EFFECT OF CORRECTIVE AND AEROBIC EXERCISES ON POSTURE AND PHYSICAL FITNESS COMPONENTS AMONG POOR POSTURE ENGINEERING WOMENSTUDENTS.

Dr. P. KUMARAVELU

Associate Professor, Department of Physical Education, Tamilnadu Physical Education and Sports University, Chennai, Tamilnadu, India.

Abstract

The purpose of the study was to examine the effect of Corrective and aerobic exercise on Posture and selected Physical fitness components of poor posture Engineering Women students. To achieve the purpose 40 subjects, age ranged from 17-21 years were selected from Vellore Institute of technology Chennai Campus. The subjects (n=40) were randomly assigned to two equal groups of twenty girls each. The groups were assigned as experimental group (EG) and control group (CG) in an equivalent manner. The pretest was conducted on all the selected variables of both experimental and control group. The experimental group participat in the Corrective and aerobic exercises training programme for a period of 12 weeks. The subjects of the control group were not participated in any physical activities. The corrective and acrobic exerci Training programme was scheduled at 6:00am to 7:00 am for five days in a week. The post-test were conducted for all subjects on Posture, Physical fitness components namely Agility, Flexibility, Balance and Endurance. To analyze the data analysis of covariance was used. The result reveals that there was a significant difference on Agility, flexibility, Balance and Endurance of experimental group than control group.

Keywords: Corrective Exercise, Acrobic Exercise, Posture.

Introduction

Poor posture is highly prevalent in our society. Basically posture refers to the body's alignment and positioning with respect to the ever-present force of gravity. Whether we are standing, sitting or lying down gravity exerts a force on our joints, ligaments and muscles. Good posture entails distributing the force f gravity through our body so no one structure s overstressed. Posture is essential for the human body to function correctly and allows the body to act as whole. Improper posture commonly causes muscular imbalances, which lead to faulty body mechanics. Posture is a habit that contribute to the well-being of an individual. Recognition of the prevalence of posture problems is important when discussing proper posture(MajorJ, 1992). Postural deviations in athletes could lead to injury and pain. When deviations in posture occur, it can place added stress on joints and musculature which w increase the risk of injury, in time this additional stress may lead to chronic injuries. (Kristin L.Kenworths 2008).

Corrective Exercise is a form of exercise that brings the body back into a perfect postural position Corrective Exercise is designed to undo all of these muscle imbalances and start to get the ones the haven't been working, working again. Aerobic exercise is a good, all round hindrance of poor Posturt Aerobic Exercise refers to exercise that involves or improves oxygen consumption by the body. Aerobic means "with oxygen", and refers to the use of oxygen in the body's metabolic or energy-generating process.

Purpose of Study

The purpose of the study was to examine the effects of Corrective and aerobic exercise on posture and selected physical Fitness components of Poor posture Engineering women students.

Methodology

Selection of Subjects

The purpose of the study was to find out the effects of corrective and aerobic exercise on posture, physical fitness components on engineering women students. To achieve the purpose of the study, the survey programme was conducted among 400 participants and New York postural rating scale was used and scoring is done for each individual from which forty participants of very poor posture were selected for this study. The students whose score is less than 53 were taken as subjects for the study. The age group of the participants ranged from 17-21 years.

Procedure for selection.

The subject being examined first assumes a comfortable and natural standing position between the plumb bob and the screen, straddling the floor line and facing the screen. After the subjects lateral posture and feet have been rated, she then turns left, sideward to the examiner and stands with her feet at right angles to the floor line; her left malleolus must be in line with the plumb bob.

Scoring

Scoring is done for each of the thirteen posture areas. For each posture area a score of 5, 3 or 1 Is assigned. Score of 5 represents good posture, a score of 3 represents fair posture and a score of 1 represents a poor posture. The thirteen scores are totaled to obtain the subjects posture score.

Variables and Tests

Agility was measured through 4x10 yds shuttle run, flexibility was measured through sit and reach test. Endurance was measured through 600 yds Run/Walk. Balance was measured through stork stand test.

Training Programme

The training programme includes corrective and aerobic exercises conducted for five days a week with 60 minutes of duration in the morning session

Study Design

The selected poor posture students were randomly divided into two groups of twenty o Group underwent Specific training of corrective and aerobic exercise programme for 5 days per up to 12 weeks and Group II acted as control group who had not participated in any specific tran other than their regular routine.

Results and Discussion

The results were presented in the following Tables.

Table1
Analysis of covariance of Experimental and control Groups on Physical fitness Variables

S.No	Variables	Adjusted post mean		Source of variable	Sum of squares	df	Mean spuares	'f'-Ratio
		Experimental	Control					
1	Agility	12.20	14.19	Between Groups	38.67	1	38.67	53.13*
				Within Groups	26.93	37	0.72	
2	Flexibility	23.04	19.45	Between Groups	121.19	1	121.19	105.49*
				Within Groups	42.50	37	1.14	
3	Balance	21.65	14.64	Between Groups	491.53	1	491.53	226.14*
				Within Groups	80.41	37	2.17	
4	Endurance	184.80	218.54	Between Groups	10943.20	1	10943.20	93.80*
				Within Groups	4316.27	37	116.65	

Table 2
Analysis of covariance of Experimental and control Groups on Posture

Variables	Adjusted post mean		Source of variable	Sum of squares	df	Mean spuares	'f'-Ratio
	Experimental	Control					
Agility	53.13	36.51	Between Groups	2684.81	1	2681.81	413.70*
			Within Groups	240.11	37	6.49	

*Significant at 0.05 level of confidence.

Table 1 and 2 show that the obtained F ratio value are higher than the table value 4.10 with df 1 and 37 required for significance at 0.05 level. Since the value of F ratios are higher than the table value it indicates that there is significant difference among the adjusted posttest means of experimental group and control groups. It was concluded that the corrective and aerobic exercise training adopted in this study influenced the selected Physical Fitness Variablesand also helps in enhancing the posture scores of women students with poor posture.

Discussion on Findings

From the results of the study it was revealed that the corrective exercise and aerobic exercise group showed significant improvement in agility, balance, endurance and flexibility than the control group. The results also revealed that the corrective exercise and aerobic

exercise group had significant improvement than the control group. These results soincides with the findings of perich etal. (2010) Nowotny (2010) and sekendzetal(2009) who had found that aerobic exercise had significant improved physical fitness components of flexibility, endurance and agility. The results of the study is also in line with the study of Rahnamactal (2002), Bargzyk etal (2005) and Benedetti etal who had concluded that corrective exercises had improved postural defects.

Conclusions

The following conclusions have made from the results of the statistical analysis:

1. It was found that Experimental group with corrective and aerobic exercise were found to be better than control group in all aspect of posture and physical fitness components such as agility, flexibility, endurance and balance.
2. It was found that group with corrective and aerobic exercise was found to be better These conclusions suggested that corrective and aerobic exercises training programme could improve the physical fitness components and Posture variables of the Engineering women students than control group in improving posture. with poor posture.

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