



EFFECT OF AEROBIC EXERCISES ON FLEXIBILITY AMONG RESIDENTIAL STUDENTS

Dr. Parvati Tambake

Physical Education Director, UG (NEP) Department, Karnataka State Akkamahadevi Women University, Vijayapura

Abstract

This study was investigated the Effect of Aerobic Exercises on Flexibility among Residential Students. To achieve the purpose of the study 60 Residential Students were selected from Karnataka State Akkamahadevi Women University, Vijayapura of Karnataka State. The subjects was randomly assigned to two equal groups (N=60). Group- I underwent Aerobic Exercises (AEG) and group - II was acted as control group (CG). The Aerobic Exercises was given to the experimental group for 6 days per week for the period of Six weeks. The control group was not given any sort of training except their routine work. The standing broad jump test was to measure (Flexibility) before and after training period. The data collected from the subjects was statistically analyzed with 't' test to find out significant improvement if any at 0.05 level of confidence. The result of the present Aerobic Exercises significantly improved Flexibility of Residential Students.

Keywords: *Aerobic Exercises, Flexibility, Residential Students.*

Introduction

Flexibility may be defined as the range of motion in a joint or group of joints or the ability to move joints effectively through a complete range of motion. Our body might have different range of motion or different level of flexibility for different joints (Scott, 2020). The general condition of our muscle system depends age and strength work which we follow. As we aged, naturally we lose strength and size of our muscles and it become less supple and stiffer. This can be affect the range of movement around our joints, which may lead to stiffness in the muscles and joints (Galley).

Kenneth cooper added aerobic exercise. It was popularized by way of people like Jane Fonda. For quite a time frame aerobics became linked only with younger girls dancing to the beat of track. But truly aerobic exercise consists of many sports like swimming, going for walks, brisk on foot, or games like tennis, squash that makes use of the oxygen from the surroundings to burn energy.

Exercise this is finished constantly for a full-size time period at some point of which the requirement of oxygen for carrying out the motor project interest can be met by the body. These exercises are stepped forward the efficiency of heart and cardio respiration device and stimulate the cardiac and lung activities. Some examples of aerobic exercise are free hand physical activities like walking, swimming, biking, brisk on foot, running rope skipping, and dancing etc"

Aerobic workout is the foundation of any fitness application. They are the coronary heart of the problem. They improve and maintain the cardio-breathing device, that's the key to the energy of the whole frame. These sports assist in sending a rich supply of oxygen via the blood to the muscle so that the muscle can then produce power. Determining how tons oxygen the lungs inhale, how a good deal blood the heart pumps, and how much oxygen the muscle use, whilst exercise vigorously are the excellent degree of standard health. This measure is called the maximum respiration ability. That is cardio electricity.



Aerobic fitness displays the potential of the cardiovascular and respiratory device to accommodate the oxygen desires of muscular machine over a sustained length of times. Many times use to describe measurement of bodily health, such as cardiovascular fitness, aerobic respiration health, aerobic-breathing staying power, cardio fitness, cardio paintings ability, and bodily operating capacity and so forth. Cardiovascular staying power improves with the assist of aerobic exercising application it changed into encompass at least 20 to half-hour each day of week. Training program has to be revolutionary in load.

Traditional aerobic dance includes mixture of running, hopping, skipping, jumping, sliding, and swimming moments and a variety of dance steps self to 6 songs. During performance of those dance workouts there's suspension segment of the body all through which each feet one momentarily of the floor. This sort of a change of conventional cardio dance has advanced referred to as "excessive impact" cardio dance. Recently, a modification of conventional cardio dance has developed known as "low impact" aerobic dance. In this technique, one foot maintains contact with the ground always. There by doing away with the suspension phase of the interest consequently the incidence of impact form of have an effect on need to be lessened with low effect dance.

Statement of the Problem

The purpose of the present investigation is to find out Effect of Aerobic Exercises on Flexibility among Residential Students.

Objective of the Study

To find out the significant difference in Flexibility of the subjects by Aerobic Exercises among experimental group.

Hypotheses

It was hypothesized that there would be a significant difference in Flexibility of the subjects by Aerobic Exercises among experimental group.

Methodology

To achieve the purpose of the study 60 Residential Students from Karnataka State Akkamahadevi Women University, Vijayapura of Karnataka State as subjects. Their age ranged from 19 to 23 years. For the present study Randomized Groups Pre-test and Post test Design was used. They were divided into two equal groups of 30 subjects each and assigned to experimental group and control group. 6 weeks training given to the subjects practicing of simple Aerobic Exercises. All the subjects underwent two areas of test Flexibility was to measure Modified sit and reach test of the subjects before Aerobic Exercises and after Aerobic Exercises. The analysis of 't' test was used to analyze the data.

Results and Discussions

After the six weeks Aerobic Exercises there would be significant improvement in Flexibility. The data on Flexibility before and after the Aerobic Exercises of experimental and control groups are analyzed and presented in Table-1.

Hypothesis: It was hypothesized that there would be a significant difference in Flexibility of the subjects by Aerobic Exercises among experimental group.



Table-1: Significance of differences between pre test and post test scores of Flexibility among experimental and control groups (N=30 each group)

variable	Group	Test	Mean	Standard Deviation	t' value	Level of Significance
Flexibility	Experimental Group	Pre- test	13.3333	1.39728	13.096	S
		Post- test	20.2000	1.37321		
	Control Group	Pre- test	14.2667	1.53375	1.000	NS
		Post- test	14.2000	1.47358		

***Significant at 0.05 level**

(Table value required for significance at 0.05 level for 't'-test is 1.671)

From the above table, it can be observed that the obtained 't' value 1.000 is less than Table value 1.671 at 0.05 level of significance in the pre test scores. Hence it was not significant on Flexibility among control and experimental groups of pre test scores. It can also observed from the above table that the obtained 't' value 13.096 is greater than Table value 1.671 at 0.05 level of significance in the post test scores. Hence the stated hypothesis is accepted that there was a significant the Impact of Aerobic Exercises on Flexibility among control and experimental groups. Hence, the hypothesis is statistically proved and stated hypothesis accepted.

The comparison of Flexibility mean scores of pre and post tests among groups is shown in graphical representation in Fig.1

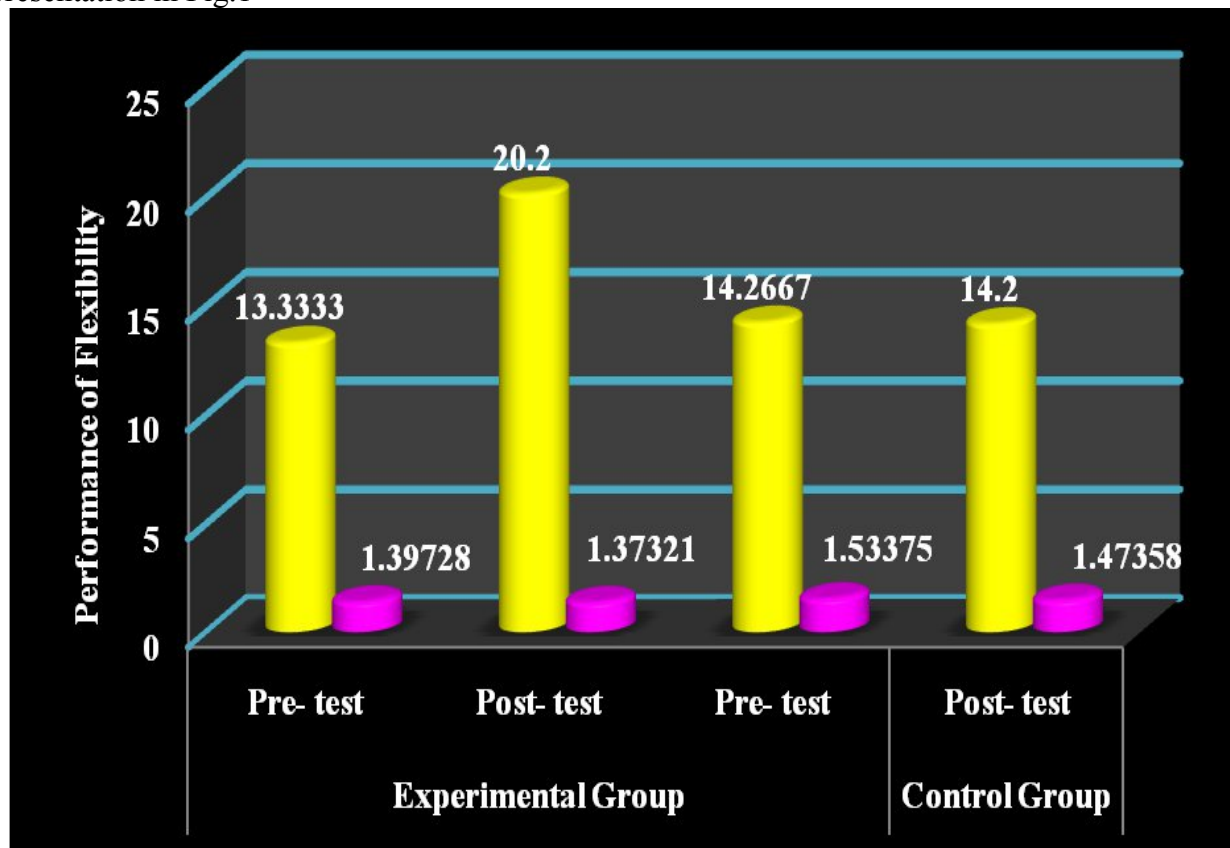


Fig.1.Bar graph showing comparison of Flexibility pre and post test mean scores among experimental and control groups



Conclusion

There was a significant difference between control and experimental group on Flexibility. There was significant improvement were noticed on Flexibility due to six weeks Aerobic Exercises among Residential Students. The study revealed that the above said Flexibility were significantly improved due to the impact of Aerobic Exercises Mambo Cha – Cha – Cha, Basic Left, Basic Right, Grapevine, L, I, Y,V – Step (Step work out) and T- step and on physical fitness variable among Residential Students. The Flexibility had increased significantly Aerobic Exercises group when compared along with the control group.

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