



EFFECT OF AEROBIC EXERCISE ON FLEXIBILITY AMONG COLLEGE WOMEN PLAYERS

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Abstract:

The purpose of the study was to find the effect of aerobic exercise on flexibility among college women players. Thirty female players were randomly selected from Namakkal, Tamilnadu and their age ranged between 18 and 25 years. The selected players were divided into two equal groups consists of 15 each namely experimental group and control group. The experimental group underwent an aerobic exercise programme for eight weeks. The control group was not taking part in any training during the course of the study. Flexibility was assessed by sit & reach test method and unit of measurement is centimeters. Pre-test was taken before the training period and post- test was measured immediately after the eight weeks training period. The data was analyzed by applying by 't' ratio and the level of significance was set at 0.05. The results revealed that there was a significant difference found on the criterion variables. The difference found is due to aerobic exercise given to the experimental group on flexibility when compared to control group.

Key Words: Aerobic Exercise and Flexibility.

Introduction:

Sport as an activity offers an opportunity for self-knowledge, self-expression and fulfillment, personal achievement, skill acquisition and demonstration of ability, social interaction, enjoyment, good health and well-being. It promotes involvement, integration and responsibility in society and contributes to the development of society, especially when sports activities have been accepted as an integral part of the culture of every society in every nation.

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. "Aerobic" basically means living or working with oxygen. Aerobics or endurance exercises are those in which large muscle groups are used in rhythmic repetitive fashion for prolonged periods of time. Aerobic exercise means the exercise where all body parts/muscles are supplied with enough oxygen with the increased heart rate. Aerobic exercises include brisk walking, jogging, swimming, cross country, skiing, hopping, and skipping. By doing aerobics, the whole body is used and major muscle groups including legs, trunk and arms get involved. In aerobic exercise the heart rate increases substantially, but never reaches its maximum level. The heart is always able to deliver sufficient oxygen-rich blood to muscles so that they can derive energy from fat and glycogen aerobically. Aerobic exercises builds stamina for sports and it also is the most important form of exercise for health, since it increases the efficiency of heart, circulation and muscles. Aerobic exercise is the keystone of fitness by doing aerobics it increases the capillary network in the body.

Objective of the Study:

The objective of this study was to find out the effect of aerobic exercise on flexibility for 8 weeks among college women players.

Methodology:

For the present study the subjects were thirty women players were randomly selected from Namakkal, Tamilnadu and their age ranged from 18 to 25 years. The subjects were assigned to two equal groups of 15 players each and named as Group 'A' and Group 'B'. Group 'A' underwent an aerobic exercise group and Group 'B' underwent did not any special exercise programme. Flexibility was assessed by sit & reach test and unit measurement is centimeters. The data was collected before and after eight weeks of training period. The data was analyzed by applying by 't' ratio and the level of significance was set at 0.05.

Results:

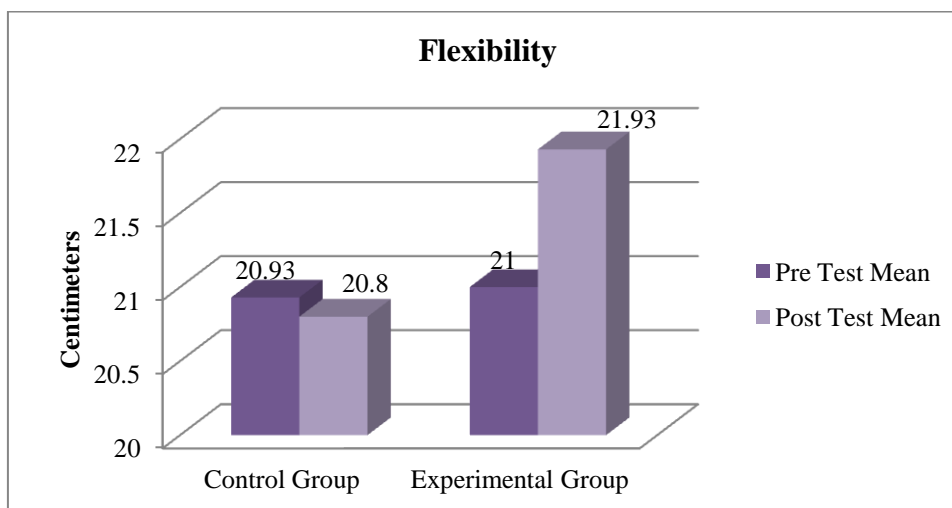
Table Shows Analysis of t-ratio for the Pre-test and Post-test of Control Group and Experimental Group on Flexibility

Variables	Group	Mean		SD		Sd Error	df	't' ratio
		Pre	Post	Pre	Post			
Flexibility	Control	20.93	20.80	1.87	1.21	0.30	14	0.27
	Experimental	21.00	21.93	1.65	1.71	0.49	14	3.10*

* Significance at 0.05 level of confidence

The Table shows that the mean values of pre-test and post-test of control group in flexibility were 20.93 and 20.80 respectively. The obtained 't' ratio was 0.27 since the obtained 't' ratio was less than the required table value of 2.15 for the significant at 0.05 level of with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of experimental groups in flexibility were 21.00 and 21.93 respectively. The obtained 't' ratio was 3.10 since the obtained 't' ratio was greater than the required table value of 2.15 for significance at 0.05 level of 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 flexibility. It may be concluded the result of the study that experimental group improved in flexibility due to eight weeks of aerobic exercise.

Bar Diagram Shows the Pre and Post Tests Mean Values of Control Group and Experimental Group on Flexibility



Discussion on Findings:

The goal of the investigation is to find whether there is any effect on those selected variables in the effect of aerobic exercise and further to find improvement on training group. The obtained 't' ratio showed that there was significant difference between experimental group and control group in performance of flexibility. It indicates that experimental group significantly improved the variables better as compared to control group. This may be due to the experimental group under gone a systematic progressive training and the control group have not take part in any formal training in the period of eight weeks.

Conclusion:

- There was a significant difference between experimental and control group on flexibility after the training period.
- There was a significant improvement in on flexibility. However the improvement was in favor of experimental group due to eight weeks of aerobic exercise programme.

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