

# Study on the Relation between Yogic Practice and Physical Exercises of School Students

Dr. Nagendra Pal\*

Assistant Professor, Physical Education, Government Girls Degree College, Rampur, Uttar Pradesh

**Abstract** – The study was carried out to assess the effect of yogic and physical exercises on physical, physiological and psychological variables of secondary school students, To see the pre post training effect of different treatment condition on subject, group was classified into three as Experimental-1(yogic) and Experimental-2(Physical exercises) and experiential group-3 as control group. 12 week training was imparted to both experimental group subjects, subject were selected by using purpose random sampling technique, subject were chosen from Govt-secondary school, India, subject age ranging from 14 to 17, The physical research variables such as speed, agility, explosive power and Physiological variables were chosen such as Vital capacity, pulse rate, blood pressure and psychological variables were selected as aggressive, anxiety, emotional intelligence, and social maturity, to collect the negate at pre and posttest situation of experiment various standard test and psychological test were administered on the sub group of the research.

**Keywords:** Yoga, Physical Exercises, Aggressive Behavior

## INTRODUCTION

The procedures of industrialization, modernization and urbanization have negatively affected the way of life of individuals. Because of high return assortments, utilization of concoction manures and bug control in the rural field is delivering harmful nourishment. Mechanical and occupied way of life is expanding worry among the individuals. Progression in the innovation has given an entirely agreeable household life. Individuals are turning out to be so inactive and minor physical development situated. Along these lines coming about the expanding heftiness and creating assortments of incessant disease among the grown-ups. Youngsters are not saved from this circumstance. The rare gainful human asset of the country is at a danger. Youngsters are the sprouting blossoms of the general public. They are the eventual fate of any countries. Their legitimate sustaining is has a heading on their comprehensive improvement of character. The social, mental, and maybe physical improvement has something to do with their accomplishments in future. In this way, they can rise as dependable residents of the country. Countries advancement relies upon its energetic gainful human asset. Sound youth completion is inside all-round advancement of the kids. It is to be noticed that sports and yoga assume the indispensable job in guaranteeing sound wellbeing of the kids. Yoga and sports are the fundamental parts of each one's life. So as to defeat the wellbeing and physical difficulties presented by stationary and post

current life, adjustment of such methods is gotten unavoidable.

The educational program, instruction division, guardians and other concern partners are to a great extent disregarded the need and significance of sports and yoga in training at all the levels. It is so critical to give due significance in the essential and auxiliary degrees of training. Sports and yoga not 2 assistance for the advancement of the physic of kids yet additionally the so as to create youngsters mentally and savvy. It is to be noticed that, the centrality of sports and yoga was not considered and due need was not really given by the essential partners of training. Subsequently, requires a logical investigation of enquiry to demonstrate the job of sports and yoga in by and large improvement of the kids so as to have sound youth in future and advancement of the country.

In this manner, requires a logical investigation of enquiry to demonstrate the job of sports and yoga in by and large advancement of the kids so as to have sound youth in future and improvement of the country. "The present youngsters are tomorrow's residents". Subsequently it is the obligation of everyone worried to see that our future residents are solid, sound and have an ideal character. Youngsters must be dynamic consistently. Physical movement invigorates development and prompts improved physical, mental and passionate wellbeing. Restorative scientists have seen that profoundly dynamic kids are less inclined to experience the ill

effects of hypertension, diabetics, weight and coronary heart sicknesses further down the road. Exercise is additionally known to ease pressure. A few youngsters encounter as a lot of pressure, gloom and nervousness as grown-ups do. Since practice improves wellbeing, a fit kid is bound to be all around rested and rationally sharp. Indeed, even moderate physical exercises have been appeared to improve a kid's aptitude at number juggling, perusing and remembrance. Schools are dynamic setting for advancing wellbeing and health through different corresponded territories, for example, physical training and sports. There is a developing mindfulness that the wellbeing and psycho-social prosperity of little youngsters is of principal significance and schools can give vital methods for kids' wellbeing, confidence, fundamental abilities and conduct. In this setting Blanc and Dikson quote Roberts who says "Sports can influence a kid's advancement of confidence and self-esteem." 3 Children are more joyful lives because of being movement associated with wearing exercises and it has for some time been built up that wellness and improved scholastic execution go connected at the hip. Physical instruction and sports exercises during the school hours decrease fatigue and help keep students mindful in the study halls. It is entrenched truth that investment in physical training and sports exercises if exceptionally valuable to one's wellbeing and prompts improved execution by students in schools, notwithstanding helping them in creating numerous fundamental abilities.

By and large, kids need in any event 30 minutes of incredible movement consistently. Shockingly today youngsters are three to multiple times less dynamic than they were 30 years prior. As kids develop senior, their lives become progressively inactive. Many take to transport or headed to schools where they sit behind a work area throughout the day. At night they sit in front of the TV or play PC games. PCs may have gotten an essential for the present children, however an examination says that the Machines are delivering an "age of weaklings" as kids swap open air play for screen games and the web, reports PTI from London. The Essex college study, in view of a review additionally found that as children less customary exercises, for example, tree climbing, their arm quality dropped 26 percent and their hold 7 percent, the sun detailed. Youngsters' wellness master Dr. Gavin Sandevock who drove the investigation was cited as saying "regularly these exercises supported kids' quality making them ready to lift and hold their very own weight".

## YOGA

Yoga is one such most enjoyable activity everyone can participate. Yoga is the art and study of keeping up physical and mental prosperity that has its cause in India, is among the most antiquated at this point dynamic living customs that is getting progressively well known today. An intense pressure buster, yoga is an instrument of self-evolvement and illuminates,

through physical and mental prosperity. Math-6 measurement it improves the nature of our lives at such a large number of levels. One part of yoga's advantages is to investigate the bond among wellbeing and excellence. Yoga makes youngsters solid; yoga is a workmanship, science and theory. It gives procedures to advance wellbeing at physical, mental, enthusiastic and scholarly levels. Yoga is considered as a type of Mind and body medication. A well known saying in Kannada "Yogi-Nirogi" which implies an individual who practices yoga is liberated from illnesses.

The word Yoga got from Sanskrit word "YUJ" which means to burden, join or join together. This suggests joining or incorporating all parts of the individual body with mind with soul-to accomplish an upbeat, adjusted and helpful life, and profoundly, joining the person with the preeminent. In India,

Yoga is viewed as one of the six parts of traditional way of thinking and is alluded to all through the Vedas-old Indian sacred writings and among the most established messages in presence. The Upanishads are likewise comprehensively philosophical treatises which postdate the Vedas and manage the idea of the "spirit" and universe. Notwithstanding, the inceptions of yoga are accepted to be a lot more seasoned than that, coming from the oral conventions of yogis, where information on yoga was passed on from Guru (spiritual instructor) to Sisya (profound understudy) right back to the originators of yoga, the 'Rishis', who initially started examination concerning the idea of the real world and man's internal world. Legend has it that information on yoga was first passed by Lord Shiva to his better half Parvati and from that point into the lives of men.

## SIX BRANCHES OF YOGA:

1. **Hatha Yoga or Yoga of Postures.** Hatha Yoga is maybe the way of yoga one generally acquainted with since this is the most famous part of yoga. This part of yoga utilizes physical postures or Asana, Breathing Techniques or Pranayama, and Meditation to accomplish better wellbeing, just as otherworldliness. There are numerous styles inside this way Iyengar, Integral, Astanga, Kripalu and Jivamukti to give some examples. On the off chance that one needs a serene personality and a sound body to oblige it, Hatha yoga may simply be the way.
2. **Bhakti Yoga or Yoga of Devotion.** Bhakti Yoga is the way most followed in India. This is the way of the heart and commitment. Yogis who practice this branch see the "one" or the heavenly in everybody and everything. Bhakti Yoga shows an individual to have dedication to the "one" or to Brahma by building up an individual's affection and acknowledgment for all things.

3. **Raja Yoga or yoga of Self-Control.** Raja implies "regal". This way is viewed as the ruler of Yoga and this might be because of the way that the greater parts of its specialists are individuals from strict and profound requests. Raja Yoga depends on the lessons of the Eight Limbs of Yoga found in the Raja yoga sutras. A Raja yogi considers the to be as focal, and in that capacity, regards to oneself and for all creation are essential to this way. They accomplish sense of pride by first figuring out how to be experts of themselves. On the off chance that one wishes to learn discipline, at that point Raja Yoga would consummately suit that need.
4. **Jnana Yoga or Yoga of the Mind.** Yoga is the way of yoga that essentially manages the psyche, and all things considered, it centers around man's insight. Jnana Yogis consider astuteness and insight as significant and they intend to bring together the two to outperform confinements. Since they wish to pick up information, they are available to different methods of reasoning and religion for they accept that an open and sane personality is significant in knowing the soul.
5. **Karma Yoga or Yoga of Service.** Karma Yoga is the way of administration. For in this way, it is accepted that one's current circumstance depends on his past activities. So by doing magnanimous assistance now, one is picking a future that is liberated from adversely and narrow-mindedness. Karma yogis change their disposition towards the great and simultaneously, change their spirits, which prompts an adjustment in their predetermination.
6. **Tantra Yoga or Yoga of customs.** Maybe the most misconstrued of the considerable number of ways, Tantra Yoga is tied in with utilizing customs to encounter what is frightened.

## PHYSICAL FITNESS

What's more, Exercises' an inquiry much of the time posed is the thing that physical wellness is, the articulation produces discussion quickly, for no for the most part acknowledged definition exists. To a doctor, physical wellness may suggest just nonappearance of malady. To a weight-lifter, physical wellness might be synonymous with enormous, babblings muscles. To a wellbeing or physical instructor, physical wellness might be likened with capacity to play out a particular number of callisthenic or to run 600 yards inside a specific time limit. For our motivation physical wellness implies just cardiovascular-aspiratory wellness, that is, a great heart, great veins, and great

lungs. This kind of wellness is the most significant, for an individual's life relies on these organs. Opportunity from ailments or having huge, swelling muscles isn't sufficient. Without satisfactory holds in the cardiovascular-pneumonic frameworks, an individual isn't set up to meet the normal or uncommon worry of day by day life, that is, he isn't physically fit. Yet, how might we know when and in the event that we have arrived at this to some degree otherworldly condition of wellbeing This inquiry can be replied when we talk about the significant segments of physical wellness and the impact of exercises on various body frameworks.

## MOTOR ABILITY

Think for a snapshot of the various and fluctuated factors, for example, balance, adaptability, power and co-appointment, each contributing reliantly to the flawlessness of the all out development. Practically like the autonomous notes of a melodic perfect work of art, these particular variables join to create compassion of development. "The prompt limit of a person to act in many changed tricks or athletic occasions is alluded to as general engine capacity".

## REVIEW OF RELATED LITERATURE

A Study of significant writing is a basic advance to get a perception of what needs to been finished with respect to the issue under any examination. The motivation behind the examination was to discover the impact of shifted bundles of yogic practices on chosen engine capacity, Physiological, hematological and bio-compound factors. The specialist experienced a few diaries, books, magazines, articles and gathered vital and applicable materials for this investigation are exhibited in this section. The surveys of the writing have been ordered under the accompanying headings:

## STUDIES ON MOTOR ABILITY VARIABLES

**Chen T.L. et al. (2009)**, done an examination on "The Effect of Yoga Exercise Intervention on Health Related Physical Fitness in School-Age Asthmatic Children". The investigation contains the accompanying. The reason for this examination was to explore the impact of yoga practice on the wellbeing related physical wellness of school-age youngsters with asthma. The investigation utilized a semi exploratory research plan in which 31 willful kids (practice bunch 16; control group15) matured 7 to 12 years were purposively inspected from one open primary school in Taipei County. The yoga practice program was practiced by the activity bunch three times each week for a successive multi week term. Every hour long yoga session included 10 minutes of warm-up and breathing exercises, 40 minutes of yoga stances, and 10 minutes of chill off exercises. Wellness scores were evaluated at pre-work out

(benchmark) and at the seventh and ninth week after intercession finish.

**Rajakumar J (2010)**, done an exploration on "The Impact of Yogic Practices and Physical Exercises on Selected Physical Variables among Inter-Collegiate Soccer Players". The examination contains the accompanying. The reason for the examination is to dissect the effect of yogic practices and physical exercises on chosen physical factors among intercollegiate soccer players. To accomplish this reason, sixty (60) male intercollegiate soccer players from Chennai were chosen aimlessly. The chose subjects were isolated into three equivalent gatherings of 20 each, in particular yogic practice gathering (Group A), physical exercises gathering (Group B) and control gathering (Group C). The trial bunches have experienced 12 weeks of preparing. The benchmark (Group C) kept up their day by day schedule activities and no unique preparing was given.

**Tran M.D. et al. (2013)**, done an examination on "Impacts of Hatha Yoga Practice on the Health-Related Aspects of Physical Fitness". The examination contains the accompanying. Ten solid, undeveloped volunteers (nine females and one male), running in age from 18-27 years, were concentrated to decide the impacts of Hatha yoga practice on the wellbeing related parts of physical wellness, including strong quality and perseverance, adaptability, cardio respiratory wellness, body synthesis, and aspiratory work. Subjects were required to go to at least two yoga classes for every week for a sum of about two months. Every yoga session comprised of 10 minutes of pranayamas (breath-control exercises), 15 minutes of dynamic warm-up exercises, 50 minutes of asanas (yoga stances), and 10 minutes of recumbent unwinding in savasana (carcass present).

**Madanmohan, Mahadevan S.K. et al. (2018)**, has done an examination on "Impact of Six Weeks Yoga Training on Weight Loss Following Step Test, Respiratory Pressures, Handgrip Strength and Handgrip Endurance in Young Healthy Subjects". The examination contains the accompanying. The present examination was intended to test whether yoga preparing of about a month and a half term balances perspiring reaction to dynamic exercise and improves respiratory weights, handgrip quality and handgrip continuance. Out of 46 sound subjects (30 guys and 16 females, matured 17-multiyear), 23 persuaded subjects (15 male and 8 female) were given yoga preparing and the staying 23 subjects filled in as controls. Weight reduction following Harvard step test (a file of sweat misfortune), greatest aspiratory pressure, most extreme expiratory weight, 40 mm perseverance, handgrip quality and handgrip continuance were resolved when the multi week study period. In the yoga gathering, weight reduction in light of Harvard step test was 64 +/- 30 g after yoga preparing when contrasted with 161 +/- 133 g before the preparation and the thing that matters was 52 critical (n = 15 male subjects, P < 0.0001).

**Ross and Thomas S. (2010)**, done an examination on "The Health Benefits of Yoga and Exercise: A Review of Comparison Studies". The investigation contains the accompanying. Goals: Exercise is viewed as an adequate strategy for improving and keeping up physical and enthusiastic wellbeing. A developing assortment of proof backings the conviction that yoga benefits physical and emotional well-being through down-guideline of the 30 hypothalamic-pituitary-adrenal (HPA) hub and the thoughtful sensory system (SNS). The motivation behind this article is to give an insightful survey of the writing with respect to examine contemplates contrasting the impacts of yoga and exercise on an assortment of wellbeing results and wellbeing conditions. Strategies: Using Pub Med ((R)) and the catchphrase "yoga," a far reaching search of the examination writing from center logical and nursing diaries yielded 81 investigations that met incorporation criteria. These examinations consequently were delegated uncontrolled (n = 30), hold up list controlled (n = 16), or correlation (n = 35). The most widely recognized correlation mediation (n = 10) included exercise. These investigations were remembered for this survey. Results: In the examinations checked on, yoga intercessions seemed, by all accounts, to be equivalent or better than practice in almost every result estimated with the exception of those including physical wellness. Ends: The investigations looking at the impacts of yoga and exercise appear to show that, in both solid and ailing populaces; yoga might be as viable as or superior to anything exercise at improving an assortment of wellbeing related result measures.

## STUDIES ON PHYSIOLOGICAL VARIABLES

**Ramesh V, Sakthignanavel D and Subramaniam P.K. (2010)**, in their paper made an endeavor to test the impact of Yogasanas and pranayama on the chose physiological factors of school boy's. They chose factors incorporate systolic weight, diastolic weight, beat rate and respiratory rate. To accomplish this reason for the investigation, thirty young men in the age gathering of 12 to 15 years were chosen from Jawaharlal NavodayaVidyalaya Higher Secondary School. The subjects were arbitrarily chosen and isolated similarly into two gatherings as control gathering and test gathering. The trial bunches were given yogasanas and pranayama preparing for a time of twelve weeks, the two mornings and nighttimes on five days every week. The benchmark group didn't take part in yogasana and pranayama preparing program. The gathered information were measurably dissected by utilizing investigation of covariance (ANCOVA). The exploratory gathering had a huge enhancement for the chose physiological factors than the benchmark group. This is the affirmation to our speculation.

**Alagesan et. al., (2010)** directed examination on impact of yogasana on chose physical wellness parameters, for example, quality continuance and adaptability. To accomplish this reason for the

investigation thirty men students concentrating in the Department of Physical Education and Sports Sciences, Ann Amalai University, Tamil nadu were haphazardly chosen as subjects. They were separated into two equivalent gatherings. Each gathering comprised of the fifteen subjects Group-I experienced yogasana for three days out of every week for twelve weeks. Group-II went about as control that didn't experience any exceptional training programme separated from their standard physical instruction software engineer.

**OBJECTIVES OF THE STUDY:**

1. To evaluate the impact of yogic and physical exercises practices on Psychological, Motor and Physiological factors of auxiliary school students.
2. To discover the idea of connection exist between yogic practice and physical exercises with Psychological, Motor, and Physiological factors of auxiliary school students.

**RESEARCH METHODOLOGY**

In this part, determination of subjects, choice of variables, direction of subjects, choice of tests, test organization, test design and statistical techniques have been talked about.

**SELECTION OF SUBJECTS:**

150 students of high school, aging 14 to 16 years are randomly selected from Govt. High School.

- a. Control group 50 subjects
- b. Experimental group-1(Yogic exercise) 50 subjects
- c. Experimental group-2(Physical exercise) 50 subjects.

**Table No 1 distributions of sample size**

Sample group	Yogic Group	Physical exercises	Control Group
Total	50	50	50
	150		

**SELECTION OF SUBJECTS:**

**Selection of variables:**

The researcher has looked into the accessible writing in the zone before designing the investigation and dependent on close to home understanding, dialogs held with the guide different specialists and considering different factors, for example, possibility, accessibility of appropriate techniques and instruments the accompanying variables are chosen.

**Motor Variables:**

1. Speed
2. Cardio-respiratory Endurance
3. Leg explosive power
4. Agility

**II. Physiological Variables:**

1. Blood pressure
2. Pulse rate
3. Vital capacity
4. Body fat

**Psychological Variables:**

1. Anxiety
2. Aggression
3. Emotional intelligence and
4. Social Maturity

**Orientation of Subjects:**

The motivation behind the examination and the idea of the preparation program are unmistakably clarified by the scientist before the beginning of the investigation to the subjects. The different tests where the subjects need to take an interest are likewise clarified and illustrated. The subjects are collected in a study hall and afterward the specialist clarified them the nature and motivation behind the examination, the tests designed and the technique to perform and to answer the survey. The tests are led before the Yoga and Physical exercise preparing for control and experimental gatherings. The last test will be led after the finishing of the 12 weeks of the preparation and the equivalent are taken for the investigation. The polls of mental variables are additionally controlled during the preparation.

**DATA ANALYSIS**

**Experimental Design:**

For the present study randomized groups pre-test and post test design is utilized. In this design, subjects are allocated to the experimental and control groups arbitrarily and are given pre-test on the reliant variables for 150 understudies and separated into 59 three groups. The principal group is treated as control group. The subsequent group is treated as experimental group 1 (Yogic exercise group) and the third group is treated as experimental group 2 (physical exercise group). Each group comprises 50 subjects. The preparation has given for a

predetermined timeframe after which three groups are estimated on the reliant variables. The normal distinction between the pre-test and post-test is found for each group is contrasted all together with see if the experimental group delivered a more noteworthy change than the benchmark group. The design can be presented as,

**TABLE 2**

**Table showing the experimental design**

Group	Pre-test	Treatment	Post-test	Difference
Control	Phy.Ex1 and Y1	----	Phy.Ex2 and Y2	P2-P1 & Y2-Y1
Experimental 1	Y1	Yogic exercise	Y2	Y2-Y1
Experimental 2	Phy. Ex 1	Physical exercise	Phy.Ex2	P2-P1

The before and after measure in this design was allowed the examiner to study change and it is frequently alluded to as the old style design for change tests. The principle quality of this design is the underlying randomization which guarantees equality between the groups before experimentation. Also it encourages the experimenter has control of the pre-test has given an extra keep an eye on the balance of the three groups on the needy variables.

For the present study 150 understudies of age 14-16 years, 50 control groups (not experienced any preparation), 50 experimental group (who has experienced Yoga preparing) and 50 experimental group (who has experienced Physical exercise preparing) are 60 studying in Govt. Secondary School are chosen as subjects.

**CONCLUSION**

In the light of the investigation attempted with certain constraint forced by exploratory condition, the accompanying end were drawn .

1. The multi week yogic exercises preparing has altogether and positive effect on the physiological variable, for example, fundamental limit, resting beat among Experimental gathering I of optional school students.
2. There is constructive outcome of multi week yogic exercise preparing in diminishing and principle ting typical status in circulatory strain of systolic and diastolic among the yoga experts bunch
3. There is constructive outcome of twelve physical exercises preparing in improving cardiovascular continuance and diminishing muscle to fat ratio of physical; practice gathering.
4. The yoga practice has emphatically and fundamentally impacted on creating dexterity

execution among the yogic exercise gathering of optional school students.

5. There is certain and noteworthy impact of Physical Exercises on creating leg hazardous power among the exploratory II bunch contrasting their partner.

**REFERENCE**

1. Asha Choudary (2006). "Games that toy with kids Health", Times life, Sunday November 12, 2006, pp. 4
2. B.K.S. Iyengar YOGA, "Path of Holistic Health". Revised Edition published in Great Britain, 2008 ( The definitive illustrated guide by the World's leading Yoga Teacher).
3. Chen T.L. et al. (2009). "Effect of Yoga training on vital capacity and breath holding time", Yoga Mimas xiv:3 and 4, 2009
4. Charles. S. Bucher and Deborka A. (2018). Wuest. Foundation of Physical Education and Sports saint Louis: Time Mirror by college 20-18
5. Rajakumar J (2010). "Application of Measurement to Health and Physical Education" 4th Edn, Prentice Hall Inc, Englewood Cliffs, New Jersey.
6. Corbins Charles B., Lin Us J., Dowill, Ruth Libsey and Homer Julason (2015) Concept in Physical education with Laboratories and Experiment, W.M.C Brown Company Publications, 2016
7. Ramesh V., Sakthignanavel D. and Subramaniam P.K. (2010). Deccan Herald, Thursday May 24, 2011, P.12
8. Tran M. D. et. al. (2013). Dynamic facets of physical education and sports studies. A publication of A manonmanium Sundaranar University edited by Prof. Shanmuganathan.
9. Madanmohan, Mahadevan S.K. et. al. (2018), Physical Measurement for Evaluation in Physical Education (Burgess Publishing, 4th education), Shabu Shan UGC (Emmes Publication)
10. Ross and Thomas S. (2010). "Psychological profile of International remark in Indian Hockey players". Souveniers 7th National Conference of Sports Psychology, Thiruvandrapuram, Dec, 2010. 129
11. Kansal Devinder K. (2016). "Test and Measurement in Sports and Physical education", DVS publications: New Delhi, 2016

12. Krishna Arungeri (2012). "Effect of selected physical exercise and yogic exercises on Physiological variables among the school boys. PhD thesis, Alagappa University.
13. Alagesan et. al. (2010). "Straight Talk about Children and Sport", 1st Indian Edn, (New Delhi :Jain Publishers, 2010),

---

**Corresponding Author**

**Dr. Nagendra Pal\***

Assistant Professor, Physical Education, Government  
Girls Degree College, Rampur, Uttar Pradesh

[nagendra.yoga250676@gmail.com](mailto:nagendra.yoga250676@gmail.com)