



EFFECT OF WELLNESS DANCE ON CARDIORESPIRATORY FITNESS AND MUSCULAR ENDURANCE OF COLLEGE FEMALE STUDENTS

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ABSTRACT- The purpose of the study was to find out the effect of wellness dance on cardiorespiratory fitness and muscular endurance of college female students. The study was delimited to forty female students (n=40) selected from Mangattuparamba Campus, Kannur University, Kerala. The age group of the participants was ranged from 18-25 years. The selected subjects were equally divided into two groups (n=20) each namely Experimental group and Control group. The Experimental Group underwent Wellness dance Programme. The Control Group did not undergo any training programme. The training period for the present study was delimited to eight weeks, one hour for three days alternatively. The selected dependent variables namely such as cardiorespiratory fitness and muscular endurance. Cardiorespiratory fitness test measured by queen step test unit of measurement in minutes and muscular endurance measured curl ups test unit of measurement in numbers. Pre test-Post test randomized group design which consists of control group and experimental group was used for the research study. The subjects were randomly assigned to two equal groups twenty each and named as Experimental group(EG) and Control group(CG). Descriptive statistics and paired 't' test were applied to test whether there was any significant difference between the mean scores of pre and post test of the experimental and control groups. To test the obtained results on variables, the criterion for statistical significance was set at 0.05 level of confidence (P<0.05).

Keywords: Wellness Dance, Cardiorespiratory Fitness, Muscular Endurance, Female Students.

I. INTRODUCTION:

Health is a dynamic process because it is always changing. We all have times of good health, times of sickness, and maybe even times of serious illness. As our lifestyles change, so does our level of health. Those of us who participate in regular physical activity do so partly to improve the current and future level of our health. We strive toward an optimal state of well-being. As our lifestyle improves, our health also improves and we experience less disease and sickness. When most people are asked what it means to be healthy, they normally respond with the four components of fitness mentioned earlier (cardiorespiratory ability, muscular ability, flexibility, and body composition). Although these components are a critical part of being healthy, they are not the only contributing factors. Physical health is only one aspect of our overall health. The other components of health (Greenberg, 2004) that are just as important as physical health include the following: *Social health*-The ability to interact well with people and the environment and to have satisfying personal relationships. *Mental health*-The ability to learn and grow intellectually. Life experiences as well as more formal structures (e.g., school) enhance mental health. *Emotional health*-The ability to control emotions so that you feel comfortable expressing them and can express them appropriately. *Spiritual health*-A belief in some unifying force. It varies from person to person but has the concept of faith at its core. Wellness is the search for enhanced quality of life, personal growth, and potential through positive lifestyle behavior and attitudes. If we take responsibility for our own health and well-being, we can improve our health on a daily basis. Certain factors influence our state of wellness, including nutrition, physical activity, stress-coping methods, good relationships, and career success. *Cardio respiratory capacity* is the ability of the body to take in oxygen (respiration), deliver it to the cells (circulation), and use it at the cellular level to create energy (bioenergetics) for physical work (activity). In fitness, we also refer to cardiorespiratory capacity as aerobic capacity. This capacity includes aerobic endurance (how long), aerobic strength (how hard), and aerobic power (how fast). Some of the long-term adaptations of cardio respiratory training are: decreased resting heart rate, decreased risk of cardiovascular disease, improved endurance, increased stroke volume and cardiac output. *Muscular capacity* refers to the spectrum of muscular capability. This

includes muscular endurance (i.e., the ability to apply force over a long period of time or to complete repeated muscle contractions); muscular strength (i.e., the ability to generate force, or the maximum amount of force that a muscle can exert in a single contraction); and muscular power (i.e., the ability to generate strength in an explosive way). Some of the long-term adaptations of improving muscular capacity are increased strength, improved muscular endurance, increased basal metabolic rate, improved joint strength, and overall posture.

Physical fitness is essential for all human being in order to discharge his day to day activities. There are different means and methods available to enhance the physical fitness. To keep up our body from disease one should be able to maintain the level of physical fitness such as those situation are our wellness. Everyone can foster his wellness by performing continues and stable physical activity. Now days dance also can improve the physical fitness. The systematic practice for the dance enhance all kinds of physical variable. For the latest methods which can be adopted for the wellness is continuously performing dance practice. So dance also play a vital role in developing the physical fitness quality. Keeping in mind the benefits of dance on different aspects of wellness the researcher makes an attempt to study the potential effects of wellness dance on health related physical fitness variables of college women.

II. METHODS:

Forty female students (n=40) were selected at random from Mangattuparamba Campus, Kannur University, Kerala in the age range of 20 to 24 years. The selected subjects were equally divided into two groups (n=20) each randomly namely Experimental group and Control group. The training period for the present study was delimited to eight weeks, one hour for three days alternatively. The selected dependent variables namely such as cardiorespiratory fitness and muscular endurance. Cardiorespiratory fitness test measured by queen step test unit of measurement in minutes and muscular endurance measured curl ups test unit of measurement in numbers. Pre test-Post test randomized group design which consists of control group and experimental group was used for the research study. The subjects were randomly assigned to two equal groups twenty each and named as Experimental group(EG) and Control group(CG).

Training Program:

The training program was conducted for 1 hour for session in a day, 3 days in a week for a period 8 weeks duration. General warm up-10 minutes, Nestle Wellness dance training- 40 minutes Step, Touch, Arm raise, Jog around, Clap, Walk forward, Arms up, Stretch Walk back, Stretch, Grapevine, Side, chest, up, side, Hip twist, Side, chest, up, side, V-steps, Clap Jump, step, punch Punch, Step, Jump, step, punch, Step, Punch, Jump in place, Roll and kick, Walk forward, Push, bend, clap, Jump in place, Wave, Walk forward, Push, bend, clap, Step, hope, Heels back, Turn, Hands up Fly's, Knee up, Jump, Side, Wiggle, Stretch, Swim, Jump, Side, Wiggle, Stretch, Swim Bicepcurls, Walk diagonally Backward, Bicep curls, Walk diagonally, Back diagonally. Cooling down Exercises-10 minutes.

III. STATISTICAL ANALYSIS:

Descriptive statistics and paired 't' test were applied to test whether there was any significant difference between the mean scores of pre and post test of the experimental and control groups. To test the obtained results on variables, the criterion for statistical significance was set at 0.05 level of confidence ($P < 0.05$).

Table-I

PAIRED 't' TEST FOR THE EXPERIMENTAL AND CONTROL GROUP ON QUEEN COLLEGE STEP TEST FOR CARDIORESPIRATORY ENDURANCE

Experiments Group	Mean	SD	Mean difference	't'	Sig. (2-tailed)
Pre - test	48.48	1.55	2.09	5.307	.000
Post - test	46.38	1.73			
Control Group	Mean	SD	Mean difference	't'	Sig. (2-tailed)

Pre - test	48.81	1.33	.36	1.090	.289
Post - test	48.45	1.84			

*significant at .05 level. The table value at .05 level with df 19 is 2.093

Table -I shows that the pre and post-test means of the control group is 48.81 and 48.45 respectively whereas the pre and post-test means of the experimental group is 48.48 and 46.38. The pre and post-test SD value of the control group is 1.33 and 1.84. Whereas the pre and post-test SD of the experimental group is 1.55 and 1.73, respectively also indicates that, there was a significant difference between the pre and post-test score in cardio respiratory fitness of experiment group, since the calculated 't' value of 5.307 is higher than the tabulated 't' value of 2.093 at .05 level of significance with 19 degree of freedom. In the case of control group there was no significant difference between pre and post test of cardio respiratory fitness, since the calculated 't' value of 1.090 is lower than the tabulated 't' value of 2.093 at .05 level of significance with 19 degree of freedom.

Table-II

PAIRED 't' TEST FOR THE EXPERIMENTAL AND CONTROL GROUP ON QUEEN COLLEGE STEP TEST FOR MUSCULAR ENDURANCE

Experiments Group	Mean	SD	Mean difference	't'	Sig. (2-tailed)
Pre - test	27.50	8.49	3.00	4.243*	.000
Post - test	30.50	7.68			
Control Group	Mean	SD	Mean difference	't'	Sig. (2-tailed)
Pre - test	26.05	5.24	.15	.900	.379
Post - test	25.90	4.99			

*significant at .05 level. The table value at .05 levels with d f 19 is 2.093

Table -II shows that the pre and post-test means of the control group is 26.05 and 25.90 respectively whereas the pre and post-test means of the experimental group is 27.50 and 30.50. The pre and post-test SD value of the control group is 5.24 and 4.99. Whereas the pre and post-test SD of the experimental group is 8.49 and 7.68, respectively also indicates that, there was a significant difference between the pre and post-test score in muscular endurance of experiment group, since the calculated 't' value of 4.243 is higher than the tabulated 't' value of 2.093 at .05 level of significance with 29 degree of freedom. In the case of control group there was no significant difference between pre and post-test of muscular endurance, since the calculated 't' value of .900 is lower than the tabulated 't' value of 2.093 at .05 level of significance with 19 degree of freedom.

IV. DISCUSSION FINDINGS:

The findings of the present study had similarity with the findings of the investigations referred in this study. However, there was a significantly changes of subjects in the present study On the basis of the results obtained it was concluded that the effect of Wellness Dance Training programme of sedentary women had significantly improved the cardiorespiratory endurance and muscular endurance. The most important fundamental requirement for all sports, games and all sedentary life style had most important to the health related physical fitness. The finding is in agreement with the findings of the study conducted Russel.et al (1982). Many of the backwards, side, and twisting movements of dance work. This may be the reason for the improvement of muscular endurance. The finding is in agreement with the findings of the study conducted Vernon Alvin Sevier 1980.

V. CONCLUSIONS:

There was a significant improvement takes place on cardiorespiratory endurance and muscular endurance due to the effect of eight weeks wellness training of college female students.

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