



Effect of Aerobic Dance in Improving Physiological and Motor Qualities

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Abstract

Dance is an art, with the expressive entity of creative movement is vital to the development of the total individual. Aerobic dance is essential to healthy cardio-vascular system. Briefly, aerobic dance is an activity that can be sustained for an extended period of time without building an oxygen debt in the muscles. It is a type of dance that overloads the heart and lungs and causes them to work harder than they do when a person is at rest. Aerobic literally means "With air". The main purpose of the study is to analyze the effect of aerobic dance in improving physiological and motor qualities. To achieve the purpose of the study 30 students were randomly selected from different colleges of Mysore district. Their age was ranged from 18 to 25 years. The selected students participated in aerobic dance program for four days in a week totally 12 weeks. The data was collected on Resting heart rate, cardiovascular endurance, agility and explosive power. The data was collected before and after the training periods. Thus the data collected was subjected to t-test to check the significance. The level of significance was set to 0.05. The results of the study showed the significant effect of aerobic dance in improving the selected physiological and motor qualities.

Keywords: Aerobic dance, agility, cardio-vascular endurance.

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Introduction

Dance is an art, with the expressive entity of creative movement is vital to the development of the total individual. Aerobic dance is essential to healthy cardio-vascular system. Briefly, aerobic dance is an activity that can be sustained for an extended period of time without building an oxygen debt in the muscles. It is a type of dance that overloads the heart and lungs and causes them to work harder than they do when a person is at rest. Aerobic literally means "With air". Aerobic dancing is a series of callisthenic exercise movements, accompanied by music, the use of music is a technique of motivation that has been increased in recent years.

Aerobic dance can be defined as continuous movement exercise wherein locomotor movements and the dance steps are performed to music. The variety and style of the movement and the musical accompaniment provide as many forms of aerobic dance programme up to the interests and tastes of people performing them. In contrast to a competitive or solitary fitness programme, aerobic dance provides an opportunity for the people of widely different levels of physical ability to participate together in the same facility, with the same musical accompaniment, engaging in exercise and skills which

are choreographed according to the needs of each individual. A aerobic dance workout is divided into four phases; warm up, skill review, aerobic and cool down. Each phase has its own purposes, without that the workout is incomplete. Each phase and frequency of the aerobic dance programme is necessary to provide the desired benefits. Aerobic dance is a popular mode of exercise for improving and maintaining cardiorespiratory fitness. A typical aerobic dance workout consists of 8 to 10 min of stretching, calisthenics and low intensity exercise. This is followed by 15 to 45 min of either high or low impact aerobic dancing at the target training intensity. Heart rate should be monitored at least 6 times during the exercise to ensure the heart rate stays within the target zone. The 10 min cold down period usually includes more stretching and callisthenic types of exercises.

Objective of the Study

The main purpose of the present study is to know the effect of aerobic dance training in physiological and motor qualities.

Research Methodology

In order to accomplish the stated purpose 30 students were randomly selected from different colleges of Mysore district as subjects. The selected students participated in aerobic dance program for four days in a week totally 12 weeks. Their age was ranged from 18 to 25 years. The data was collected for Resting heart rate,

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cardiovascular endurance, agility and explosive power. The data was collected at the before and after the training periods. The T-test was applied for the collected data to know the differences between the pretest and post-test scores. The significant level was kept to 0.05.

Table 1

Mean, standard deviation and t-ratios of students on the measures of physiological and motor variables

Variables	Group	Mean	Standard. Deviation	t- value
Resting Heart Rate	Pretest score	72.73	1.721	11.833*
	Post test score	68.40	1.429	
Cardiovascular Endurance	Pretest score	1805.00	68.31	13.297*
	Post test score	2021.53	68.27	
Agility	Pretest score	15.42	0.85	17.575*
	Post test score	12.61	0.68	
Standing Broad Jump	Pretest score	1.46	0.07	3.162*
	Post test score	1.53	0.11	

* Significant at 0.05 level of confidence

It is noted from the table 1 that aerobic dance training shows significant effect in improving physiological and motor qualities such as Resting heart rate, Cardiovascular Endurance, Agility and Leg Explosive Power. As in table 1, 't' values for Resting heart rate, Cardiovascular Endurance, Agility and Leg Explosive Power are 11.833, 13.297, 17.575 and 3.162 respectively. The 't' values obtained are significant as they are greater than the table value of 2.04 level of confidence. This shows the positive effect of aerobic dance training in physiological and motor qualities. The mean scores of pretest and posttest of Resting heart rate is found 72.73 and 68.4 respectively, which shows that the heart rate is decreased to about 4.33 beats per minute after participating in aerobic dance. The study reveals the positive effect of aerobic training in improving the Cardiorespiratory Endurance of the students. The distance covered in 12 min walk and run test of children's was increased from average of 1805mts to 2021.53mts i.e., to about 216.53mts. It shows the effect of aerobic dance training in improving cardiovascular endurance.

The mean scores of agility of pretest and posttest is found as 15.42 and 12.61 respectively, which shows better timing in shuttle run after participating in aerobic dance training. The mean scores of leg explosive power of pretest and posttest is found to be 1.46 and 1.53 respectively. The values show the highest leg explosive power after participating in aerobic dance training.

Conclusion

Based on the results of the study it is concluded that selected physiological and motor characters of students such as Resting heart rate, Cardiovascular Endurance, Agility and Leg Explosive Power is found as significant. This shows the effect and importance of

Discussion and Results

In order to accomplish the purpose of the study, the raw data was subjected to statistical analysis and the obtained results are presented in the preceding tables.

aerobic dance training on some of the selected physiological and motor components.

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