EFFECT OF AEROBIC DANCE TRAINING ON RESTING PULSE RATE AMONG BASKETBALL PLAYERS

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ABSTRACT

The purpose of the study was to find out the effect of aerobic dance training on resting pulse rate among basketball players. It was hypothesized that there would be significant differences on resting pulse rate due to the effect of aerobic dance training among basketball players. For the present study the 30 male volleyball players from Government College of Engineering Krishnarajapete,Mandya were selected at random and their age ranged from 20 to 22 years. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of fifteen each and named as Group 'A' and Group 'B'. Group 'A' underwent aerobic dance training and Group 'B' has not undergone any training. Resting pulse rate was assessed by stethoscope. The data was collected before and after six weeks of training. The data was analyzed by applying ANCOVA test. The level of significance was set at 0.05. The level of significance was set at 0.05. The aerobic dance training had significantly reduced resting pulse rate among basketball players than the control group.

Keywords: Aerobic Dance Training, Resting Pulse Rate, Basketball

INTRODUCTION

The term "Aerobic" means "living in air" or "utilizing oxygen" Aerobic exercises refer to those activities that require oxygen for prolonged periods and place such demands on the body that it is required to improve its capacity to handle oxygen. As a result of aerobic exercise, there are beneficial changes that occur in the lungs, the heart, and the vascular system. Dance in this century has enhanced the fitness boom, and imposed us to the energetic dancing of fame and Hollywood images and examples of Olivia Newton John and Jane Fonda all much more appealing to many in this search for personal fitness than the monotony of jogging or alternative more skillful fitness pursuits. Dance is movement which involves any part of the body movement in which the dancer remains in one place or moves through space. These movements fall into two general categories that are aerial and locomotors. Dance in this century has enhanced the fitness boom, and imposed us to the energetic dancing of fame and Hollywood images and examples of Olivia Newton John and Jane Fonda all much more appealing to many in this search for personal fitness than the monotony of jogging or alternative more skillful fitness pursuits. Dance is movement which involves any part of the body movement in which the dancer remains in one place or moves through space. These movements fall into two general categories that are aerial and locomotors. The

aerobic dance phenomenon which has spread throughout the United States to Thailand, Venezuela, and Canada in the last five years was inspired by a fitness programme designed by Kenneth Cooper (1992). Aerobic is a system of cardiovascular conditioning which strengthens the heart and lungs by forcing the body to demand increased amounts of oxygen over a long period of time. Aerobic dance involves a series of vigorous dances, set to popular songs, which lasts only as the song it is set to may include leg kicks, lungs, arm swings and jogging. Aerobic activity is also used by individuals with anorexia as a means of suppressing appetite, since aerobic exercise increases glucose and fatty acids in the blood by stimulating tissues to release their energy stores. While there is some support for exercising while hungry as a means of tapping into fat stores, most evidence is equivocal. In addition, performance can be impaired by lack of nutrients, which can impair training effects. The term "Aerobic" means "living in air" or "utilizing oxygen" Aerobic exercises refer to those activities that require oxygen for prolonged periods and place such demands on the body that it is required to improve its capacity to handle oxygen. As a result of aerobic exercise, there are beneficial changes that occur in the lungs, the heart, and the vascular system.

Basketball a game of interest and it has many features of physical development. The game requires concentrations, quick thinking and a great deal of movement. The speed of the game means the players must be thinking in one moment about the attack and in the next about defense. They must be concentrating all the times if they are to keep up with the play. It is all action games with name of the players activity as involuntary spectators during the course of the match as in other team games such as hockey, football and cricket. It is an excellent remedial activity, which develops good body and shoulder posture.

METHODOLOGY

The purpose of the study was to find out the effect of aerobic dance training on resting pulse rate among Basketball players. It was hypothesized that there would be significant differences on resting pulse rate due to the effect of aerobic dance training among basketball players. For the present study the 30 male basketball players from Government College of Engineering Krishnarajapete, Mandya were selected at random and their age ranged from 20 to 22 years. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of fifteen each and named as Group ‘A’ and Group ‘B’. Group ‘A’ underwent aerobic dance training and Group ‘B’ has not undergone any training. Resting pulse rate was assessed by stethoscope. The data was collected before and after six weeks of training. The data was analyzed by applying ANCOVA test. The level of significance was set at 0.05. The level of significance was set at 0.05.

RESULTS

TABLE I

COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF RESTING PULSE RATE OF EXPERIMENTAL AND CONTROL GROUP

	Control	Experiment	Source of Variance	Sum of Squares	df	Means Squares	F
Pre Test Means	71.86	70.73	BG	10.53	1	10.53	1.00
			WG	396.66	38	10.43	
Post Test Means	66.26	62.00	BG	268.82	1	268.82	37.96*
			WG	269.33	38	7.08	
Adjusted Means	66.35	61.93	BG	272.14	1	272.14	38.38*
			WG	262.65	37	7.09	

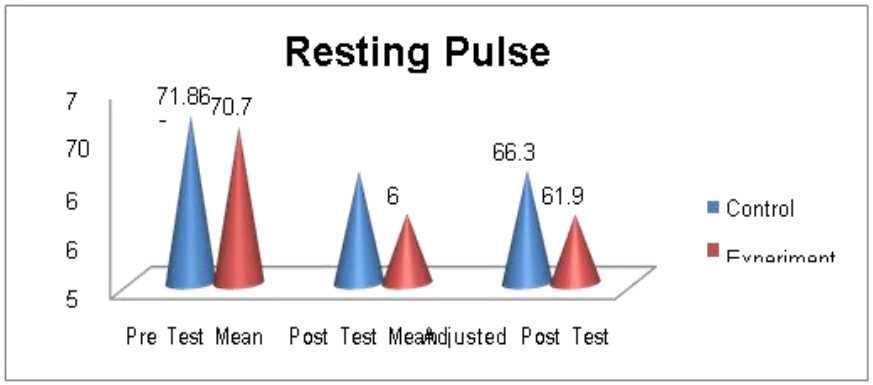
Table value for df 1 and 38 was 4.10 *

Significant at 0.05 level Table value for df 1 and 37 was 4.10

The obtained 'F' value for adjusted mean for diastolic pressure were 38.38 was greater than the required value 4.10 at 0.05 level. Since the observed 'F' value on diastolic pressure were highly significant, the adjusted mean differences between experimental and control group was statistically significant. It was concluded that the treatment adopted to this study influenced resting pulse rate. The bar diagram for obtained mean on resting pulse rate for experiment group and control group are postulated in the figure I.

FIGURE I

BAR DIAGRAM SHOWING THE PRE MEAN, POST MEAN AND ADJUSTED MEAN OF RESTING PULSE RATE



CONCLUSION

On the basis of findings and within the limitations of the study the following conclusion was drawn:

1. The aerobic dance training had significantly reduced resting pulse rate among Basketball players than the control group.

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