

Research Paper

Physical Education



Enhancement of Motor Ability Components through Yogic Practices among Cricket, Soccer and Basketball Players at University Level

* Y.C. Louisraj ** Dr. A. Amuldoss

* Director of Physical Education, SRM University, Kattangulathur-603203, Tamilnadu, India

** Director of Physical Education, Department of Physical Education, Thiruvalluvar University, Vellore - 632106

ABSTRACT

The purpose of the study was find out the effect of yogic practice on selected Motor Ability components among university level Cricket, Soccer and Basketball Players. Fifty university level players from the above games were selected randomly as subjects. The age of the subjects ranged from 21 to 25 years. The selected subjects were divided into two groups namely Group A (yoga practice) and Group B (control without any training). The Group A was subjected to yoga training for three days per week for six weeks. The dependent variables namely cardio respiratory endurance measured by 12 min cooper's Run/Walk Test, Muscular Endurance Measured by Bent-knee sit ups, and Flexibility Measured by Sit and reach test. The data were collected from each subject before and after the training period and statistically analyzed by using dependent 't' test and analysis of covariance (ANOVA). It was found that there was significant improvement on yogic practice on selected motor ability components.

Keywords : Motor ability, cardio respiratory endurance, Muscular endurance and Flexibility

INTRODUCTION

Fitness is for living, be in the home, on the office, in the factory, or in military service implies freedom disease, enough strength, agility, endurance and skill to meet the demands of daily living, sufficient to with stand ordinary stresses without harmful strain, and mental development and emotional adjustment appropriate to the maturity of the individual. Physical fitness is the basic fitness of all other fitness. Physical fitness is not only the most important ways to a healthy body but it is also the basis of dynamic and creative activity. Physical fitness is the combination of strength, speed, flexibility, agility and endurance. It is the ability to enjoy our lives and achieve our goals without undue fatigue or stress. Physical fitness varies from person to person and different type of fitness and needed for different types of profession.

Yoga is a form of exercise based on the belief that the body and breath intimately connected with the mind. By controlling the breath and holding the body in steady poses, or asana, yoga creates harmony. Yoga is means of balancing and harmonizing the body, mind and emotion and is a tool that allows us to withdraw from the chaos of the world and find a quite space within. Pranayama are the best exercise to increase the capacity of lungs capacity.

METHODOLOGY

To achieve purpose, fifty university level players of Cricket, Soccer and basketball from various universities were selected randomly as subjects. The age of the subjects ranged from 21 to 25 years. They were assigned randomly into experimental and control group of 25 each. The experimental group was subjected to the yoga practices during morning hours for alternative three days for six weeks. Control group (n=25) was not given yoga practice.

RESULTS AND DISCUSSIONS

The data pertaining to the variables in this study were examined by using dependent 't' test to find out the significant improvement and analysis of covariance (ANOVA) for each variables separately in order to determine the difference and tested at 0.05 level of significance. The analysis of dependent 't' test on data obtained for cardio respiratory endurance, muscular endurance and flexibility of the pre-test and post-test means of yoga practice and control groups have been analyzed and presented in Table-I.

TABLE-I
MEAN AND DEPENDENT 't' TEST OF EXPERIMENTAL AND CONTROL GROUPS ON SELECTED VARIABLES

Variable	Mean	Experimental group	Control group
Cardio Respiratory Endurance	Pre-test Mean	1606.4	1568.4
	Post-test Mean	1714.4	1532.4
	't' test	2.40*	0.60*
Muscular Endurance	Pre-test Mean	29.32	28.44
	Post-test Mean	32.2	27.68
	't' test	1.53*	0.43*
Flexibility	Pre-test Mean	33.24	33.24
	Post-test Mean	36.28	33.44
	't' test	1.73*	0.11*

*significant at 0.05 level of confidence (24) = 2.064

The obtained 't' ratio value of experimental group is higher than the table value and it is understood that yogic practice had significantly improved the performance of cardio respiratory endurance, muscular endurance and flexibility. Since the obtained 't' ratio value of experimental groups are greater than

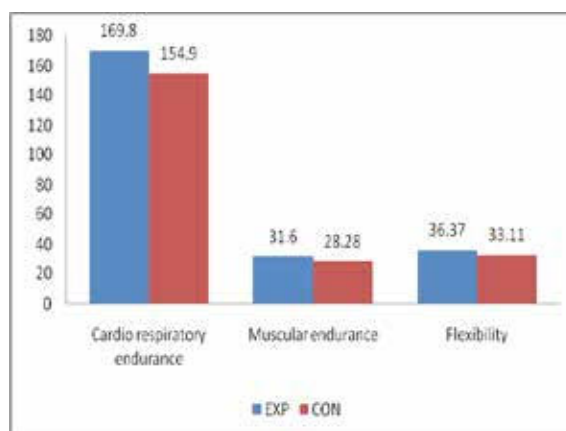
the table value, it is understood that yoga training group had significantly improved the performance of cardio respiratory endurance, muscular endurance and flexibility. The analysis of covariance on the data obtained on flexibility and explosive power due to the effect of yogic practice have been analyses and presented in Table II.

TABLE-II
ANALYSIS OF COVARIANCE OF EXPERIMENTAL AND CONTROL GROUPS ON SELECTED VARIABLES

Variables	Adjusted Post Test means		Source of variance	SS	df	Mean squares	'F' Ratio
	Exp group	Cont. group					
Cardio Respiratory Endurance	169.8	154.9	Between	276859.19	1	276859.19	75.83*
			Within	171606.27	47	3651.201	
Muscular Endurance	31.60	28.28	Between	136.69	1	136.69	58.64*
			Within	109.29	47	2.331	
Flexibility	36.37	33.14	Between	130.92	1	130.92	204.24*
			Within	29.98	47	0.641	

***Significant at 0.0s level of confidence, df (1,47) = 4.06**

Table II showed that the adjusted posttest mean values of Cardio Respiratory Endurance, Muscular Endurance and Flexibility of experimental and control group were 169.8 and 154.9 and 31.60 and 28.28 and 36.37 and 33.14 respectively. The obtained f-ratio value is 75.83, 58.64 and 204.24 which is higher than the table value 4.06 with df 1 and 47 required for significance at 0.0s level. Since the value of f-ratio is higher than table value, it indicates that there is significant difference exist between the adjusted posttest means of experimental group in improving the performance of cardio respiratory endurance, muscular endurance and flexibility when compared control group.



CONCLUSION

The experimental group namely yoga practice group had achieve significant improvement on cardio respiratory endurance, muscular endurance and flexibility. Significant difference were found among the two groups namely yoga practice (experimental) and control groups. Yoga practice group founded better achievement towards improving the selected criterion variables such as cardio respiratory endurance, muscular endurance and flexibility. It was found that the improvement caused by yoga practice group was better than control group. The results are supported by the studies conducted by R.Murugesan (2000) and Govindarajulu N (2002).

REFERENCES

- R. Murugesan, et.al. (2000) "Effect of selected yogic practices on the management of hypertension". Indian Journal of Physiology and pharmacology, 44.2. | Govindarajulu, N. et.al. (2002) "Work capacity of elite school players practicing yoga in Pondicherry region" Yoga- Mimamsa, xxxIV:2. | Clarke, David and Harrison H. Clarke (1972), Research Process in Physical Education, Recreation and Health, Englewood Cliffs, Prentice Hall Inc., New Jersey. P.76 | Herold M. barrow and Mc Gee, A Practical approach to Measurement in Physical | Education, Newyork: The C.V. Mosby Company, 1979, P.11 |