

Effect of Wellness Dance On Muscular Strength And Flexibility Of College Female Students

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ABSTRACT:

The purpose of the study was to find out the effect of wellness dance on muscular strength and flexibility 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. Muscular strength test measured by medicine ball put test unit of measurement in meters and flexibility measured sit and reach test unit of measurement in centimeters. 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, Muscular Strength, Flexibility, Female Students.

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INTRODUCTION

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.

Health benefits of dancing

Dancing can be a way to stay fit for people of all ages, shapes and sizes. It has a wide range of physical and mental benefits including: Improved

condition of your heart and lungs increased muscular strength, endurance and motor fitness increased aerobic fitness improved muscle tone and strength weight management stronger bones and reduced risk of osteoporosis better coordination, agility and flexibility improved balance and spatial awareness increased physical confidence improved mental functioning improved general and psychological wellbeing greater self-confidence and self-esteem better social skills.

Physical and physiological benefits of wellness dance

Wellness dance enhance the endurance capacity of muscles and also it helps to develop lungs capacity. The mobility of joints will be increase. Muscle stretchable ability improve. Coordination of synchronized rethamic movement of the body helps to develop cognitive ability. The nervous system also in great condition.

Wellness dance have great fun and exciting opportunity to develop the best body posture. The rethamic exercise programme provides confidence in mind. Always feel some plusher can keep enthusiasm. By performing the

wellness dance develop some confidence and good healthy habits so can keep good life style. By performing wellness dance can create mental power and also can provide mental relaxation from any kind of human stress.

Female Fitness Facts

The benefits of participation in physical activities are great, and the potential costs of inactivity can be severe. Many girls around the world are not currently able to take advantage of the benefits of regular sports and physical activities due to inequitable access and opportunities. Therefore, a central challenge facing governments, schools, sports groups and communities is to develop forms of physical activity that are sensitive to girls' needs and interests. But rather than focusing on 'girl-friendly' sports, we should be looking for ways to make sports and other physical activities more 'child-friendly' and 'youth-friendly'.

Our reading of the research suggests a number of strategies that promote such 'child-friendly' practices, facilitate regular physical activity, and are supportive of positive sporting experiences.

1. Girls do enjoy engaging in physical activities. Strategies should be implemented which build upon this enjoyment, and allow them to participate as fully as possible, in forms that offer them satisfaction and opportunities for achievement.
2. Practices should be established which recognize the importance of fun, health and social interaction in sports participation.
3. School physical education is a foundation of life-long physical activity. Fundamental movement skills need to be developed from an early age, for all children, with the emphasis on the individual body, rather than sporting outcomes.
4. Some girls regularly engage in sports and physical activities, as an integral part of their lifestyle. Any strategies concerned with raising participation among young people need to remember that neither girls nor boys are 'the problem'; rather, the difficulty lies with the ways in which

physical activities are constructed and presented.

5. It is important to examine and highlight the practices inherent within sports which might deter children from participating. Sports provision may need to be adapted to encourage and accommodate all young people.
6. It is necessary to listen to voices from outside mainstream sports, for example, dance, mixed ability, non-competitive and co-operative activities.
7. Sports programme should reflect local cultural needs if they are to engage and sustain girl's participation.

The organization of sports groups and programmers should include women in key roles, such as coaching and mentors, and role models drawn from within local communities and schools. These should reflect differences in perspectives and interests, and develop close links with schools and communities, to ensure continuity of engagement in sports and physical activities throughout life. The more opportunities that are available for girls to be physically active, the more they are active. Strategies need to be put in place that ensure activities, settings and facilities are easily accessible and safe.

The physical activity preference for girls, they are very busy in life and lazy for doing any physical activity. They thought very much time spend doing any activity. They like simple exercise not like using equipment's. All are doing any job for live in her life, less cost of physical activity they prefer. They also think that sudden movements or exercises are coming any injury so sequence activity and slowly start exercise prefer. Females like watching T.V serial's doing kitchen work, study time also doing physical activity, no need of equipment's, no costly. This type of physical activity like sedentary college females.

In Kerala most of the college women follow a sedentary life style. They find very little or no time for physical activity. Rather they spent most of their time in academic activities and as a result they have an ideal lifestyle. Unlike the earlier situations they spent most of their leisure or recreational time on activities that doesn't demand any physical exertion. Most of them are lazy in doing physical activity and they love to be in their Comfort zone. College women depend on electronic media like I pad, mobile, lap top etc.

for recreation. So here the researcher makes an attempt to identify the effect of wellness dance on selected health related physical fitness of female students.

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 muscular strength and flexibility. Muscular strength test measured by medicine ball put test unit of measurement in meters and flexibility measured sit and reach test

unit of measurement in centimeters. Pre test-Post test randomized group design which consists of control group and experimental group was used

Table-I

Experiments Group	Mean	SD	Mean difference	't'	Sig. (2-tailed)
Pre – test	1.36	0.42	.177	4.029*	.001
Post - test	1.54	0.47			
Control Group	Mean	SD	Mean difference	't'	Sig. (2-tailed)
Pre - test	1.43	0.34	.00	1.878	.076
Post - test	1.42	0.33			

PAIRED 't' TEST FOR THE EXPERIMENTAL AND CONTROL GROUP ON MEDICINE BALL PUT TEST FOR MUSCULAR STRENGTH

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

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.

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 shows that the pre and post-test means of the control group is 1.43 and 1.42 respectively whereas the pre and post-test means of the experimental group is 1.36 and 1.54. The pre and post-test SD value of the control group is 0.34 and 0.33. Whereas the pre and post-test SD of the experimental group is 0.42 and 0.47, respectively.

Table I also indicates that, there was a significant difference between the pre and post-test score in muscular strength of experiment group, since the calculated ‘t’ value of 4.029 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 muscular strength, since the calculated ‘t’ value of 1.878 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 SIT AND REACH TEST FOR FLEXIBILITY

Experiments Group	Mean	SD	Mean difference	‘t’	Sig. (2-tailed)
Pre – test	25.85	4.145	1.70	4.587*	.000
Post - test	27.55	4.536			
Control Group	Mean	SD	Mean difference	‘t’	Sig. (2-tailed)
Pre - test	23.60	3.424	.20	1.285	.2214
Post - test	23.40	3.485			

*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 23.60 and 23.40 respectively whereas the pre and post-test means of the experimental group is 5.85 and 27.55. The pre and post-test SD value of the control group is 3.424 and 3.485. Whereas the pre and post-test SD of the experimental group is 4.145 and 4.536, respectively. Also indicates that, there was a significant difference between the pre and post-test score in flexibility of experiment group, since the calculated ‘t’ value of 4.587 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 also significant difference between pre and post test of flexibility, since the calculated ‘t’ value of 1.285 is lower than the tabulated ‘t’ value of 2.093 at .05 level of significance with 19 degree of freedom.

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 muscular strength and flexibility. On the basis of the results obtained it was found that Strength improved through eight week wellness dance training programme. Strength is very important factor in any physical activity in which muscular force moves the body. Movements occur only through the muscular contraction which is a direct product through strength. Wellness dance training programme can improve basic fitness or strength. The improvement of physical fitness includes the improvement of general health, organic function, increasing strength and stability of the musculo-skeletal system as well. Movements such as jumps floor works or adagio (slow controlled movements) required muscular strength for control, graceful execution, and safety. Muscular strength provides supports to the joints, so as not to compromise alignment and to increase position stability. This allow the ability to maintain the position for longer and it is decreases the likelihood of soft tissue injuries. The finding is in agreement with the findings of the study conducted Viskic et.al. (2007).

One of the investigated variables was the flexibility performance in this study after the eight weeks wellness dance of sedentary college women programme of experimental group was statistically improved. Flexibility is needed for the requirements of daily activities. The improvement in flexibility may be due to proper execution of stretching exercises and movement patterns done in wellness dance training programme had positively effect on flexibility performance. It may due to having hip twisting, stretch, hop, and jump so on in the dance program. This helps to enhance the elasticity of the muscles and increased the range of motion in the particular joints. More over the test was taken for measuring the flexibility was sit and reach, one of the good reason for improve the flexibility, itself help to improve the flexibility. The finding is in agreement with the findings of the study conducted Argo (1988).

Conclusions:

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

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Reference:

1. Ahtinen A, Mattila E, Väikkynen P, Kaipainen K, Vanhala T, Ermes M, Sairanen E, Myllymäki T, Lappalainen R. Mobile mental wellness training for stress management: feasibility and design implications based on a one-month field study. *JMIR mHealth and uHealth*. 2013;1(2):e11.
2. Chou DW, Staltari G, Mullen M, Chang J, Durr M. Otolaryngology Resident Wellness, Training, and Education in the Early Phase of the COVID-19 Pandemic. *Annals of Otolaryngology & Laryngology*.:0003489420987194.
3. Chafetz L, White M, Collins-Bride G, Cooper BA, Nickens J. Clinical trial of wellness training: health promotion for severely mentally ill adults. *The Journal of nervous and mental disease*. 2008 Jun 1;196(6):475-83.
4. Anitha J, Kumaravelu P, Lakshmanan C, Govindasamy K. Effect of plyometric training and circuit training on selected physical and physiological variables among male Volleyball players. *International Journal of Yoga*,

- Physiotherapy and Physical Education. 2018;3(4):26-32.
5. Eckleberry-Hunt J, Van Dyke A, Lick D, Tucciarone J. Changing the conversation from burnout to wellness: physician well-being in residency training programs. *Journal of Graduate Medical Education*. 2009 Dec;1(2):225.
 6. Kumaravelu P, Govindasamy K. Effect of prescribing and monitoring direct and indirect physical activity on selected health related fitness and cardio respiratory variables among obese school boys. *International Journal of Physiology, Nutrition and Physical Education*. 2018;3(1):707-16.
 7. Hamdouni H, Kliszczewicz B, Zouhal H, et al. Effect of three fitness programs on strength, speed, flexibility and muscle power on sedentary subjects. *The Journal of Sports Medicine and Physical Fitness*. 2021 Feb. DOI: 10.23736/s0022-4707.21.12086-9.
 8. Brini, S., Abderrahman, A.B., Clark, C.C.T. *et al.* Sex-specific effects of small-sided games in basketball on psychometric and physiological markers during Ramadan intermittent fasting: a pilot study. *BMC Sports Sci Med Rehabil* **13**, 56 (2021). <https://doi.org/10.1186/s13102-021-00285-1>