



ORIGINAL RESEARCH PAPER

Physical Education

COMPARATIVE EFFECT OF YOGIC VS. PHYSICAL EXERCISES ON PSYCHO-PHYSIOLOGICAL HEALTH OF HUMAN BEINGS.

KEY WORDS: Yogic Exercises, Physical Exercises, And Psycho-physiological Health.

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ABSTRACT

People in general these days consider that physical exercise is an acceptable method for securing physical fitness and health. But there has also been a growing trend of belief that the yogic exercises have been proving better in this field especially after a conceptual change in the definition of health since the last century. This belief is also well supported by ever increasing evidence that Yoga provides not only physical fitness but also fitness in different aspects of the "overall health" as conceptualised these days. This study surrounded around the two-way solution that is Yogic Exercises and Physical Exercises and is meant to draw a comparison between the two in order to facilitate adoption of either of the two or both depending on the circumstances, situations, and the requirements of the people at different stages of their lives or at a given point of time. As it was an attempt to compare the effect of Yogic and Physical Exercises, it has covered, inter-alia, points like difference between Yogic and Physical Exercises, All the comparative analysis made in this review study established the priority and preference for Yogic exercises over the Physical exercises.

INTRODUCTION

Physiology and Psychology are the two most vital elements of health as it is perceived presently by the modern civilization. However, the present outlook towards the health took several centuries to evolve. There was an era, pre-historic, when healing practices were clubbed with, and even embedded in, spiritual or better said religious, practices. During this period, all sorts of blind faiths, rituals and even primitive form of surgical practices were in vogue in order to restore well-being. But always the wellness had been the prime motto.

Physical Fitness and how does it differ from 'Health'

"The word "fitness" means the ability to perform physical activities. This includes discussions on the strength of your muscles, joints and ligaments; the state of your endurance; and the power in which your body is capable of moving. This does NOT mean 'health'."

A person who is fit may not necessarily be healthy, and a person who is healthy may not necessarily be fit. "Health" covers a wide array of components which are usually under the umbrella word, "wellness."

Thus while the term 'Health' covers the overall "well-being" or "health" of a person from mind, body to spirit, the term "fitness" refers only to physical activities. So it remains only a part of the total health. Hence we can conclude that a person may be a fit person but not necessarily be healthy and enjoying the total well-being and the vice-versa. This is how health is considered more important as compared to mere physical fitness since health covers many more components of the "well-being" of a person.

Yoga

The kind of diseases, particularly those of degenerative nature, that the present generations are faced with due to the complexities of the present day life style full of anxiety, stress, frustration "weakening the immune system and contributing to development of chronic diseases" compel us to seek refuge to such a health system which provides us a total health that is a perfect health and yet based on the changes in the life style, preventive health practices, cultivating health promotional habits, strengthening the immune system and a regular regime of mindful exercises promoting good behavioural pattern and a spiritual holistic approach, rather than the bio-medical system alone, to ensure an all-around health i.e. physical fitness, better physiological & psychological functioning, mental alertness, emotional balance, spiritual achievement and social well-being etc.

Physical Exercises

The word 'exercise', as is obvious, has been derived from the verb

'exert'. The word 'Exercise' means an "activity that requires physical or mental exertion, especially when performed to develop or maintain fitness and or a skill. According to Medical Dictionary, "Exercise is physical activity that is planned, structured, and repetitive for the purpose of conditioning any part of the body". In these two definitions, stress is laid on two aspects of the purpose for which exercises are performed that is 'fitness' and 'conditioning' of any part of the body. How are these terms- 'fitness' and 'conditioning'-different from, and short of achieving, the overall term of 'health' especially the 'total or integrated' health or a 'perfect' health as already discussed in the foregoing paragraphs, would get elucidated while we discuss the difference between the two types of exercises as in the following paragraph:

Difference between Yogic and Physical Exercises

As we proceed further with the subject of this study explaining comparative effect of Yogic vs. Physical Exercises, it is obvious that we have in mind the superiority of one of these two kinds of exercises. This study covered both the aspects of health-physiological and psychological-while placing yogic exercises and physical exercises to test as to which of these two systems are better suited to the present day human generations under the present situations and circumstances. Therefore, it would be fair and justifiably a right approach towards the study if we understand the basic points of difference between the two types of exercises in question:

a) Unlike physical exercises, Yogasanas do not involve much of physical exertion. When performing yogasanas and other yogic practices, the human body gets tuned to use much less resources (energy/calories) and be more efficient as against physical exercises. Yogasanas also consume less oxygen as compared to physical exercises. **Gore (2005)** while bringing out the difference of mode of performance of these two types of exercises being discussed here concludes, as one of his points, that there was no exertion in performing yogasanas, whereas exercises are performed in fast or speedy manner leading to exertion and fatigue.

b) The aim of yogasanas is to provide an overall health to the human beings by coordinating the body with mind and breathing thereby harmonizing the human body as a whole; but in the case of exercises which involve repetitive dynamic movements, the aim is to build/strengthen a particular muscle or a group of muscles for a particular purpose.

c) While in doing exercises, the body comes under stress and the built-in systems therein (sympathetic predominance of the Autonomic Nervous System) takes over to enable the body to cope

up with such a situation. This results in, inter-alia, an increase in the blood pressure, the pace of respiration, the rate of heart beat, etc., and consequently increased consumption of oxygen and energy by the body. Whereas in performing yogasanas, the respiration rate, the rate of heart beat falls as they are done slowly. **Gore (2005)**

d) Yogasanas and other yogic practices like Pranayam (controlling/ regulating of breathing) particularly the one known as " Bhramari Pranayam", a practice involving creation of a sound like buzzing of "Bhramar" (Black Beetle) generating vibrations in the entire body specially in the brain area, meditation, etc., result in changing of the secretions of all the endocrine glands for the better. This process brings in a two-pronged benefit to the practitioners-one in the psychology and the other in the physiology-each resulting in a better human behavior pattern and an improved metabolic activity respectively. Yogic exercises help to coordinate the endocrinal secretions, balance the reactions and develop positive attitude in life.

e) A review was undertaken by **Alyson et al (2010)** with an objective to bring out a scholarly review of the literature regarding research studies comparing the effects of yoga and exercise on a variety of health outcomes and health conditions. Based on a comprehensive search of the research literature from core scientific and nursing journals, a total of 81 studies were included in the review. The result of this review had indicated that the yoga interventions were seemingly either equal or superior to exercises in nearly every health outcome measured except those measuring physical fitness. The reviewers had, however, suggested that future clinical trials be conducted to examine the distinctions between exercise and yoga, particularly as to how the two modalities may differ in their effects on the Sympathetic Nervous System.

f) According to **Goodwin Angela (2013)**, while Yoga is anabolic which conserve energy, Exercise is catabolic which is capable of breaking down the energy. **Gore (2005)** also says that since muscle building is not the aim of asanas heavy muscular activity is avoided resulting in less energy expenditure than that in physical exercises.

g) Yoga provides unlimited possibilities for growth in self-awareness whereas in exercises there is generally no aspect of self awareness. While practicing 'Pranayama' and also some of the other Yogic practices like Meditation, etc., the practitioners quite often tend to get introvert. Similarly, in performing "Kayotsarga" (A Process of Self-realisation) an important Yogic process of the Jain's system of Yoga, the practitioners do, inter-alia, "Sharir Preksha" (Perception of body), "Shwas Preksha" (Perception of breathing), Chaitanya Kendra Preksha" (Perception of Psychic centres) which are some of the important components of "Kayotsarga", to achieve total relaxation and self awareness.

h) As is well known, the trunk portion of the body contains the organs most of which are directly or indirectly related to maintaining of the overall health of the body-physiological as well as psychological. Even the physical fitness of the body is dependent on health of the body and not the vice-versa. According to **Gore (2005)**, performance of asanas has more effect on the trunk portion of the body as compared to the exercises which are comprised mostly of movements of the extremities. Their effect on the trunk portion of the body is secondary. Hence performance of these exercises generate the fitness to make the skeletal muscles of the extremities powerful but at the cost of increased circulation in the periphery and profuse sweating on account of heavy movements.

CONCLUSION

Thus it transpires from the above account that the basic purpose and technique of Yogic exercises and Physical exercises are distinctly different from each other. Hence their resulting effects are also clearly different. The effect of Yoga goes beyond the body that is its benefits cover not only the physical strength and steadiness of the body but also include physiological and psychological health too. And on top of all, one should not miss the point that Yogasanas were developed as part of spiritual science

to serve the prime goal of Yoga that is the spiritual achievement. The Asanas and their health benefits are thus secondary and support a person to reach the higher practices of Yoga such as Pranayama (Breathing Processes), Pratihara (withdrawal of the five senses), *Dharana* (concentration), Dhyana (Meditation) and Samadhi (state of realization of, and complete absorption in, the higher consciousness that is the Absolute Soul). Whereas in the case of Physical exercises the emphasis is laid on developing or so to say conditioning any specific part or parts of the body and/or on acquiring some skill/s, by undertaking a physical activity which is planned, structured, and repetitive in nature.

Thus we have found that the very basic purpose and therefore the technique of performing Yogic exercises and the Physical exercises are distinctly different. Their effects serving their respective purpose are also more or less different. Therefore there should be no confusion as to the choice by the majority of people between these two types of exercises. Hence all the comparative analysis made in this review study establishes the priority and preference for Yogic exercises over the Physical exercises.

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