

EFFECT OF SELECTED AEROBIC AND TRADITIONAL DANCE TRAINING ON PHYSICAL FITNESS OF SELECTED NON- SPORTS MALE STUDENT IN BHOPAL CITY

<p>Mr. Pramod Malviya Research Scholar Department of Physical Education, Barkatullah Vishwavidyalaya, Bhopal</p>	<p>Dr. Alok Mishra Associate Professor Department of Physical Education, Barkatullah Vishwavidyalaya, Bhopal</p>	<p>Dr. Neeraj Silawat Professor Faculty of Physical Education and Sports Science, Gujarat Vidyapith, Sadra</p>
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Introduction

Physical education classes can assist with increased energy expanded true and physically education teacher can advise student to energy in regular and frequent active. Specially recommended that children Angels in modern physical activities for the least 30 minutes daily moreover children from kinder Joy garden throat grade 12B invalid in a compressive physical education program. Physical education particularly as a part of a prevention program needs to offer enjoyable moderate to vigorous activities outside of school. The art physical education family and feed preferences in their child. Finally they need to be trained to assist their child in Reducing sedentary behavior and build activity into their finally routine The well- being of a Human life is depends on the way a Human body is maintained, as almost every activity of life is performed with the help of body . Nature has created humans to perform various activities efficiently. Though modernization has made human life easier as most of the work is performed by the machines. The sedentary life style of man has reduced the efficiency of humans. The less working capacity of humans has caused many problems like weakness, illness, chronic disease and lifestyle diseases etc. In past our ancestors were very healthy and fully fit. The reason behind that was they had to perform a lot of hard physical activity, like running, walking, jumping, etc. The environment in past was not so polluted, moreover, they had less stress in their life. Today it is as opposite, i.e. physical activity is less, environment is polluted, unhygenical conditions exist all around, life is full stress unbalanced diet etc. All these factors have reduced the efficiency of humans. Today we desperately require physical fitness not only to improve our abilities but also to improve our health and wellness. This will also help to develop healthy environment around us along with community health thus nation will be benefitted. By the physical fitness programmers we can improve our fitness wellness and health.

Dance is a popular of people of all ages and is both a physical activities and a performing art that gives participants an opportunity for aesthetic express through moment dance is a form of communication where ideas and feeling are expressed through a creative art Dances should be integral part of the Educational experience as a form of Recreation provides opportunities of enjoyment self and relaxation dance also can be used as a form of therapy providing opportunities for individual to express their thoughts and feelings hands recreation and dance are allied field of physical exercise science and sports. Community agencies in recreational program then College and university Lamar also over many opportunities to server dancing becoming popular and providing area of specialization for physical educator who wished to render service by helping young person to better understand their bodies and to express themselves through rhythmic activities. As the dance event College and his school become former there is a demand for teachers of physical education who are specialized in the various phases of Dance. In addition to the school and college dance employes are needed in other places such As theatre, private studios, recreational centers.

Methods and Materials

For this study 150 male student studying in Different college of Barkatullah University, Bhopal were randomly selected as subjects. Whose age limit was 17 to 25 years? In this research study 50 subjects were selected in Aerobics training group, 50 in Traditional Dance Training group and 50 in control group. The training period of this research study was limited to 16 (sixteen) weeks. In the present research study the researcher conducted different training effects on college students such as Aerobics training and Traditional Dance Training affects selected Physical fitness components such as Flexibility of Low back, Abdominal strength and endurance, Upper body strength and endurance and Explosive Strength of legs of college students was measured. In order to collect data, a pre-test was conducted before starting the training program and a post-test was conducted after the 16-week training program through various trainings. Statistical analysis of the obtained data was done. In which pre-test, post-test and adjusted means differences were tested for significance. To find out the effects of different training methods on groups, one way analysis of covariance (One Way Analysis of Covariance) test was applied and differences between means were tested by Least Significant Difference Post Hoc test at 0.05 levels.

Table – 1 Analysis of covariance of two experimental and one control group of Flexibility of low back test performance in college students

Test	Aerobic Training Group	Traditional dance Training Group	Control Group	SS		DF	MSS	F
				(A)	(W)			
Pre Mean	14.74	13.88	13	(A)	75.69	2	37.84	18.36*
				(W)	302.9	147	2.06	
Post Mean	16.24	15	14.12	(A)	113.44	2	56.72	26.86*
				(W)	310.4	147	2.11	
Adjusted mean	15.45	14.99	14.91	(A)	7.14	2	3.57	8.37*
				(W)	62.32	146	0.42	

*Level of significance at 0.05 level 'F' = 0.05 (2,147) = 3.06

Above Table- 4 shows all the statistical data of pre-test and post-test means and analysis of covariance 'F'. Accordingly, pre-test mean of Flexibility of low back test performance (Aerobics training group = 14.74, Traditional dance training group = 13.88, control group = 13) the 'F' ratio was found to be 18.36 which compared to the table value (3.06) was found to be significant at 0.05 level. So the division of subjects into experimental group and control group was unsuccessful.

Table – 2 Table showing the critical difference between the means of two experimental and one control group of Flexibility of low back test performance in college students

Means			Mean Difference	Critical Difference
Aerobics Training	Traditional Dance Training	Control		
15.45	14.99		0.46*	0.25
	14.99	14.91	0.08*	
15.45		14.91	0.54*	

Significance level at 0.05

In the above Table - 5 the difference between the adjusted means of the two experimental group and one control group of Flexibility of low back test performance can be clearly seen. The mean difference shown in the above table shows Aerobics Training – Traditional Dance Training and Aerobics Training – control Group and Traditional Dance Training Group – Control group. Comparing this with the mean difference makes it easier to understand how much training has improved in which group. As per Table - 5 Aerobics training showed more significant (15.45) level of improvement as compared to other experimental groups. Then there was an improvement in the Traditional Dance Training group (14.99). Significant effect of experimental treatment was observed between the two experimental groups. But the effect of the experimental treatment was observed on all two experimental groups as compared to the control group.

Graph – 1

Graph showing means of two experimental and one control group of Flexibility of low back test performance in college students

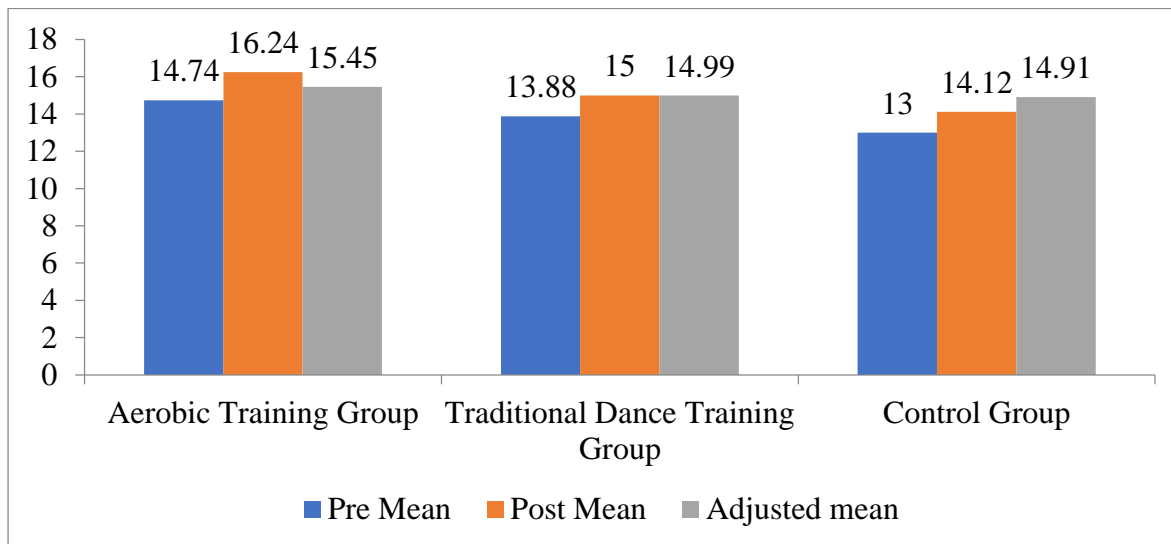


Table – 3

Analysis of covariance of two experimental and one control group of abdominal strength and endurance test performance in college students

Test	Aerobic Training Group	Traditional dance Training Group	Control Group	SS		DF	MSS	F
				(A)	(W)			
Pre Mean	20.68	20.88	16.02	(A)	756.25	2	378.12	5.69*
				(W)	9767.14			
Post Mean	24.78	23.26	16.02	(A)	2191.09	2	1095.54	16.39*
				(W)	9821.18			
Adjusted mean	23.33	21.62	19.10	(A)	426.58	2	213.29	52.20*
				(W)	596.53			

*Level of significance at 0.05 level 'F' = 0.05 (2,147) = 3.06

Above Table- 6 shows all the statistical data of pre-test and post-test means and analysis of covariance 'F'. Accordingly, pre-test mean of abdominal strength and endurance test performance (Aerobics training group = 20.68, Traditional dance training group = 20.88, control group = 16.02) the 'F' ratio was found to be 5.69 which compared to the table value (3.06) was found to be significant at 0.05 level. So the division of subjects into experimental group and control group was unsuccessful.

Table – 4

Table showing the critical difference between the means of two experimental and one control group of abdominal strength and endurance test performance in college students

Means			Mean Difference	Critical Difference
Aerobics Training	Traditional Dance Training	Control		
23.33	21.62		1.71*	0.79
	21.62	19.10	2.52*	
23.33		19.10	4.23*	

Significance level at 0.05

In the above Table - 7 the difference between the adjusted means of the two experimental group and one control group of abdominal strength and endurance test performance can be clearly seen. The mean difference shown in the above table shows Aerobics Training – Traditional Dance Training and Aerobics Training – control Group and Traditional Dance Training Group – Control group. Comparing this with the mean difference makes it easier to understand how much training has improved in which group. As per Table - 7 Aerobics training showed more significant (23.33) level of improvement as compared to other experimental groups.

Then there was an improvement in the Traditional Dance Training group (21.62). Significant effect of experimental treatment was observed between the two experimental groups. But the effect of the experimental treatment was observed on all two experimental groups as compared to the control group.

Graph – 2

Graph showing means of two experimental and one control group of abdominal strength and endurance test performance in college students

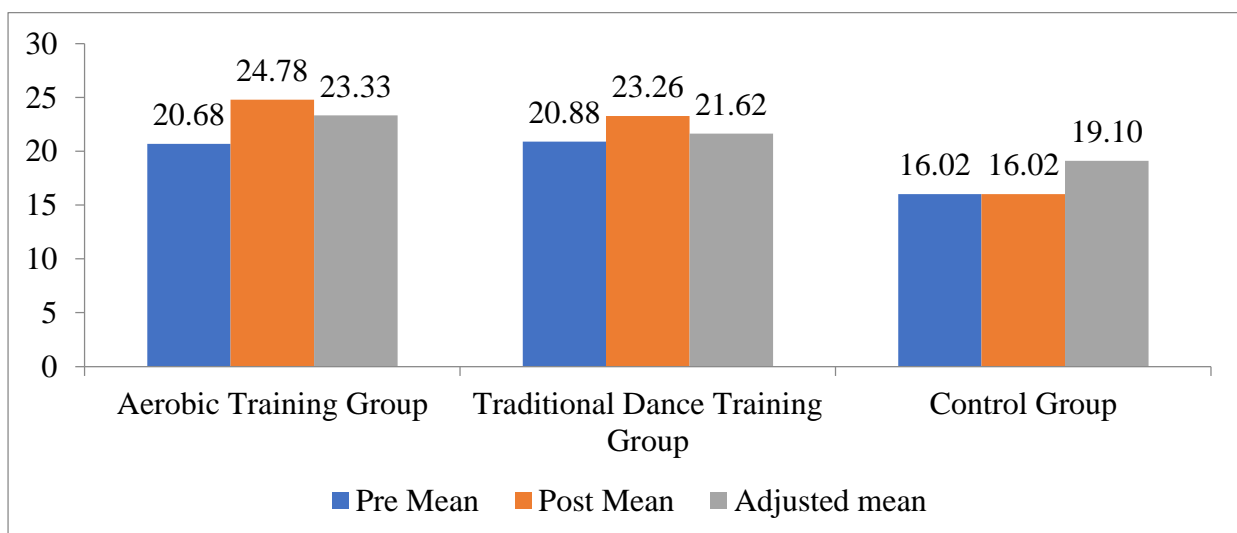


Table – 5

Analysis of covariance of two experimental and one control group of upper body strength and endurance test performance in college students

Test	Aerobic Training Group	Traditional dance Training Group	Control Group	SS	DF	MSS	F	
Pre Mean	22.82	19.44	12.66	(A)	2676.97	2	1338.48	40.09*
				(W)	4906.92	147	33.38	
Post Mean	26.32	21.3	13.98	(A)	3850.97	2	1925.48	57.99*
				(W)	4880.36	147	33.19	
Adjusted mean	21.99	20.21	19.39	(A)	123.82	2	61.911	24.36*
				(W)	371.00	146	2.54	

*Level of significance at 0.05 level 'F' = 0.05 (2,147) = 3.06

Above Table- 8 shows all the statistical data of pre-test and post-test means and analysis of co-variance 'F'. Accordingly, pre-test mean of upper body strength and endurance test performance (Aerobics training group = 22.82, Traditional dance training group = 19.44, control group = 12.66) the 'F' ratio was found to be 40.09 which compared to the table value (3.06) was found to be significant at 0.05 level. So the division of subjects into experimental group and control group was unsuccessful.

Table – 6

Table showing the critical difference between the means of two experimental and one control group of upper body strength and endurance test performance in college students

Means			Mean Difference	Critical Difference
Aerobics Training	Traditional Dance Training	Control		
21.99	20.21		1.78*	0.62
	20.21	19.39	0.82*	
21.99		19.39	2.6*	

Significance level at 0.05

In the above Table - 9 the difference between the adjusted means of the two experimental group and one control group of upper body strength and endurance test performance can be clearly seen. The mean difference shown in the above table shows Aerobics Training – Traditional Dance Training and Aerobics Training – control Group and Traditional Dance Training Group – Control group. Comparing this with the mean difference makes it easier to understand how much training has improved in which group. As per Table - 9 Aerobics training showed more significant (21.99) level of improvement as compared to other experimental groups.

Then there was an improvement in the Traditional Dance Training group (20.21). Significant effect of experimental treatment was observed between the two experimental groups. But the effect of the experimental treatment was observed on all two experimental groups as compared to the control group.

Graph – 3

Graph showing means of two experimental and one control group of upper body strength and endurance test performance in college students

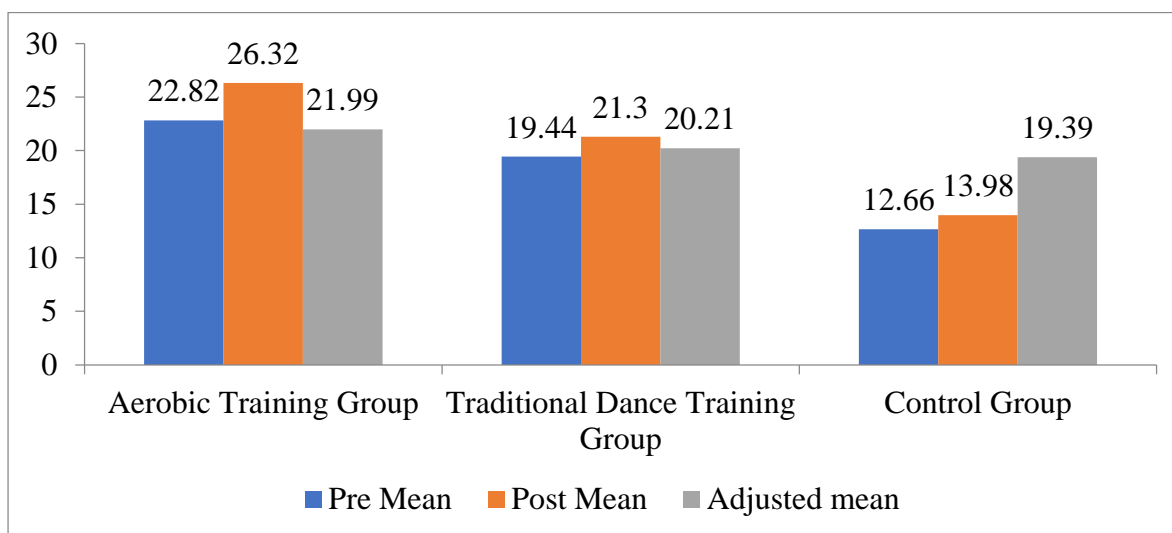


Table – 7

Analysis of covariance of two experimental and one control group of Explosive strength of Legs test in college students

Test	Aerobic Training Group	Traditional dance Training Group	Control Group	SS		DF	MSS	F
				(A)	(W)			
Pre Mean	6.41	6.54	5.88	(A)	11.97	2	5.98	10.85*
				(W)	81.10	147	0.55	
Post Mean	7.35	6.71	6.03	(A)	43.66	2	21.83	035.12*
				(W)	91.36	147	.62	
Adjusted mean	7.25	6.51	6.32	(A)	23.25	2	11.62	36.25*
				(W)	46.82	146	0.32	

*Level of significance at 0.05 level 'F' = 0.05 (2,147) = 3.06

Above Table- 10 shows all the statistical data of pre-test and post-test means and analysis of co-variance 'F'. Accordingly, pre-test mean of Explosive strength of Legs test performance (Aerobics training group = 6.41, Traditional dance training group = 6.54, control group = 5.88) the 'F' ratio was found to be 10.85 which compared to the table value (3.06) was found to be significant at 0.05 level. So the division of subjects into experimental group and control group was unsuccessful.

Table – 8

Table showing the critical difference between the means of two experimental and one control group of Explosive strength of Legs test performance in college students

Means			Mean Difference	Critical Difference
Aerobics Training	Traditional Dance Training	Control		
7.25	6.51		0.74*	0.22
	6.51	6.32	0.19	
7.25		6.32	0.93*	

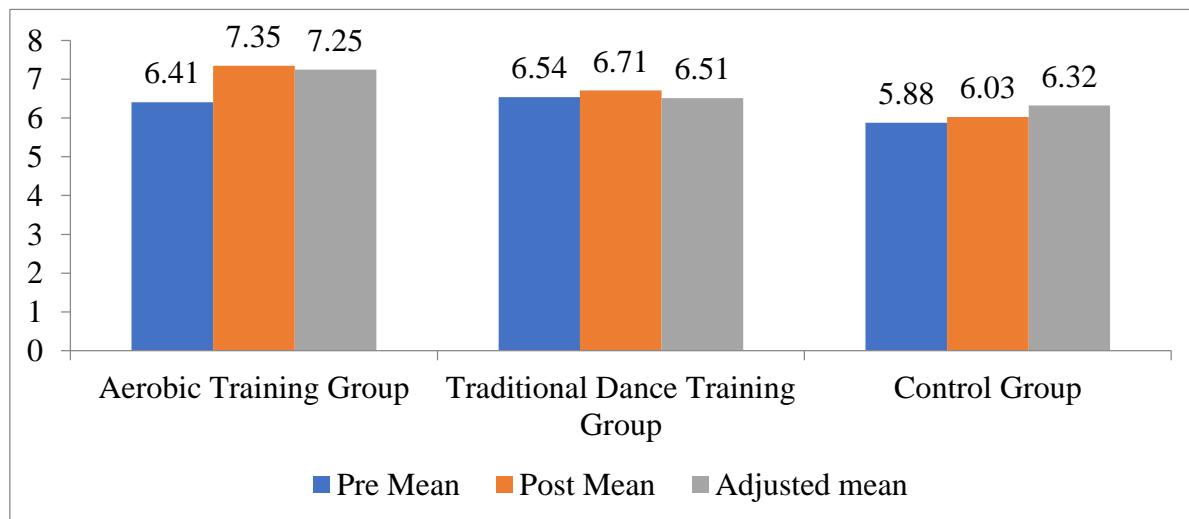
Significance level at 0.05

In the above Table - 11 the difference between the adjusted means of the two experimental group and one control group of Explosive strength of Legs test performance can be clearly seen. The mean difference shown in the above table shows Aerobics Training – Traditional Dance Training and Aerobics Training – control Group and Traditional Dance Training Group – Control group. Comparing this with the mean difference makes it easier to understand how much training has improved in which group. As per Table - 11 Aerobics training showed more significant (7.25) level of improvement as compared to other experimental groups.

Then there was an improvement in the Traditional Dance Training group (6.51). Significant effect of experimental treatment was observed between the two experimental groups. But the effect of the experimental treatment was observed on all two experimental groups as compared to the control group.

Graph – 4

Graph showing means of two experimental and one control group of Explosive strength of Legs test performance in college students



Results of the Study

- ✓ Hence it is clear that due to Aerobics Training and Traditional Dance Training there was a significant improvement in the Flexibility of low back test performance of the subjects compared to the control group. A 16-week systematic Aerobics Training program and Traditional Dance Training program showed significant improvement in the Flexibility of low back test performance of selected subjects.
- ✓ Hence it is clear that due to Aerobics Training and Traditional Dance Training there was a significant improvement in the abdominal strength and endurance test performance of the subjects compared to the control group. A 16-week systematic Aerobics Training program and Traditional Dance Training program showed significant improvement in the abdominal strength and endurance test performance of selected subjects. But Aerobic Dance Training program showed more significant improvement in the abdominal strength and endurance test performance of selected subjects.
- ✓ Hence it is clear that due to Aerobics Training – Traditional Dance Training there was a significant improvement in the upper body strength and endurance test performance of the subjects compared to the control group. A 16-week systematic Aerobics Training program and Traditional Dance Training program showed significant improvement in the upper body strength and endurance test performance of selected subjects. But Aerobic Dance Training program showed more significant improvement in the upper body strength and endurance test performance of selected subjects.
- ✓ Hence it is clear that due to Aerobics Training – Traditional Dance Training there was a significant improvement in the Explosive strength of Legs test performance of the subjects compared to the control group. A 16-week systematic Aerobics Training program and Traditional Dance Training program showed significant improvement in the Explosive strength of Legs test performance of selected subjects. But Aerobic Dance Training program showed more significant improvement in the Explosive strength of Legs test performance of selected subjects.

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