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## Relationship analysis and effect of selected yoga asana training on mental health and endurance of female college students

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### Abstract

Yoga has the characteristics particularly in their efforts to improve the human condition. Also, they aim to heal community members and the practitioners act as religious mediators. It works on all aspects of the person: the physical, mental, emotional, psychic and spiritual. The aim of the present study was to find out the effect of yoga on college level female to know the changes in mental health, physical fitness health related- endurance shown by both the groups. And in-order to serve this purpose 120 sedentary youth females who were selected from participating in one month yoga training programme from University College. They were divided into two groups of 60 youth male each. Group “A “underwent Training and Group” B “acted as Control Group. The yogic exercises showed highly significant improvement in the mental health variable from pre to post test of experimental group compared to control group. The yogic exercises showed significant improvement in the endurance variable from pre to post test of experimental group compared to control group.

**Keywords:** yoga, human condition, mental health, yogic exercise

### Introduction

The word yoga can also be used as an extension for knowledge, love, action, etc. Since these are also means of liberation (moksha) and are thus the instruments of reintegration (Yoga). The activities of the mind are said to be five in number. These are ascertaining of facts (pramana) false knowledge (viparya or knowledge contrary to facts), imagination (vikalpa), sleep the experience of being unconscious and memory (smiriti). The modes of ascertaining the real nature of things is direct experience. Deduction there from, and the traditionally transmitted revolution. The mental activity which through sensory perception leads to the exact knowledge of things as they constitute the ascertaining of facts through direct evidence.

Mental activity resulting from the generalization of categories is a deduction (anumana) mental activity contrary to facts constitutes false knowledge and is the result of a defeat (either in the perception or in the object). Memory is exclusively the activity resulting from imprints left upon the mind’s substance by former experiences. The mental activity of sleep is limited to the experience of happiness during sound sleep, which gives rise to such memories as “I slept pleasantly”.

Yoga is usually defined as a union: union between the limited self and the Divine Self. The aim of Yoga is not really to unite us with anything, for we are already united. It is to help us realize our identity with the Divine Self, to make us know and tune into our intrinsic nature.

Yoga is a discipline to improve or develop one’s inherent power in a balanced manner. It offers the means to attain complete self-realization. The literal meaning of the Sanskrit word Yoga is ‘Yoke’. Yoga can therefore be defined as a means of uniting the individual spirit with the universal spirit of God. According to Maharishi Patanjali, Yoga is the suppression of the modifications of the mind.

Yoga means ‘union’ or ‘connection’. In Sanskrit, the word ‘yoga’ is used to signify any form of connection. Yoga is both a state of connection and a body of techniques that allows us to connect to anything. Conscious connection to something allows us to feel and experience that thing, person, or experience. The experience of connection is a state of yoga, a joyful and blissful, fulfilling experience.

Yoga is a science of right living and it works when integrated in our daily life.. The word yoga means ‘unity’ or ‘oneness’ and is derived from the Sanskrit word ‘yuj’ which means ‘to join’. We might already have an idea of what Yoga is but to understand it better, we have to

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know what it has become as well as its roots and beginnings. A quick look at the history of Yoga will help us appreciate its rich tradition and who knows, it might help us incorporate Yoga into our lives. Earliest archaeological evidence of Yoga's existence could be found in stone seals which depict figures of Poses. The stone seals place Yoga's existence around 3000 B.C. Scholars, however, has a reason to believe that For a better discussion of the history of Yoga, we could divide it into four periods: the Vedic Period, Pre-Classical Period, Classical Period, and Post-Classical Period. Still many sports scientists are finding different effects of yoga thorough experimental way.

Yoga is essentially a spiritual discipline based on an extremely subtle science, which focuses on bringing harmony between mind and body. It is an art and science of healthy living. The word 'Yoga' is derived from the Sanskrit root 'Yuj', meaning 'to join' or 'to yoke' or 'to unite'. As per Yogic scriptures the practice of Yoga leads to the union of individual consciousness with that of the Universal Consciousness, indicating a perfect harmony between the mind and body, Man & Nature. According to modern scientists, everything in the universe is just a manifestation of the same quantum firmament. One who experiences this oneness of existence is said to be in yoga, and is termed as a yogi, having attained to a state of freedom referred to as mukti, nirvana or moksha. Thus the aim of Yoga is Self-realization, to overcome all kinds of sufferings leading to 'the state of liberation' (Moksha) or 'freedom' (Kaivalya). Living with freedom in all walks of life, health and harmony shall be the main objectives of Yoga practice. "Yoga" also refers to an inner science comprising of a variety of methods through which human beings can realize this union and achieve mastery over their destiny. Yoga, being widely considered as an 'immortal cultural outcome' of Indus Saraswati Valley civilization – dating back to 2700 B.C., has proved itself catering to both material and spiritual upliftment of humanity. Basic humane values are the very identity of Yoga Sadhana.

### **Aims and Objectives of Yoga**

Yoga' -the very word radiates peace and tranquillity. This feeling probably stems from the etymology of the word. The word Yoga is derived from the Sanskrit word 'Yuj' which essentially means to join or unite. The union referred to be that of the individual self-uniting with Cosmic Consciousness or the Universal Spirit. Yoga is a means to achieve this goal.

According to the Yoga Sutra of Patanjali, the ultimate aim of yoga is to reach "Kaivalya" (emancipation or ultimate freedom). This is the experience of one's innermost being or "soul" (the Purusa). Then one becomes free of chains of cause and effect (Karma) which tie us to continual reincarnation. In Kaivalya one is said to exist in peace and tranquillity, having attained absolute knowledge of the difference between the spiritual which is timeless, unchanging and free of sorrows, and the material which is not.

Yoga has a diverse range of things that it can offer. It could be said that a primary goal of yoga is to gain balance and control in one's life. To free one from confusion and distress. To provide a sense of calm that comes from the practice of yogic exercises and the practice of breath control.

The practice of yoga exercises aims at overcoming the limitations of the body. Other forms of exercise are good but good is not enough, they strain the muscles, joints, the entire skeletal system and cause free radical damage at a cellular level.

Yoga however realigns and rejuvenates the body inside and out, yoga frees the mind from the negative feelings caused by the fast pace of modern life. The practice of yoga installs optimism within you. It helps you to focus better and overcome any obstacles in your way while on your road to perfect health, spiritual contentment, and total well-being.

Yoga will teach you that the goal of every individual's life should be to take the inner journey inside one's self. When there is perfect harmony between mind and body, we achieve total balance and control.

Yoga teaches us that challenges that we all face indicate themselves in either a physical or mental form. When our physical state is not perfect, this causes an imbalance in our mental state. The practice of yoga helps us to overcome that imbalance.

Yogic poses can cure physical ailments and correct the alignment of the body. By learning the practice of yoga you will become totally responsible for yourself. Yoga poses tone the whole body, they strengthen bones and muscles, correct posture, improve breathing, and increase energy. This physical wellbeing has a strengthening and calming impact on the mind.

Practicing yoga poses cleanses and detoxifies the body, by increasing the circulation of fresh blood through the body, you will be able to cleanse and flush out toxins which are the direct result of an irregular lifestyle, unhealthy habits, and poor posture.

Regular practice of the stretches, twists, bends, and inversions – the basic movements of yoga poses – restores strength and stamina to the body. Poses together with the control of breath, rectify physical, physiological, and psychological disorders.

Asanas are based on the three basic human postures of standing, sitting, or lying down. But they are not a series of movements to be followed mechanically. They have a logic, which must be fully comprehended if the pose is to be practiced correctly. The end result of each pose is achieved when all the parts of the body are positioned correctly, with full understanding of the foundations.

To achieve this, you must look to understand the structure of the pose. Realize the fundamentals by imagining how you will adjust and arrange each part of your body, in the given movements. Then, mould the body to fit the structure of the pose, making sure that the balance between both sides of the body is perfect, until there is no undue stress on any one organ, muscle, bone, or joint, instead they are working together as one.

### **Misconceptions about yoga**

For many, the practice of yoga is restricted to Hatha Yoga and Asanas (postures). However, among the Yoga Sutras, just three sutras are dedicated to asanas. Fundamentally, hatha yoga is a preparatory process so that the body can sustain higher levels of energy. The process begins with the body, then the breath, the mind, and the inner self.

Yoga is also commonly understood as a therapy or exercise system for health and fitness. While physical and mental health are natural consequences of yoga, the goal of yoga is more far-reaching. "Yoga is about harmonizing oneself with

the universe. It is the technology of aligning individual geometry with the cosmic, to achieve the highest level of perception and harmony.”

Yoga does not adhere to any particular religion, belief system or community; it has always been approached as a technology for inner well being. Anyone who practices yoga with involvement can reap its benefits, irrespective of one's faith, ethnicity or culture. Traditional Schools of Yoga: These different Philosophies, Traditions, lineages and Guru-shishya paramparas of Yoga lead to the emergence of different Traditional Schools of Yoga e.g. Jnana-yoga, Bhakti-yoga, Karma-yoga, Dhyana-yoga, Patanjali-yoga, Kundalini-yoga, Hatha-yoga, Mantra-yoga, Laya-yoga, Raja-yoga, Jain-yoga, Buddha-yoga etc. Each school has its own principles and practices leading to ultimate aim and objectives of Yoga.

Yogic Practices for Health and Wellness: The widely practiced Yoga Sadhanas (Practices) are: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana (Meditation), Samadhi /Samyama, Bandhas & Mudras, Shat-karmas, Yukta-ahara, Yukta karma, Mantra japa, etc. Yama's are restraints and Niyama's are observances. These are considered to be pre-requisites for the Yoga Sadhanas (Practices). Asanas, capable of bringing about stability of body and mind 'kuryat-tad-asanam-sthairyam...', consists in adopting various body (psycho-physical) patterns, giving the ability to maintain a body position (a stable awareness of one's structural existence) for a considerable length and period of time as well.

Pranayama consists in developing awareness of one's breathing followed by willful regulation of respiration as the functional or vital basis of one's existence. It helps in developing awareness of one's mind and helps to establish control over the mind. In the initial stages, this is done by developing awareness of the 'flow of in-breath and out-breath' (svasa-prasvasa) through nostrils, mouth and other body openings, its internal and external pathways and destinations. Later, this phenomenon is modified, through regulated, controlled and monitored inhalation (svasa) leading to the awareness of the body space/s getting filled (puraka), the space/s remaining in a filled state (kumbhaka) and it's getting emptied (rechaka) during regulated, controlled and monitored exhalation (prasvasa).

Pratyahara indicates dissociation of one's consciousness (withdrawal) from the sense organs which helps one to remain connected with the external objects. Dharana indicates broad based field of attention (inside the body and mind) which is usually understood as concentration. Dhyana (Meditation) is contemplation (focused attention inside the body and mind) and Samadhi – integration.

Bandhas and Mudras are practices associated with pranayama. They are viewed as (the) higher Yogic practices mainly consisting on adopting certain body (psycho-physical) patterns along with (s well as) control over respiration. This further facilitates control over the mind and paves way for higher yogic attainment. Shat-karmas are detoxification procedures, help to remove the toxins accumulated in the body and are clinical in nature.

Yuktahara (Right Food and other inputs) advocates appropriate food and food habits of healthy living. However, the practice of Dhyana (Meditation) helping in

self-realization leading to transcendence is considered as the essence of Yoga Sadhana (The Practice of Yoga).

### Statement

The aim of the investigation was to examine the effect of yoga training on the mental health and endurance of college female students'.

### Definitions

Cardio respiratory fitness /Endurance are the ability to exercise the entire body for extended periods of time without undue fatigue. Endurance is the ability to do sports movements, with the desired quality and speed under the conditions of fatigue

Mental health- It is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to her or his community.

### Method

The aim of the study was to find out the effect of yoga on college level female to know the changes in mental health, physical fitness health related- endurance shown by both the groups. And in-order to serve this purpose 120 sedentary youth males who were selected from participating in one month yoga training programme from University College. The importance of the study was explained to the subjects before getting their consent for the study. They were divided into two groups of 60 youth male each. Group "A" "underwent Training and Group" B "acted as Control Group.

#### A. Mental health - Test

For finding mental health of subjects mental health battery of Dr. Alpana Sen Gupta and Dr. Arun Kumar Singh are used, values are collected through (yes /no) procedure. This questionnaire consists 130 asset of items were retained for test. Generally normal examine having average mental health takes about 25 minutes in giving complete answers. Scoring the answers of those items which tally with the answers given in the scoring key would be given a score. If they don't tally they will be given a score of zero.

#### B. 1.5 Mile run for endurance

The endurance (Cardiovascular) test measured by 1.5 mile run Health related physical fitness test of was taken to determine the cardiovascular efficiency of the subjects. (Cardiovascular fitness) The purpose of these distance runs is to measure maximal functions and endurance of the cardio respiratory system. Students are instructed to run the required distance. A signal, "Ready, go, "or a whistle is used to begin the test. Endurance running is widely accepted as a valid method of measure cardio respiratory fitness.

The 1.5 mile runs are scored to the nearest second.

### Statistics and calculations

In this session each variable's data were first analyzed through Anova, then Ancova and t- test. The analysis report including. Level of Significance chosen was 0.05 for Anova, Ancova. Abbreviations of tables are CG-control group, EG-experimental group, SV- source of variance, MS- mean square. SS- Sum of squares, MS-Mean square.

**a. Mental health – Test**

Mental health	CG	EG	MD	SV	SS	df	MS	F value	P value
Pre test	68.44	68.4	4.37	Between	4.03	1	4.033	.056	.811
		3		With in	8274.33	118	70.121		
				Total	8278.37	119			
Post test	68.43	80.4	13	Between	5070.00	1	5070.00	78.45	.000
		3		With in	7537.47	118	63.88		
				Total	12607.47	119			
Adjusted post test	68.60	80.2	12.67	Between	4814.46	1	4814.46	635.2	.000
		7		With in	885.50	117	7.57	4	
				Total	5699.96	118			

\*Significant at 0.05 level F0.05 (119) =3.92

Post test scores f value is 78.45 > f 0.01(1,118), therefore there is a statistically significant difference of posttest mean mental health score of control and experimental group at 1%

level (P < 0.01). The f value obtained from an ANCOVA is 635.24, which also shows that the adjusted posttest mean difference is statistically significant at 1% level (P < 0.01).

**b. 1.5 Mille run for endurance**

EN	CG	EG	MD	SV	SS	DF	MS	F value	P value
Pre test	26.47	26.61	.20	B	1.20	1	1.21	.187	.665
				W	757.00	118	6.42		
				T	758.20	119			
Post test	26.50	26.53	-.05	B	.094	1	.094	.016	.902
				W	725.68	118	6.15		
				T	725.77	119			
Adjusted post test	26.71	26.46	-.24	B	1.89	1	1.89	31.69	.000
				W	6.98	117	.06		
				T	8.87	118			

\*Significant at 0.05 level F0.05 (119) =3.92

From f-table the 5% level critical value for f distribution with (1,118) df is 0.05=3.92 and that at 1% level f 0.01 is 6.85. Since f < f 0.05 (1,118), there is no statistical significance in the difference between mean pre scores of experimental and control groups (p > 0.05). To examine whether there is any statistically significant pretest to posttest mean difference of endurance scores in the experimental group, paired t test was carried out. The results are shown in table

**Table:** To examine whether there is any statistically significant pretest to posttest mean difference of endurance scores in the experimental group

Pre test	Post test	T value	P value
26.61	26.54	1.98	.053

\*Significant at 0.05 level F0.05 (119) =1.97

From Table 4 the calculated t value for pretest and posttest endurance scores between experimental groups is 1.97. The central value obtained from t- distribution with 59 degrees of freedom at level 0.01, t (59) = 2.58 and at level 0.05, t (59) = 1.96. Since t >01 t (59), there is a statistically significant pre to posttest mean difference score.

**Selected yoga asanas**

1. Suryanamaskar
2. Shavasana
3. Trikonasana
4. Vajrasanasukasana
5. Garudasana
6. Padmasana
7. Simhasana
8. Matsyasana
9. Gomukhasana

10. Ushtrasana
11. Viparithakarni
12. Halasana
13. Bhujangasana
14. Shalabasana
15. Veebareetasalabasana.
16. Makrasana
17. Dhanurasana
18. Chakarasna
19. Paschimothasana
20. Matsyendrasana

**Results and Discussion**

In mental health the yogic asana showed highly significant improvement change shown in experimental group they were significant at 1% percentage level also. In the case of endurance the post test results had shown very low level significant improvement.

**References**

1. Kumar Amresh. Yoga for Healthy Living, Khel Sahitya Kendra, New Delhi 2007.
2. Russ David W, Towse Theodore. Contrasting Influences of Age and Sex on Muscle Fatigue Medicine & Science in Sports & Exercise 2008;40(2):234-241.
3. Currell Kevin, Jeukendrup. Superior Endurance Performance with Ingestion of Multiple Transportable Carbohydrates Medicine & Science in Sports & Exercise 2008;40(2):275-281.
4. Williams Paul. Asymmetric Weight Gain and Loss from Increasing and Decreasing Exercise. Medicine & Science in Sports & Exercise 2008;40(2):296-302.
5. Fed Baumgartner A, Andrew Jakson, Measurement for Evaluation, 4th Edn, Brown Publishers 1991.

6. Gordon Edin, Eric Holanty. Health and Wellness, 5th Edn., Jones and Barlett Publishers 1998.
7. Hoarc Syd. Teach yourself judo, British Library Publications, London 1995.
8. Mangal SK. Essential of Educational Psychology, Published by Prentice-Hall of India. New Delhi 2008.
9. Stephen Davis F. Psychology, Published by Prentice–Hall Inc., New Jersey, Saddle River 1997.