



EFFECTIVENESS OF FREESTYLE DANCE AND POWER YOGA ON HEALTH RELATED FITNESS OF THE COLLEGE GIRLS

(Received on: 21 Oct 2016, Reviewed on: 12 Dec 2017 and Accepted on: 24 Jan 2017)

Mr. Adrib Mitra, Research Scholar,
Jadhavpur University, West Bengal

Dr. Gyan Swaroop, Sports Officer,
IIT, Kharagpur, West Bengal

Dr. Vikas B. Prajapati, Assistant Professor,
The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India



Abstract

Present study was taken up by the investigator to compare the freestyle dance and power yoga on health related fitness of college girls. In the present study the subjects were sixty sedentary girls selected from West Bengal. The age of the subjects was ranging between 17 to 22 years. The experimental groups were imparted 60 sessions of training of free style dance and power yoga exercises for 12 weeks. The subjects were equally divided into three groups namely experimental groups i.e. free style dance programme, power yoga and control group. The following variables were selected for this study: (1) Cardiovascular endurance (2) Muscular Strength (3) Flexibility (4) Body Composition (5) Muscular Endurance. 60 session of training of freestyle dance and power yoga exercises were imparted to experimental groups for twelve weeks while control group were not given any formal training. After the completion of twelve weeks of both programs, post test of all variables were conducted in the same manner as in pre test.

Keywords: Freestyle Dance, Power Yoga, Physical Activity, Cardiovascular Endurance, Muscular Strength and Flexibility.

Introduction

Good health provides a solid foundation on which fitness rests and at the same time fitness provides one of the most important keys to health and living one's life to the fullest. Freedom from disease, organic development, efficient movement, alertness of mind and emotional adjustment provide the framework of fitness. It has been said that fitness is not a state for the young; it is for all ages. There are five area of health related fitness: Cardiovascular fitness, Muscular strength, Muscular endurance, Flexibility, Body composition. Obesity is one of the largest health problems affecting many countries. Obesity is defined as having excessive amount of body fat (adipose tissue) necessary for certain bodily functions, but when it accumulates in excessive amounts, it can lead to a wide array of ailments, including heart disease, high blood pressure, increasing cholesterol, diabetes, certain type of cancer, orthopaedic problems musculo-skeletal diseases, decreased flexibility, difficulty breathing. Childhood obesity has become a cause of concern in the modern day living. More children today are overweight or obese than ever before. When a child overweight than what is recommended for a given height, then health problems start. Regular physical



activity can prevent this probability of getting overweight in the early years of life.

Dance is defined as to move the feet and body to rhythm. Dance has been recognized as a physical activity from ancient times. It is a way of expressing joy, happiness and excitement. As an aerobic exercise, dance brings well known benefits to the performer, such as controlling the body weight and reducing the risk of cardiovascular diseases, diabetes, arthritis and other ones commonly associated with physical fitness. In addition, a considerable effect of dance on psychological well-being has been noted.

Yoga which emphasizes developing one's physical flexibility and nurtures the desire for self-discipline. The name Power Yoga says it all. It is one of the several types of Yoga that has the same potential of emulating a rigorous full-body workout and promotes mental stability and concentration. Power Yoga is done by doing a series of Yoga Poses while synchronizing one's breathing patterns to each movement, or Vinyasa, resulting in actions with perfect unity and grace. In the eyes of a person who does not practice Yoga, the movement may seem soft and free-flowing, comparable to a trancelike dance. But in the perspective of a Power Yogi, the process is like a vigorous exercise, pushing and controlling every limb to its limit while maintaining a strong sense of inner peace and concentration to pull off each move flawlessly and gracefully. Observing the importance of the dance and yoga, researcher attempted to find the effect of free style dance and power yoga on sedentary girls of west Bengal.

Methods

In the present study the subjects were sixty girls selected from the West Bengal. The age

of the subjects was ranging between 17 to 22 years. The subjects were evenly divided into three groups namely two experimental and one control group. In the present study equated group design which consisted of control group and experimental groups was used to compare the effect of freestyle dance and power yoga on sedentary girls. The following variables were selected for this study: (1) Cardiovascular endurance (2) Muscular Strength (3) Flexibility (4) Body Composition (5) Muscular Endurance. 60 session of training of freestyle dance and power yoga exercises were imparted to experimental groups for twelve weeks while control group were not given any formal training. After the completion of twelve weeks of both programs, post test of all variables were conducted in the same manner as in pre test.

The data collected on criterion test were analyzed with the application of analysis of co-variance. Further, post hoc test were employed to uncover the significant difference among specific group means. In order to test the hypothesis, the level of significance 0.05 was chosen to test the hypothesis.

Results

The analysis of co-variance for the data collected for the variables i.e. Cardiovascular Endurance, Muscular Strength, Flexibility, Body Composition and Muscular Endurance were applied. The calculated F value of 4.12, 2.01, 3.97, 0.12575 and 10.6507 respectively. For cardiovascular endurance, flexibility and muscular endurance respectively were significant found higher than the table value of 3.23, which suggest that there were significant effect of the both training on selected variables.



TABLE 1
REPRESENTS THE ADJUSTED MEANS AND F-RATIO OF
DIFFERENT GROUPS

Variable	Source of Variation	SS	df	MS	F
Cardiovascular Endurance (600 mt run)	Between Groups	2.61	2	1.30	4.11*
	Within Groups	17.12	54	0.32	
	Total	19.73	56		
Muscular Strength (Standing Broad Jump)	Between Groups	389.31	2	194.66	2.015
	Within Groups	5216.57	54	96.60	
	Total	5605.88	56		
Flexibility (sit and reach)	Between Groups	13.62	2	6.81	3.97*
	Within Groups	92.55	54	1.71	
	Total	106.17	56		
Body Composition (Body Fat %)	Between Groups	0.036	2	0.02	0.12
	Within Groups	7.70	54	0.14	
	Total	7.74	56		
Muscular Endurance (sit ups)	Between Groups	274.84	2	137.42	10.65*
	Within Groups	696.74	54	12.90	
	Total	971.58	56		

*Significant at 0.05 level Tab F (2, 56) = 3.16

The improvement on cardiovascular endurance were more found lower in power yoga group as the yoga also helps to control the breath. The higher adjusted mean value of the flexibility in power yoga group indicated that the power yoga can improve the flexibility in sedentary girls. It was evident from the result that the power yoga training can help in more significantly than the freestyle dance in muscular endurance.

Conclusion

On the basis of the findings of the research following conclusions were drawn:-

The improvement in cardiovascular endurance was found after following the power Yoga Exercises and freestyle dance program.

The power Yoga Exercises and freestyle dance program have significantly improved the score of flexibility.

Significantly increased level of muscular endurance was found by the administering of both experimental programs in comparison to control group.

References

- Angioi M, Metsios GS, Twitchett E, Koutedakis Y, Wyon M. (2009), Association between selected physical fitness parameters and esthetic competence in contemporary dancers. *J Dance Med Sci.* 13(4):115-23.
- Bell, J.M. and Bassey, E.J.(1994), "A Comparison of the Relation between Oxygen Uptake and Heart Rate during Different Styles of Aerobic Dance and a Traditional Step Test in Women", *European Journal of Applied Physiology*, 68(1).
- Ceylan, Halil İbrahim, İrez, Gönül Babayiğit and Saygın, Özcan (2014), "Examining of the Effects of Aerobic Dance and Step Dance Exercises on Some Hematological Parameters and Blood Lipids", *International Journal of Human Science*, 11:2.
- Edlin, Gorden and Golanty, Eric (2007), "Health and Wellness" 9th Ed. Jones & Bartlett Publishers.
- Lee, K.J., Yi, Y.J. and Kim, C.N.(2007), "Comparison of the Effects of an Exercise Program in Non-Obese and Obese Women", *Obesity*, 37(5).
- Mayer (1968), "Overweight: Causes, Cost and Control", N.J.: Englewood Cliffs, Prentice- Hall, Inc.
- O'Neill J.R, Pate R.R, Beets M.W(2012), Physical activity levels of adolescent girls during dance classes. *Journal of Physical Activity and Health*, 9(3):382-388.
- Padmanathan, V. and Jhon Joseph, K. (2011), "Effect of Aerobic Exercise on Select Health Related Physical Fitness Variables of Adolescents", *Facts of Sports Science*, Krishna Publications, Triunelveli, India.
- Park, K.(2000), "Preventive and Social Medicine", M/S Banarsidas Bhanot Publisher, New Delhi.
- Ramesh, V.(2011), " Effect of Physical Exercises and Yoga Practice on Health Related Physical Fitness, Basal Metabolic Rate and Lipid Profile Variables of Obese Adolescents", Unpublished Thesis, Pondicherry University, cited on <http://shodhganga.inflibnet.ac.in>
- Robergs, Rober A. and Roberts, Scott O. (2001), "Exercise Physiology For Fitness Performance And Health", Canada: Library Of Congress Cataloguing Publication Data.
- Tremblay M.S. et al., (2011) Systematic review of sedentary behavior and health indicators in school-aged children and youth. *International Journal of Behavioral Nutrition and Physical Activity*, 8:98.