



EFFECT OF AEROBIC DANCE ON SELECTED PHYSICAL FITNESS VARIABLES OF SCHOOL BOYS

Physical Education

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ABSTRACT

The purpose of this study was to find out the effect of aerobic dance on selected physical fitness variables of school boys. The investigator selected 60 school boys from Ramakrishna Mission Vidyalaya High School and GKD Matriculation Higher Secondary School Coimbatore, their ages were ranged from 13 to 15 years. The subjects were divided into two equal groups. Group 1 consist 30 subjects called as the experimental group and group 2 consist of 30 students called as the control group. The group I was assigned aerobic dance for a period of 12 weeks training programme. The control group was not allowed to participate in any kind of treatment. The dependent variables namely cardio respiratory endurance and leg explosive power was selected and measured by One mile run test and Sargent vertical jump test respectively for this study. The data was analysed by the use of paired 't' test. The obtained 't' ratio was tested for significance at 0.05 level of confidence. The analysis of the data revealed that there was a significant improvement on the selected physical fitness variables namely cardio respiratory endurance and leg explosive power by the application of aerobic dance training programme.

KEYWORDS

Cardio respiratory endurance, Leg explosive power.

INTRODUCTION
AEROBIC DANCE

In this competitive world, many people find it hard to dedicate time for physical activities like exercises, although one of their first priorities is to stay in perfect shape. Here comes the easy method of maintaining a perfect figure-dance aerobics. As the name suggests, dance aerobics is an exercise that combines the rhythmic steps of aerobics with graceful dance movements. High impact exercises involve intense jumping actions that are synchronized with the rhythmic beats of the music being played. Low impact exercise, the second type of dance aerobics, involves less jumping action, but more of footwork, which are coordinate with the rhythm of the music being played. Step aerobics is performed in a raised platform, while water aerobics is done in waist-deep water. Typically, a dance aerobic exercise is performed for about 20-30 minutes. The steps are performed in a rhythmic way, with 4 or 8 counts.

Generally every one's life literate with music and dance either professionally or recreation or relaxation purpose. Dance and music is a basic human activity that can be ever changing because it is close to the pulse of life. Nowadays so many health centres, schools and colleges provide fitness program based on "aerobic dance"

METHODOLOGY

For this study 60 school boys were selected from Ramakrishna Mission Vidyalaya high school and GKD Matriculation Higher Secondary School Coimbatore and their ages were ranged from 13 to 15 years. The subjects were divided into two equal groups. Group 1 consist 30 subjects called as experimental group and group 2 consist of 30 students called as control group. The group I was assigned aerobic dance for a period of 12 weeks. The control group was not allowed to participate in any kind of treatment. The subjects were tested in the selected physical fitness variables namely cardio respiratory endurance was tested with One mile run test and leg explosive power was tested with Sargent vertical jump test, before and after the training period. The collected data was treated by using paired t-test. The level of confidence was fixed at 0.05 level.

RESULTS OF THE STUDY

TABLE-I COMPUTATION OF 'T'-RATIO BETWEEN THE PRE AND POST TESTS ON CARDIO RESPIRATORY ENDURANCE OF EXPERIMENTAL AND CONTROL GROUPS

Group	Test	M	SD	σ DM	DM	t- ratio	'p' value
Experimental	Pre Test	8.69	1.22	0.07	0.93	13.23*	0.01
	Post Test	7.76	0.97				
Control	Pre Test	8.69	1.18	0.01	0.01	1.88	0.07
	Post Test	8.68	1.17				

* significance at 0.05 level.

The table I indicates that there was a significant improvement on the Cardio respiratory endurance through the aerobic dance training. It reveals that the obtained t-ratio 13.23 was significant because the 'p' value was lesser than the 0.05, there was significant improvement between pre and post tests on the cardio respiratory endurance variables. So there was a significant improvement on the Cardio respiratory endurance between pre and post tests of experimental group, whereas control group showed no significant improvement. Hence the results indicate that the significant improvement on the Cardio respiratory endurance was due to the aerobic dance alone.

FIGURE - I THE FIGURE SHOWING THE MEAN DIFFERENCE OF PRE AND POST-TESTS SCORES ON CARDIO RESPIRATORY ENDURANCE OF EXPERIMENTAL AND CONTROL GROUPS

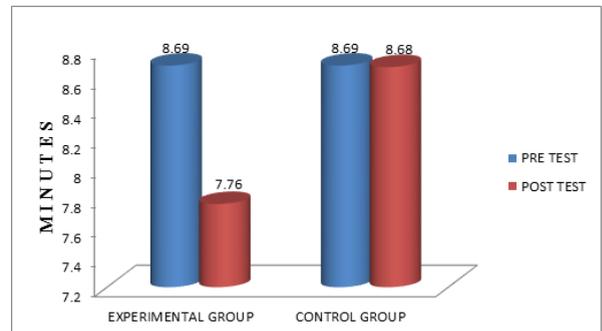


TABLE-II COMPUTATION OF 'T'-RATIO BETWEEN THE PRE AND POST TESTS ON LEG EXPLOSIVE POWER OF EXPERIMENTAL AND CONTROL GROUPS

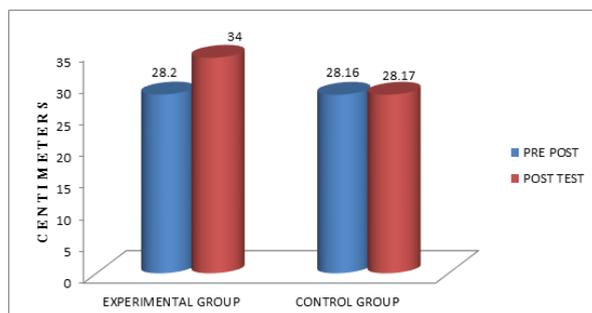
Group	Test	M	SD	σ DM	DM	t- ratio	p
Experimental	Pre Test	28.20	3.57	0.42	5.80	13.75*	0.01
	Post Test	34.00	3.27				
Control	Pre Test	28.16	3.57	0.05	0.01	0.01	1.00
	Post Test	28.17	3.54				

* significance at 0.05 level.

The table II indicates that there was a significant improvement on the leg explosive power through the aerobic dance training. It reveals that the obtained t-ratio 13.75 was significant because the 'p' value was lesser than the 0.05, there was a significant improvement between pre and post tests on the leg explosive power. So there was a significant improvement on the leg explosive power between pre and post tests of experimental group, whereas control group showed no significant improvement. Hence the results indicate that the significant improvement on the leg explosive power was due to the aerobic dance

alone.

FIGURE – II THE FIGURE SHOWING THE MEAN DIFFERENCE OF PRE AND POST-TESTS SCORES OF LEG EXPLOSIVE POWER OF EXPERIMENTAL AND CONTROL GROUPS



DISCUSSION ON FINDINGS

The result of the study reveals that the twelve weeks of aerobic dance training there was a significant improvement on the selected dependent variable Cardio respiratory endurance through the aerobic dance training. It reveals that the obtained t-ratio 13.23 was significant because the 'p' value was lesser than the 0.05, level of confidence. So there was a significant improvement on the Cardio respiratory endurance between pre and post tests of experimental group, whereas control group showed no significant improvement. Hence the results indicate that the significant improvement on the Cardio respiratory endurance was due to the aerobic dance training alone. The results of the study is in consonance with the research done by Mahendran (2009).

The result of the study reveals that the twelve weeks of aerobic dance training there was a significant improvement on the leg explosive power through the aerobic dance training. It reveals that the obtained t-ratio 13.75 was significant because the 'p' value was lesser than the 0.05, level of confidence. So there was a significant improvement on the leg explosive power between pre and post tests of experimental group, whereas control group showed no significant improvement. Hence the result indicates that the significant improvement on the leg explosive power was due to the aerobic dance training alone. The result of the study is in consonance with the research done by Saroja (2017).

CONCLUSIONS

It was concluded that there was a significant improvement on the selected dependent variables namely cardio respiratory endurance and leg explosive power by the application of aerobic dance training programme.

Reference:

1. Mahendran.P. (2009). Effect of 12 Weeks Aerobic dance on Selected Health Related Physical Fitness Variable of Adolescents. Unpublished M.Phil Thesis, Pondicherry University, Pondicherry, 2009.
2. Saroja.S. (2017). Effect of different intensity of step aerobics training on selected motor fitness variables among school girls. International journal of adapted physical education and yoga, 2(9).