

## Impact of Dance on Physical Fitness

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**Abstract:** A series of steps and movements that body matches the speed and rhythm of a piece of music is known as Dance. It allows people to be more active, socialize and develop creative and physical skills. Regular exercise has been long associated with a fewer visit to the doctor, hospitalization and medication. Physical activity can help to prevent or manage a wide range of health problems and concerns, including stroke, metabolic syndrome, diabetes, depression, and certain types of cancer, arthritis and falls. The main objective of this study is to analyze and describe the impact of dance on our body and mind. Through this article reader can perceive the significance of dance as physical fitness not only entertainment.

**Keywords:** Western dance, classical dance, folk dance, aerobic dance

### Introduction

The body movement rhythmically to music is known as dance (Campbell, 1991). Confidence gained through dance builds social skills, increases self-esteem (Bunker, 1991). Medically dance also prevents heart disease, reduces stress and tension for the mind and body (Seides, 1986). Different genres of dance are eastern classical, western, folk and contemporary-modern practice world widely. 'Dance is considered an activity that offers the involvement of different senses and connects movement to music with self-expression and applies different aspects of personality' (Kaufmann, 2011). Dance and music are basic human activity that can be ever changing because it is close to the pulse of life (Rea, 2014). It is considered an activity that involves coordinating movements with music, as well as brain activation because it is constantly necessary to learn and remember new steps (Douka et al., 2019).

Nowadays so many health centers, schools and colleges provide fitness program (Strand et al., 2010) based on "aerobic dance". Aerobic dancing is a fun way to get fit (Ahmad, & Rosli, 2015). It combines fat burning aerobic movements, muscle-building exercises and stretching into routines that are performed to music. Regular physical activity can improve our muscle strength (Moreira-Pfrimer et al., 2009) and boost our endurance. Exercise and physical activity deliver oxygen and nutrients to our tissues and help our cardiovascular system work more efficiently (Åstrand, 1992). 'It is considered one of the most important factors for lifestyle, maintaining good health in older ages and increasing life expectancy' (Lee et al., 2012). The advanced age changes in physical fitness, increases sensitivity to chronic diseases and disabilities, and reduces the quality of life (Wanderley et al., 2015). We may also feel better about our appearance and our self when we exercise regularly, which can boost our confidence and improve our self-esteem. Physical activity stimulates various brain chemicals that may leave to feeling happier and more relaxed. Man needs vigorous exercises for growth and development. To perform the daily activities in a more efficient manner, a condition of muscles, their strength and endurance are essential to man.

A muscle must be overloaded in order to be strengthened and the fitness of life is not possible without physical activities. Through physical activities alone people were able to survive in this world. The story of evolution throws some light on the nature and types of activities which are an essential part of modern physical activities. Aerobics is an effective physical exercise which is often done according to music. Aerobic exercise is a repetitive activity

that you do long enough and hard enough to challenge heart and lungs (Aquatic Exercise Association., 2017).

### **Methods and material**

Research methodology involves the systematic procedure by which the research starts from the initial identification of the problem to its final conclusion. In this research most of the information are related to secondary sources like books, journals, article, thesis, social sites etc. Researcher's own experience and observation are also included as qualitative sources

### **Physical Fitness**

Fitness is defined as the quality or state of being fit (Corbin & Pangrazi, 2001) in five abilities as Strength, Speed, Endurance, Flexibility and Co-ordination (Gallotta et al., 2009). These five abilities and their complex forms are the basic prerequisites for human motor actions (Senthilkumar et al., 2020). Therefore, the sports performance in all sports depends to a great extent on these abilities. Each sport requires different level of physical fitness that can be called as specific fitness. To achieve specific fitness, the coaches and trainers use different kinds of exercises for training different sports events. There are two types of physical fitness which are, health related physical fitness and performance related physical fitness.

### **Aerobic exercise**

The concept of aerobics stems from a book published in 1968, written by Dr. Kenneth Cooper (Caldwell, 1980) in which author explains that 'aerobic exercise helps prevent disease. He explains that in order to live a healthy life, you must exercise regularly'. Aerobic exercise refers to exercise that involves or improves oxygen consumption by the body (Defina, et al., 2015). Aerobic means "with oxygen", and refers to the use of oxygen in the body's metabolic or energy-generating process (Nandhini, 2013). Many types of exercise are aerobic, and by definition are performed at moderate levels of intensity for extended periods of time. These produce beneficial changes in the body, especially the action of the lungs, heart and blood circulation. Aerobic training is a type of exercise that improves the cardiovascular system, strengthens the heart, and improves the body's ability to deliver oxygen to the muscles. The activities suitable for aerobic training include rapid walking, running, swimming, bicycling, rowing and skiing. Aerobic exercise is any physical activity that requires the heart rate to reach at least 60% of the maximal heart rate for an extended period of time. It is the activity that can be sustained for an extended period of time without developing an oxygen deficit (Artal, & O'Toole, 2003).

Aerobic dance exercises are basically physical exercises that intend to improve the oxygen system. Aerobic means 'with oxygen' and refers to the use of oxygen in the bodies metabolic or energy generating process. Aerobic exercises are generally performed at moderate levels of intensity for extended periods of time. The term aerobic exercise refers to energetic physical activity that requires high levels of oxygen over an extended number of minutes, say 30 minutes. Aerobic exercise directly affects the physiology of human being; it helps a lot in the maintenance of physical and psychological health. It helps in the prevention of many bodily problems such as obesity, arthritis and muscular cramp by developing a healthy body and healthy mind. The process of aerobic exercise is very simple. It involves rhythmical action that moves the body over a distance or against gravity as occurs in dancing, jogging, bicycling, swimming or certain calisthenics. It is a kind of complete physical workout without the feeling of fatigue. Performing aerobic activity with sufficient intensity and duration on a regular basis increases the body's ability to extract oxygen from the blood and burn fatty acids and can reduce the

cholesterol level in the blood and can also help in the prevention of arteriosclerosis or arterial thrombosis.

The specific benefits of aerobic exercise include a better attitude, an emotional lift, thereby increasing the ability to handle stress. They also increase the aerobic threshold and oxygen pickup in lungs which causes to do more exercises with ease. They help to increase fat burning enzymes which induce fat deposits to release fatty acids and burn more fat to produce more calories even while at rest resulting in better hunger control. Aerobic exercise develops better resistance to cold by the improved handling of excess heat. Besides that, they decrease triglycerides low density lipoprotein, and increase high density lipoprotein which help in guarding coronary ailments. They reduce the conversion of sugar to fat leading to decrease in body fat resulting in reduced incidence of hypoglycemia. They also help to raise glycogen storage, hemoglobin levels and muscle mass (Devi, 2018).

### **Aerobic dance**

Aerobic dance is simple, vigorous dancing that gives all the benefits of jogging plus figure-toning exercise. There are a number of reasons why aerobic dance appeals to so many people and why they keep on dancing. Skills and techniques are not important. One can do everything at his/her own level of ability and at his/her own level of aerobic effort, the walking level, the jogging level, or the running level. If he/she can clap, walk, and lift his/her knees, he/she can get through an aerobic dance. The arms usually get very little exercise when an individual jog or walk, but in aerobic dance choreographed arms movements add upper-body toning. While dancing one can burn more calories than by spending the same amount of time exercising on the floor. Maintaining figure firmness and fitness is a lifetime opportunity, so what good is the most effective program if one gets bored with it, treat it as a chore, and finally get burned out and quit. Aerobic dance is a popular mode of exercise for improving and maintaining cardio respiratory fitness.

A typical aerobic dance workout consists of eight to ten minutes of stretching, calisthenics, and low-intensity exercise. This is continued by 15 to 45 min of either high- or low impact aerobic dancing at the target training intensity. Some popular aerobic dances: There are different genres of dance practiced world widely. There are two kinds of physical exercise, such as aerobic and anaerobic training. Aerobic exercise is an exercise that helps the heart and lungs work harder to supply muscles with oxygen, for example aerobics, running, swimming and cycling. Aerobics is brief exercises that do not require the use of oxygen to replenish fuel, for example: lifting weights and running short distances. Many sports can help maintain physical conditions, such as swimming, jogging, cycling, aerobic dance and Zumba.

### **Zumba**

Zumba is a combination of a sports movement with a new dance featured a combination of music and dance. In addition, Zumba is acknowledged as a fun way to exercise and is beneficial in improving cardiovascular fitness. Furthermore, Zumba can help to reduce the skinfold thickness and body mass Zumba uses Latin and hip-hop dance influence to create a dance workout that is fun and effective. The combination of fast and slow dance movements will work body in an aerobic routine. Created by Columbian dance teacher and fitness instructors alberto "beto "perez in the mid-1990s. Mix of Caribbean dance like soca, south American dance like, samba, merengue. The frequency is to get optimal results, it is good to do aerobic exercise 3-5 times per week Indian style form Bollywood, Panjabi- bhangra and even martial arts and many more. Research has shown, over 12 million people all over the world take Zumba classes every year. Lots of different muscle groups at once for total body toning and boost heart health. It's

not hard to see why the activity would be invigorating and freeing. “You have to let go and have fun during Zumba,” Cooper says. Just as some people with anxiety take improve classes to relieve their social skittishness, dancing around other people may help Zumba-goers feel less shy or self-conscious about their bodies. Zumba includes dances that can burn calories and body fat quickly because the movements of Zumba use cardio exercise including jump, spin, and move quickly. Zumba can build 369 calories around 9.5 kcal per minute.

### **Hula-hoops**

Hula hooping is one of the most popular forms of exercise (Garcia-Falgueras, 2016) which is not only fun, but it’s incredibly easy. In four simple steps, anyone can get up and give their hoop a spin. It is a bona-fide piece of workout, equipment that can tone thighs, abdominal, gluteal and arms. Basic hula hooping can burn a massive 450 calories an hour but by adjusting your posture or incorporating other exercises into your routine, you can target all manner of muscle groups. Hula hooping is one of the most popular forms of exercise. Not only is it fun, but it’s incredibly easy. In four simple steps, anyone can get up and give their hoop a spin. The term 'Hula-hoops' came from British sailors who had seen Hula-dancing in the Hawaiian Islands. Before it was a form of storytelling in 1400s (Gale, 2016) which symbolizes never ending circle of life in Native American Indians. Tony white cloud is American hoop dancer where he used multiple hoops to perform stylish dance to woven stories how life is connected with change and transaction. Japan and Indonesia banned the public use of hoops because it was not culturally acceptable to shake one's hips in public. According to American council on exercise, 30 minutes of hooping can burn approximately 230 calories (Music & Murray-Smith 2010).

### **Belly dance**

The dance form we call "belly dancing" is derived from traditional women's dances (Shay & Sellers-Young, 2003) of the Middle East and North Africa. It is beautiful and interesting, more popular in today's societies especially among youth. Dancing is a good cardio-vascular work out and helps increase flexibility. It is suitable for all ages and body types and can be as physical as the dancer chooses to make it Mental health benefits, for many belly dancers, include an improved sense of wellbeing, elevated body image and self-esteem as well as a generally positive outlook that comes with regular enjoyable exercise. The repetitive movements of the dance and the concentration needed to do them can help a mind filled with daily stress to "let go" for a while and relax (Batson, 1990). One effect of stress is that our bodies tense up, causing contractions or spasms in muscle groups, such as those in the neck, shoulders, or back. When a muscle is contracted, lactic acid builds up causing the "soreness" or pain that occurs. Blood flow to the affected muscles decreases as well. The name is entirely western is a solo dance form where torso articulation is must. Great exercise for stomach and lower body part. All above mentioned dance form like Zumba, hula-hoops, belly are known as Aerobic dance worldwide.

### **Impacts of aerobic dance style in Nepal**

Nepal is a multi-lingual, multi-cultural and multi-diverse country. The diverse cultures have made it possible for us to have a great number of folks, traditional, classical, martial, devotional, ritualistic dance and theatrical forms. Folk dances are the dances developed by groups of people that reflect the traditional life of the people. Tradition and culture of a country are generally seen in the art of the state. Nepal, being a vast country has a great and rich cultural heritage that has been handed to the present generation from the previous ones. Without music and dance we cannot imagine the completeness of any Nepalese special celebrations.

In recent days, especially the young generation which influenced by western life styles wants to enjoy in their own music forms and western too. By getting the global standard education they can judge what is right or wrong? They are also very much aware in their physical fitness. They don't want to bind themselves in a particular boundary. Through the social media or sites, they know globally trend of physical fitness. As a result, most of the Nepalese of urban area like Kathmandu, Pokhara, Biratnagar, Dharan, Nepalgunj, Butbal have been made aerobic dance forms as a part of physical fitness in their daily routine rather to adopt traditional yoga and other exercise. Different forms of aerobic dance and its music is more enjoyable than any traditional forms for overall physical exercise. Throughout Nepalese history, physical activity has always been an important part of our lives. Movement conditions our body, sharpens our minds, keeps us alert and efficient throughout the day.”

Modern forms of fitness activities like Zumba, hula-hoops, belly etc. are attracting more Nepalese people every day. Especially housewife and working professional have started devoting their time to fitness activities. Early gym was the only place known as a fitness center where few types of fitness equipment available. Increasing awareness among Nepalese is evident through the stress that put on being healthy not only physically but mentally and socially as well. The fitness business is mounting in present context as there are more than 100 fitness centers within Kathmandu valley.

### Conclusion

Dance and music are a basic human activity that can be ever changing because it is close to the pulse of life. Aerobic exercise directly affects the physiology of human being; it helps a lot in the maintenance of physical and psychological health. It helps in the prevention of many bodily problems. Unhygienic food habit like junk food, fast food in daily life is increasing in recent days. This type of unusual habits is gaining our weight, cardiovascular disease, mental stress, bad cholesterol etc. To control such types of disease, we have to do physical exercise in concerned fitness center under the supervision of good instructor. Physical fitness prevents or treat many chronic health conditions brought on by unhealthy lifestyle or aging. Working out can also help some people sleep better and possibly alleviate some mood disorders in certain individuals. Especially the young generation of Nepal also have been attracted towards this dance form as physical fitness in recent days. This study is limited to the western dances which are popular and practice in Nepal hence further study is needed to address this issue.

### References

- Ahmad, M. F., & Rosli, M. A. A. (2015). Effects of aerobic dance on cardiovascular level and body weight among women. *International Journal of Sport and Health Sciences*, 9(12), 874-882.
- Aquatic Exercise Association. (2017). Aquatic fitness professional manual. Human Kinetics.
- Artal, R., & O'Toole, M. (2003). Guidelines of the American College of Obstetricians and Gynecologists for exercise during pregnancy and the postpartum period. *British journal of Sports Medicine*, 37(1), 6-12.
- Åstrand, P. O. (1992). Physical activity and fitness. *The American journal of clinical nutrition*, 55(6), 1231S-1236S.
- Batson, G. (1990). Dancing fully, safely, and expressively—the role of the body therapies in dance training. *Journal of Physical Education, Recreation & Dance*, 61(9), 28-31.
- Bunker, L. K. (1991). The role of play and motor skill development in building children's self-confidence and self-esteem. *The Elementary School Journal*, 91(5), 467-471.
- Caldwell, F. (1980). Kenneth Cooper: Preaching the gospel of fitness. *The Physician and Sportsmedicine*, 8(5), 114-123.

- Campbell, P. S. (1991). Rhythmic movement and public-school music education: Conservative and progressive views of the formative years. *Journal of Research in Music Education*, 39(1), 12-22.
- Corbin, C. B., & Pangrazi, R. P. (2001). Toward a uniform definition of wellness: A commentary. *President's council on physical fitness and sports research digest*.
- DeFina, L. F., Haskell, W. L., Willis, B. L., Barlow, C. E., Finley, C. E., Levine, B. D., & Cooper, K. H. (2015). Physical activity versus cardiorespiratory fitness: two (partly) distinct components of cardiovascular health? *Progress in Cardiovascular Diseases*, 57(4), 324-329.
- Devi, K. V. (2018). *Effect of aerobic dance and pilates training on health related physical fitness components and physiological parameters of college women*. Doctoral dissertation. Bharathiar Universit, Tamilnadu, India. <http://shodhganga.inflibnet.ac.in:8080/jspui/handle/10603/292907>
- Douka, S., Zilidou, V. I., Lilou, O., & Manou, V. (2019). *Traditional dance improves the physical fitness and well-being of the elderly*. *Frontiers in aging neuroscience*.
- Gale, C. L. (2016). *A Study Guide for Leslie Silko's "Story from Bear Country"*. Gale, Cengage Learning.
- Gallotta, M. C., Marchetti, R., Baldari, C., Guidetti, L., & Pesce, C. (2009). Linking co-ordinative and fitness training in physical education settings. *Scandinavian journal of medicine & science in sports*, 19(3), 412-418.
- Garcia-Falgueras, A. (2016). Hula hoop in fitness and the centripetal force. *Psychology*, 7(13), 1503.
- Kaufmann K. (2011). Movement as a metaphor: how persistence, the tao and the wisdom of the ostrich helped build school dance programs. *J. Phys. Educ. Recreat. Dance* 82, 37-45.
- Kraus, R. (2014). Becoming a belly dancer: Gender, the life course and the beginnings of a serious leisure career. *Leisure Studies*, 33(6), 565-579.
- Lee I. M., Shiroma E. J., Lobelo F., Puska P., Blair S. N., & Katzmarzyk P. T. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. *Lancet* 380, 219-229.
- Moreira-Pfrimer, L. D., Pedrosa, M. A., Teixeira, L., & Lazaretti-Castro, M. (2009). Treatment of vitamin D deficiency increases lower limb muscle strength in institutionalized older people independently of regular physical activity: a randomized double-blind controlled trial. *Annals of Nutrition and Metabolism*, 54(4), 291-300.
- Music, J., & Murray-Smith, R. (2010, September). Virtual hooping: teaching a phone about hula-hooping for fitness, fun and rehabilitation. In *Proceedings of the 12th international conference on Human computer interaction with mobile devices and services* (pp. 309-312).
- Nandhini, P. (2013). Effect of aerobic dance training on maximal oxygen uptake (VO2Max) of college women. *International Journal of Innovative Research and Development*, 2(6).
- Rea, S. (2014). *Tending the Heart Fire: Living in Flow with the Pulse of Life*. Sounds True.
- Seides, M. R. (1986). Dance/movement therapy as a modality in the treatment of the psychosocial complications of heart disease. *American Journal of Dance Therapy*, 9(1), 83-101.
- Senthilkumar, S., & Kavithashri, P. K. (2020). Analysis of selected physical fitness variables of large area middle area and small area games inter district school level players. *Journal of Sports Science and Nutrition*, 1(2), 22-25.
- Shay, A., & Sellers-Young, B. (2003). Belly dance: Orientalism—exoticism—self-exoticism. *Dance Research Journal*, 35(1), 13-37.
- Strand, B. N., Egeberg, J., & Mozumdar, A. (2010). The prevalence and characteristics of wellness programs and centers at two-year and four-year colleges and universities. *Recreational Sports Journal*, 34(1), 45-57.
- Wanderley F., Oliveira N., Marques E., Moreira P., Carvalho J. (2015). Aerobic versus resistance training effects on health-related quality of life, body composition and function of older adults. *J. Appl. Gerontol.* 34, 143-165.