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EFFECT OF REGIMENS OF PHYSICAL TRAINING ON HEART RATE AMONG YOUNG MEN

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Abstract

The purpose of the present study was to investigate the effect of regimens of physical trainingon heart rate among men handball players. To achieve the purpose of the study thirtymen were selected from Tamilnadu, India during the year 2021. The subject's age ranges from 18 to 24 years. The selected subjects were divided into two equal groups consists of 15 men each namely experimental group and control group. The experimental group underwent aphysical training programme for six weeks. The control group was not taking part in any training during the course of the study. Heart rate was taken as criterion variable in this study. The selected subjects were tested on heart rate was measured through the palpation method is at wrist (radial artery). Pre-test was taken before the training period and post- test was measured immediately after the six week training period. Statistical Technique't' ratio was used to analyse the means of the pre-test and post test data of experimental group and control group. The results revealed that there was a significant difference found on the criterion variable. The difference is found due to physical traininggiven to the experimental group on heart rate when compared to control group.

Keywords:P hysical Training, heart rateand't' ratio.

INTRODUCTION

Physical training has been present in human societies throughout history. Usually, it was performed for the purposes of preparing for physical competition or display, improving physical, emotional and mental health, and looking attractive. It took a variety of different forms but quick dynamic exercises were favoured over slow or more static ones. For example, running, jumping, wrestling, gymnastics and throwing heavy stones are mentioned frequently in historical sources and emphasised as being highly effective training methods. Notably, they are also forms of exercise which are readily achievable for most people to some extent or another.

METHODOLOGY

The purpose of the study was to find out the effect of physical trainingon heart rate among men. To achieve this purpose of the study, thirtymen were selected as subjects at random. The age of the subjects were ranged from 18 to 24 years. The selected subjects were divided into two equal groups of fifteen subjects each, such as aphysical traininggroup (Experimental Group) and control group. The experimental group underwent physical trainingfor three days per week for six weeks. Control group, which they did not undergo any special training programme apart from their regular physical activities as per their curriculum. The following physiological variable, namely heart rate was selected as criterion variable. All the subjects of two groups were tested on selected criterion variable heart rate was measured through the palpation method is at wrist (radial artery) test at prior and immediately after the training programme. The't' test was used to analysis the significant differences, if any, in between the groups

respectively. The 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

ANALYSIS OF THE DATA

The significance of the difference among the means of the experimental group was found out by pre-test. The data were analysed and dependent't' test was used with 0.05 levels as confidence.

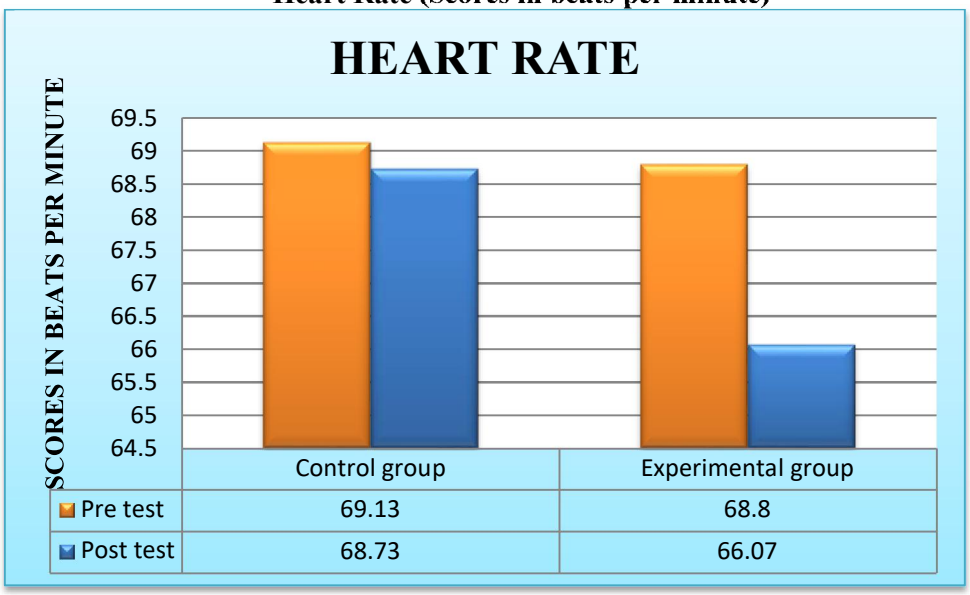
Table I Analysis of t-ratio for the pre and post tests of experimental and control group on Heart Rate (Scores in beats per minute)

Variables	Group	Mean		SD		Sd Error		df	't' ratio
		Pre	Post	Pre	Post	Pre	Post		
Heart rate	Control	69.14	68.73	1.30	1.33	0.34	0.34	14	1.30
	Experimental	68.81	66.07	1.74	1.16	0.45	0.30		**10.24***

**Significance at .05 level of confidence.*

The Table-I reveals that the mean values of pre-test and post-test of the control group on heart rate were 69.14and 68.73 respectively. The obtained 't' ratio was 1.30, since the obtained 't' ratio was less than the required table value of 2.14 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of the experimental group on heart rate were 68.81and 66.07 respectively. The obtained 't' ratio was 10.24*since the obtained 't' ratio was greater than the required table value of 2.14 for significance at 0.05 level with 14 degrees of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between control group and experimental group in heart rate. It may be concluded from the result of the study that experimental group improved in heart rate due to six weeks of physical training.

Figure-1 Bar diagram showing the pre and post mean values of experimental and control group on Heart Rate (Scores in beats per minute)



DISCUSSIONS ON FINDINGS

The result of the study indicates that the experimental group, namely physical traininggroup had significantly improved the selected dependent variable, namely heart rate, when compared to the control group. It is also found that the improvement caused by physical trainingwhen compared to the control group. The result of this study on heart rate has in line with the study conducted by **Daljeet Singh., (2017).**

CONCLUSIONS

1. There was a significant difference between experimental and control group on heart rate after the training period.
2. There was a significant improvement in heart rate. However the improvement was in favour of experimental group due to six weeks of physical training.

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CONFLICT OF INTEREST

Nil

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