post-training data. Necessary instructions were given to the subjects before administration of the tests.

Administration of training programme

All the subjects assembled at the sports stadium, and were briefed on type of the training to both groups. Both group also participated in regular practice programme. The training was carried out for a period of six weeks, five days each week. The scholar demonstrated the yoga poses for each group and explained all the related objectives. Each subject of the both group performed their respective poses with proper warming-up and cooling down. Assessments for each group were completed separately. One day before the initiation of first yoga session, the measurements were taken with the same testing protocol from both group girls and boys. Similarly, at the end of 6-week yoga training session, one day after, the testing protocol was repeated with the both girls and boys group athletes respectively.

Table 2 :- yogic asana training schedule for six weeks.

Weeks	Yogic asana	Repetitions x Duration	Rest interval
Week 1	Surya Namaskar Plank position Chaturanga Dandasana	4 x 0 2 x 30sec 2 x 30sec	2 minutes 2 minutes 2 minutes
Week 2	Surya Namaskar Plank position Chaturanga Dandasana	6 x 0 3 x 30sec 3 x 30sec	2-3 minutes 2-3 minutes 2-3 minutes
Week 3	Surya Namaskar Bhujangasana Navasana	8 x 0 4 x 30 4 x 30	2 minutes 2 minutes 2 minutes
Week 4	Surya Namaskar Bhujangasana Navasana	8 x 0 4 x 60 4 x 60	2-3 minutes 2-3 minutes 2-3 minutes
Week 5	Surya Namaskar Ustasana Natrajasana	10 x 0 6 x 60 6 x 60	2-3 minutes 2-3 minutes 2-3 minutes
Week 6	Surya Namaskar Ustasana Natrajasana	10 x 0 6 x 60 6 x 60	2-3 minutes 2-3 minutes 2-3 minutes

Statistical procedure

The data analysis done with paired t-test to evaluate the statistical difference between the pretest and posttest measure.

Result and findings

The study group consisted of 20 state level players Boys and Girls and 10 players in each group. The measure of outcome variables were assessed before the intervention and end of the training programme.

Table 3 :- Medicine Ball Put pre and post test of Boys group

Medicine ball put Boys	Paired Differences					t	df	Sig. (2tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair-1pretest-posttest	-.05900	.02923	.00924	-.07991	-.03809	-6.383	9	.000

Table 4 :- Medicine Ball Put pre and post test of Girls group

Medicine ball put Girls	Paired Differences					t	df	Sig. (2tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair1pretest-posttest	-.00200	.00422	.00133	-.00502	.00102	-1.500	9	.168

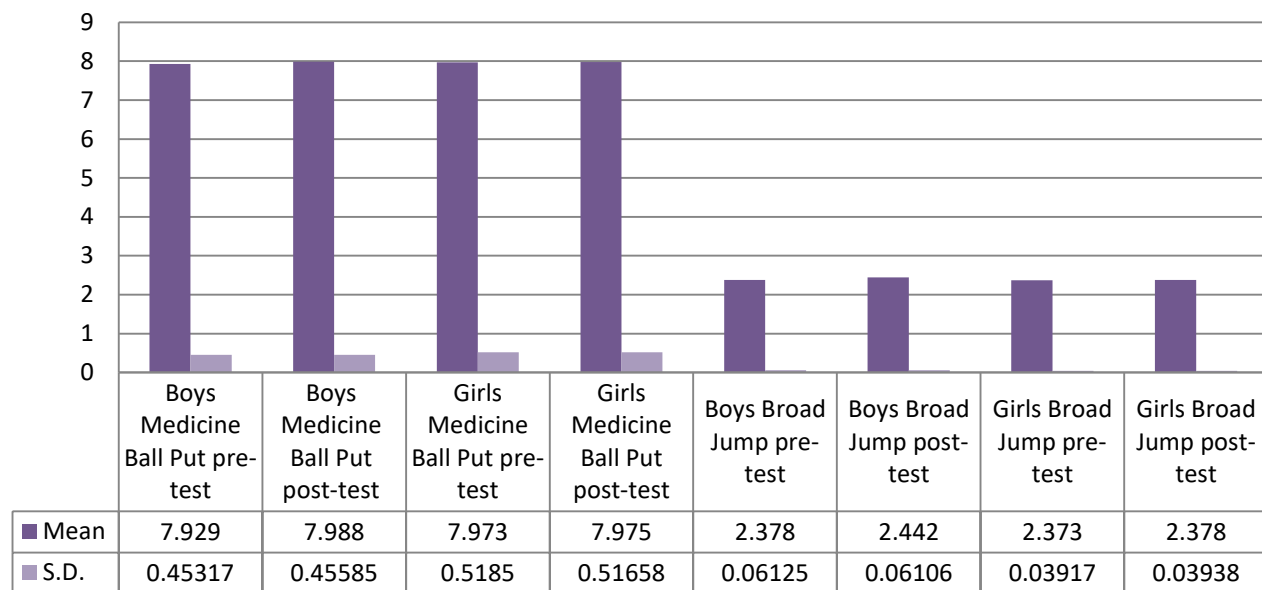
Table 5 :- Standing Broad Jump pre and post test of Boys group.

Standing broad jump Boys	Paired Differences					t	df	Sig. (2tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair1pretestposttest	-.06400	.01075	.00340	-.07169	-.05631	-18.827	9	.000

Table 6 :- Standing Broad Jump pre and post test of Girls group

Standing broad jump Girls	Paired Differences					t	df	Sig. (2tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair-1pretest-posttest	-.00500	.00707	.00224	-.01006	.00006	-2.236	9	.052

Fig. 1 – Graphical representation of Pre-test and Post-test of Medicine Ball Put and Standing Broad Jump of Boys and Girls.



This study aimed at comparing the effect of six weeks yogic exercise training on state level players of basketball over the standing broad jump and medicine ball put. Table-3 shows that the Boys group pre and post test mean, standard deviation and t-values are presented in table-3 and it reveals the significant level in the effect of yogic exercise on Boys group. The t-value of the selected variable is above the table of .000. Hence the study indicates that the yogic exercise is useful for the significant improvement of physical fitness variables medicine ball put. In table-4 Girls group pre and post test mean, standard deviation and t-value are .168. The result indicates that there is no significant difference in medicine ball put. And the table-5 shown that the Boys group pre and post mean, standard deviation and t-value are presented in table-5 and it reveals the significant level in the effect of yogic exercise on standing broad jump. The t-value of the selected variable is above the table of .000. Hence the study indicates that the yogic exercise is useful for the significant improvement of physical fitness variable standing broad jump. In table-6 Girls group pre and post test mean, standard deviation and t-value are .052. The result is indicates that there is insignificant difference in standing broad jump.

Discussion

The findings of this study revealed that six week of yogic exercise training would improve standing broad jump of boys and medicine ball put in state level Boys players of basketball Uttar Pradesh but not effective for the Girls basketball players of Uttar Pradesh may the cause Girls were not performing right technique or lack of interest in the training activity and they have the some personal or physiological issues. Or increasing performance of boys may due to their physical performance. In terms of boys this study supported by the previous study. The yoga asana training may be recommended to improve agility and muscular strength. And may contribute to enhance sports performance (Singh, Amandeep; Singh, Sukhdev; Gaurav, Vishaw,2011).

REFERENCES

1. Laster J. The heart of patanjali. *Yoga J.* 1997;137:134-44.
2. Raub JA. Psychophysiological effects of hatha yoga on musculoskeletal and cardiopulmonary function: A literature review. *J Altern Complement Med.* 2002;8:797-812.
3. Collins C. Yoga: Institution, preventive medicine, and treatment. *J Obstet Gynecol Neonatal Nurs.* 1998;27:563-8.
4. Desikachar K, Bragdon L, Bossart C. The yoga of healing: Exploring yoga's holistic model for health and well-being. *Int J Yoga Ther.* 2005;15:17-39.
5. Marlatt GA. Buddhist philosophy and the treatment of addictive behavior. *Cogn Behav Pract.* 2002;9:44-50.
6. Kolasinski SL, Garfinkel M, Tsai AG, Matz W, Dyke AV, Schumacher HR. Iyengar yoga for treatment symptoms of osteoarthritis of the knee: A pilot study. *J Altern Complement Med.* 2005;11:689-93.
7. Ding D., Stamatakis E. Yoga practice in England 1997-2008: prevalence, temporal trends, and correlates of participation. *BMC Research Notes.* 2014;7(1, article 172)doi: 10.1186/1756-05000-7-172.
8. Feuerstein G. *The Deeper Dimension of Yoga: Theory and Practice.* Boston, Mass, USA: Shambhala Publications; 2003.
9. Angel A. Pathophysiological changes in obesity. *Can. Med. Assoc. J.* 1978; 119:1401.
10. Fox EL, Mathews DK. *The Physiological basis of Physical Education and Athletics.* Philadelphia: CBS College Publishing, 1981.
11. McArdle WD, Katch FI, Katch VL. *Exercise Physiology: Energy, Nutrition, and Human Performance.* Philadelphia: Lee and Febiger, 1981.
12. Sidney KH, Sephard RJ, Harrison JE. Endurance Training and Body Composition of the elderly, *American Journal of Clinical Nutrition.* 1977; 30:326-333.

