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Effect of Yogic Exercise on Selected Motor Fitness Components of Undergraduate Students

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Abstract – The aim of the study was to investigate the effect of Yogic Exercises on motor fitness components of (Rural + Urban) undergraduate students. 30 female students were selected from JAV Girls Degree College, Baraut, Baghpat, Uttar Pradesh and their age range between 18-22 years. Students were selected with their prior consent for voluntary participation in research. The research scholar had an informal discussion with all the subjects about the requirements of the projects and apprised with the purpose of study. The experimental research method was applied for the purpose of the study. In order to analysis, the data, the t-test was used to find out the effect of means of pre and post test. The level of significance was set at 0.05. On the basis of analysis of data, the conclusion was drawn that there is a significant difference between pre and post scores of speed, agility, flexibility and strength endurance whereas cardiovascular endurance found insignificant of rural students. On the other hand in the case of urban student pre and post scores of speed, agility, flexibility, strength endurance and cardiovascular endurance were found significant.

Keywords: Yogic Exercise, Motor Fitness Components, Under Graduate Girls

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INTRODUCTION

Primitive man recognized physical fitness as necessary to his survival. However, modern man in this mechanical age tends to become complement and forgets its importance to not only his efficiency and happiness, but also to the survival of his way of life. The right kind and right amount of physical education develops organic and muscular power, stamina, vigor and the activity skills related to this development other factors such as sleep, rest, diet and avoidance of infections, influence physical fitness. But the physical activity is sole source of organic power. It is also the only known organic means of acquiring the ability to engage in tasks demanding sustained physical effort. There is a direct relationship between physical exercise and physical fitness.

If human being wants to be free from diseases of live most and serve best he must develop his capacity of body as well as of mind and spirit. They all are interdependent. Physical fitness is one's own capacity for sustained physical activity with emphasis on quantity. It is a quality of body and mind, which not only supplies day to day energy but also provides reserve capacity enabling a person to preserve difficult circumstance and on the other hand general motor ability, is capacity of individual for physical activity.

To unify the diverse aspects of the human organism and to make possible an integration of the body, mind and spirit, the ancient age of India devised the system, which is known as yoga. It may be defined as an entreated process of self-culture where by the physical mental and spiritual components of a man are bought into perfect integration.

Today, Yoga has gained worldwide popularity. Recent research trends have shown that it can serve as an applied science in a number of fields such as education, physical education and sports. It is now being realized in all parts of the glob that Yoga is for not only better development of mind, Socio-control, spiritual, moral but also a therapy. The nature of every yogic practice is psycho physiological and if this conceptual background not clearly understood, the whole outlook on yogic practice in terms of anatomy and physiology would remove many misconceptions about them.

Mary Martha made a comparative study of Motor Ability and Physical Fitness of selected freshmen women, enrolled in college dance classes. Three items of Physical Education Test Battery and Scott two items of Physical Education Test Battery administered to 100 freshman women before and after the fall semester of 1960-1961 at Madison College (Virginia), during which the subjects had four weeks of fundamental movement, four weeks of folk dance, and eight weeks of modern dance. The woman improved in motor ability and physical fitness, but showed greater improvement in Motor Ability than Physical Fitness.

The purpose of the study is to investigate the effect of Yogic Exercises on motor fitness components of rural and urban undergraduate girls.

PROCEDURE

Each subject was selected with prior consent for voluntary participation. Training was given for 24 weeks to yogic exercise group. Pre and posttest is taken:

1. Time taken to run distance of 50 meter dash as far as possible and recorded to the nearest 1/10th of a second with the help of stop watch.

2. Time taken to shuttle a distance of ten meters your times and recorded the nearest 1/10th of a second with the help of stop watch.

3. The degree of trunk flexion recorded to the nearest centimeters with the help of scale.

4. Strength endurance of abdomen was recorded by using sit ups test.

5. Distance covered in minutes recorded by using 9 min run/walk test.

The experimental research method was applied for the purpose of the study. Yogic exercises are the independent variable and motor fitness components are the dependent variables.

RESULTS AND CONCLUSION OF THE STUDY

Table: 1

Effect of Yogic Exercises on Motor Fitness Components of Under Graduate Girls Students of Rural Area

Component		N	Mean	SD	't' score
Speed	Pre	15	8.98	0.62	5.64*
	Post	15	10.05	0.70	
Agility	Pre	15	11.63	0.78	5.22*
	Post	15	12.48	0.87	
Flexibility	Pre	15	32.07	6.15	3.53*
	Post	15	34.40	6.96	
Strength Endurance (Abdomen)	Pre	15	28.87	7.86	2.56*
	Post	15	26.40	7.26	
Cardio vascular Endurance	Pre	15	1438.67	129.25	0.27
	Post	15	1430.67	156.35	

* Significant at .05 level of confidence and df (28) = 2.05

Table no. 1 revealed the average scores of Pre data of Speed, Agility, Flexibility, Strength Endurance and Cardiovascular Endurance of rural area girl students of yogic exercise group were 8.98, 11.63, 32.07, 28.87 and 1438.67 respectively, whereas the average scores of Post data of Speed, Agility, Flexibility, Strength Endurance and Cardiovascular Endurance of rural area girl students of yogic exercise group were 10.05, 12.48, 34.40, 26.40 and 1430.67 respectively. The table also revealed a significant difference between Pre test and Post test data of students in Speed, Agility, Flexibility and Strength Endurance. The obtained't' score of Speed (5.64), Agility (5.22), Flexibility (3.53) and Strength Endurance (2.56) were found higher than the required table value 2.05 to be significant at 0.05 level of confidence at df 28. It shows that the post test scores of rural area girl students of yogic exercise group in relation to Speed, Agility, Flexibility and Strength Endurance were found better than the pre test scores of students.

Cardiovascular Endurance found insignificant difference between Pre test and Post test data of rural area girl students of yogic exercise group. The obtained't' score of Cardiovascular Endurance (.27) was found lower than the required table value 2.05 to be significant at 0.05 level of confidence at df 28.

Table: 2

Effect of Yogic Exercises on Motor Fitness Components of Under Graduate Girls Students of Urban Area

Component		N	Mean	SD	't' score
Speed	Pre	15	10.44	1.33	3.73*
	Post	15	9.51	0.74	
Agility	Pre	15	12.57	0.78	4.93*
	Post	15	11.64	0.66	
Flexibility	Pre	15	32.07	4.40	3.32*
	Post	15	34.60	4.99	
Strength Endurance (Abdomen)	Pre	15	26.93	9.81	3.73*
	Post	15	30.47	9.19	
Cardio vascular Endurance	Pre	15	1373.67	141.92	3.47*
	Post	15	1404.00	135.42	

* Significant at .05 level of confidence and df (28) = 2.05

Table no. 2 revealed the average scores of Pre data of Speed, Agility, Flexibility, Strength Endurance and Cardiovascular Endurance of urban area girl students of yogic exercise group were 10.44, 12.57, 32.07, 26.93 and 1373.67respectively, whereas the average scores of Post data of Speed, Agility, Flexibility, Strength Endurance and Cardiovascular Endurance of urban area girl students of yogic exercise group were 9.51, 11.64, 34.60, 30.47 and 1404.00 respectively. The table also revealed a significant difference between Pre test and Post test data of students in Speed, Agility, Flexibility and Strength Endurance. The obtained't' score of Speed (3.73), Agility (4.93), Flexibility (3.32), Strength Endurance (3.73) and Cardiovascular Endurance(3.47) were found higher than the required table value 2.05 to be significant at 0.05 level of confidence at df 28. It shows that the post test scores of urban area girl students of yogic exercise group in relation to Speed, Agility, Flexibility, Strength Endurance and Cardiovascular Endurance were found better than the pre test scores of the students.

CONCLUSION:

Within the limitations of the present study and on the basis of the analysis of data, the following conclusion was drawn:

- There is significant difference between pre and post scores of speed, agility, flexibility and strength endurance of rural yogic group students and found insignificant difference between pre and post test data of cardiovascular endurance of rural yogic group students.
- There is a significant difference between pre and post scores data of speed, agility, flexibility, strength endurance and cardiovascular endurance of urban yogic group students.

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