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Effect of Yogic Practices on Cardiovascular Fitness among College Men Hockey Players

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ABSTRACT

The purpose of the study was to find out the effect of yogic practices on cardiovascular fitness among college men hockey players. It was hypothesized that the yogic practices group would show significant improvement on cardiovascular fitness than control group. To achieve the purpose of the present study, thirty men college level hockey players from Salem district, Tamilnadu, India were selected as subjects at random and their ages ranged from 18 to 23 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=30) were randomly assigned to two equal groups as yogic practices group (YPG) and control group (CG) in an equivalent manner. Modified Harvard step test with 18 inches height was used to assess the cardiovascular fitness. The yogic practices participated for a period of six weeks for alternate three days in a week and the post-tests were taken. To find out the difference between the two groups paired 't' test was used. The result reveals that the yogic practices group showed better performance on duration of Ex. in sec, pulse rate and PFI than the control group owing to the influences of yogic practices group.

Key Words: Yogic Practices, Hockey, Cardiovascular fitness.

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INTRODUCTION

Yoga also keeps us awake and expresses the path and the means to proceed the life. Yoga has both preventive and therapeutic benefits. It has been shown to offer both physical and mental benefits to the body and the mind. A perfect fitness routine, yoga provides the means for people of any age not only to get and stay in shape but also to develop balance, coordination, and a sense of centeredness (Iyengar, 2008). The aim of Yogasanas is not only to develop the muscles and the body but regulate the proper activities of all mainly to the internal organs and glands to affect the nervous system and that which control our well being to a much greater degree than we actually suppose. The ability of the heart, blood vessels, blood and respiratory system to supply fuel, especially oxygen, to the muscles during sustained exercise. A fit person can persist in' physical activity for relatively longer periods of time without undue stress. Field Hockey is a popular sport played in more than 132 countries. Its official name by which it is usually known is Hockey. However, some countries, and some encyclopedic references, distinguish it from other sports with the same name as Field Hockey. The origin of the word Hockey was obscure. Hockie was forbidden in the Statutes of Galway in 1527. The word may derive from comocke and the Anglo-Saxon word for 'Hook', Hok; alternatively, it may come from the French word for a shepherd's crook, Hocquet (Dorthy & Landie, 1992).

Purpose of the study

The purpose of the study was to find out the effect of yogic practices on cardiovascular fitness among college men hockey players.

Hypothesis

It was hypothesized that the yogic practices group would show significant improvement on cardiovascular fitness than control group.

Methodology

To achieve the purpose of the present study, thirty men college level hockey players from Salem district, Tamilnadu, India were selected as subjects at random and their ages ranged from 18 to 23 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=30) were randomly assigned to two equal groups as yogic practices group (YPG) and control group (CG) in an equivalent manner. Modified Harvard step test with 18 inches height was used to assess the cardiovascular fitness. The yogic practices participated for a period of six weeks

for alternate three days in a week and the post-tests were taken. To find out the difference between the two groups paired 't' test was used.

Results and Discussions

The primary objective of the paired 't' ratio was to describe the differences between the pre-test and post-test mean of hockey players.

TABLE – I

SUMMARY OF 't' RATIO ON CARDIOVASCULAR FITNESS OF EXPERIMENTAL GROUP (YPG)

S.No	Cardio Vascular Fitness	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Duration of Ex. in Sec.	166.74	175.61	8.87	3.87	1.20	3.26*
2	Pulse rate	54.56	58.03	3.47	1.09	0.45	4.12*
3	PFI	52.14	57.84	5.70	1.10	0.47	3.93*

An examination of table - I indicates that the obtained't' ratios were 3.26, 4.12 and 3.93 for duration of Ex. in sec, pulse rate and PFI respectively. The obtained't' ratios were found to be greater than the required table value of 2.14 at 0.05 level of significance for 1, 14 degrees of freedom. Hence it was found to be significant.

FIGURE – I PRE AND POST TEST DIFFERENCES OF THE EXPERIMENTAL GROUP ON CARDIOVASCULAR FITNESS

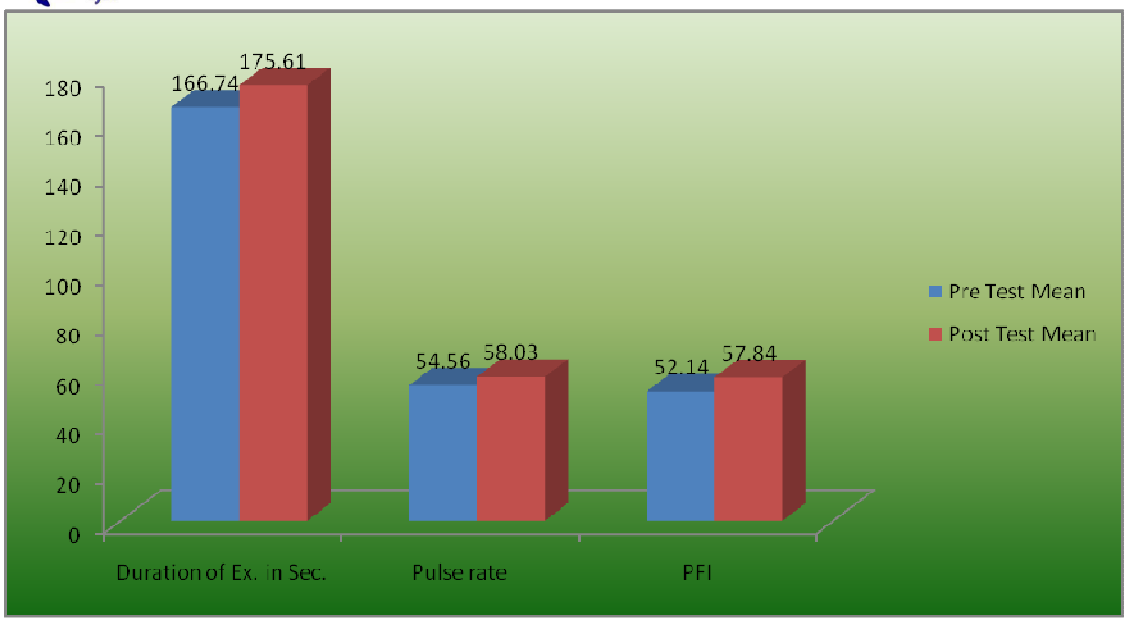
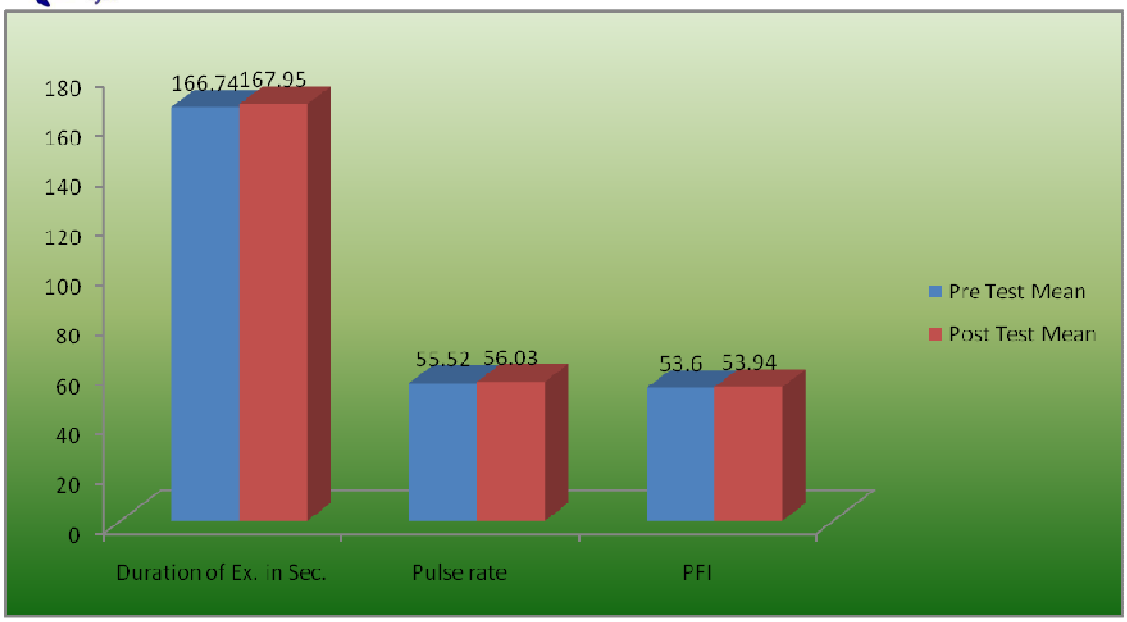


TABLE – II SUMMARY OF'ť' RATIO ON CARDIOVASCULAR FITNESS OF CONTROL GROUP (CG)

S.No	Cardio Vascular Fitness	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	'ť' Ratio
1	Duration of Ex. in Sec.	166.74	167.95	1.21	4.12	1.89	0.32
2	Pulse rate	55.52	56.03	0.51	1.27	0.08	1.67
3	PFI	53.60	53.94	0.34	1.02	0.07	0.71

An examination of table - II indicates that the obtained'ť' ratios were 0.32, 1.67 and 0.71 for duration of Ex. in sec, pulse rate and PFI respectively. The obtained'ť' ratios on all the selected variables were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 1, 14 degrees of freedom. Hence it was found to be insignificant. The results of this study showed that the control group was statistically insignificant.

FIGURE – II PRE AND POST TEST DIFFERENCES OF THE CONTROL GROUP ON CARDIOVASCULAR FITNESS



Discussions and Conclusions

In case of cardio vascular fitness i.e. duration of Ex. in sec, pulse rate and PFI the results between pre and post (6 weeks) test has been found significantly higher in experimental group in comparison to control group. The findings of the present study have strongly indicates that six weeks of yogic practices group had significant influence on selected cardio vascular fitness i.e. duration of Ex. in sec, pulse rate and PFI of hockey players. Hence the hypothesis earlier set that yogic practices group would have been significant influence on selected cardio vascular fitness in light of the same the hypothesis was accepted. The result reveals that the yogic practices group showed better performance on duration of Ex. in sec, pulse rate and PFI than the control group owing to the influences of yogic practices group.

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