# IMPACT OF PHYSICAL EDUCATION AND YOGIC EXERCISES ON PSYCHOLOGICAL ASPECTS LIKE ANXIETY AND DEPRESSION

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## Abstract

This study's main goal is to assess and analyze the influence of physical and yogic activities on different psychological and behavioral elements of secondary and college students. It examines the link between yoga and mental health issues including anxiety. The purpose is to examine the effects of physical and yogic activities on college students' mental health. The researcher investigates the impact of physical and yogic activities on pupils' emotional intelligence. The findings of this investigation will have wide-ranging repercussions. It helps schoolboys build their individuality. Yoga, the study found, had a greater impact on body fat, vital capacity, blood pressure, and pulse rate than other forms of exercise. Incorporating yogic training for children with increased body fat, blood pressure, and pulse rate will be easier. This research also adds to the current body of knowledge in assessing body fat percentage, blood pressure, vital capacity, and pulse rate.

Keywords: Anxiety, Depression, Yoga.

## 1. Introduction

Yoga asanas and practices are referred to as those that are utilized to treat medical conditions when they are discussed in the context of health care. In addition to the above-mentioned yoga practices and teachings, students will learn how to prevent, diminish, or alleviate bodily, mental, and spiritual pain and suffering via the application of yoga practices and teachings. According to the experts, yoga has been proved to develop physical strength and flexibility, as well as to activate and increase respiratory and cardiovascular systems. Reduced stress and anxiety, as well as reduced sadness and chronic pain, have

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all been demonstrated to offer potential advantages. A higher level of enjoyment and a higher quality of life were also discovered to be potential consequences.

Regular exercise has been shown to provide a number of health benefits, including lower mortality and morbidity rates, as well as improved physical and mental health, among other things. An increase in physical activity has been connected to stress-related ailments such as anxiety, depression, and other mental illnesses. Yoga practice, according to the findings of the research, has a stronger influence on body fat, vital capacity, blood pressure, and pulse rate than other types of physical activity. In addition, this study makes major contributions to the present body of knowledge in the specialist field of measuring body fat percentage, blood pressure, vital capacity, and pulse rate, among other things.

## **1.1 Research Objectives**

The primary aim of this study is to review and analyze the impact that the physical as well yogic exercises have on various psychological aspects of the students studying in the secondary schools and colleges.

- To review the relationship between yoga and various psychological aspects like anxiety.
- To analyze the impact of physical as well as yogic exercises on the psychological behavior of students studying in colleges.

# 2. Literature Review

In reaction to an actual or perceived danger, the body responds physiologically by becoming anxious. When you are experiencing general fear or foreboding, you are likely to feel tension. It is a complicated emotional state that may be described as follows: Heavily connected with fear and tear, this emotion is typically associated with failure, whether actual or predicted. It frequently has to do with interpersonal relationships and social settings in which we find ourselves. In most cases, anxiety is accompanied by feelings of rejection and insecurity. According to [1], anxiety is defined as "an unease and a sense of dread that is frequently accompanied with a strong desire to achieve success." As a result, anxiety is created by incorrect adaptations to the stresses and strains of everyday life, and it is exacerbated by overreacting in an attempt to deal with these issues.

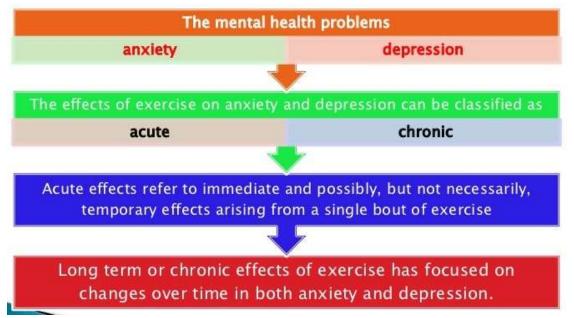
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According to various authors, "major depression or any other sort of clinical depression" to "elevated depressed symptoms" were all among the diagnoses they uncovered in the articles they analyzed. Certain research have shown yoga to be beneficial in reducing depressed symptoms; however, the quality and quantity of these studies are inadequate to evaluate if there is a major therapeutic reason to explore this therapy for depression. The findings of this research suggest that Yoga is advantageous when compared to passive controls, but the findings are less compelling when compared to active controls, which is understandable.

Certain persons who practice yoga on a regular basis have been shown to have lower levels of somatization and anxiety, according to research. According to some study, practicing yoga and meditation on a daily basis may be beneficial in reducing the anxiety associated with performing for musicians.Stress, anxiety, sadness, and mood have been the most often seen effects of yoga practice when it has been investigated. The majority of yoga research have been done with a single group; nevertheless, A few randomized controlled studies (RCTs) have shown the benefits of yoga. Yoga in a randomized controlled study for healthy elderly discovered that participants in a six-month yoga program saw significant benefits.

When evaluated side by side, a substantial body of research reveals that yoga interventions beat passive controls (such as test anxiety) in terms of effectiveness. Yoga therapies were tested against active controls (such as the relaxation response) and against conventional medications, and the majority of studies revealed that yoga interventions had positive outcomes compared to the active controls. However, at this time, there are no meta-analyses available that clearly discriminate between this important worry and other concerns that are relevant. [2].

# REDUCING ANXIETY AND DEPRESSION WITH EXERCISE



Because anxiety disorders are the most common mental disease in the world, they are categorized in the same manner as depressive disorders. According to epidemiological research, there is a significant link between physical exercise and decreased levels of sadness and anxiety. According to one research, persons who exercise often had lower levels of anxiety and depression. Various results suggest that physical exercise might be used as a treatment for these illnesses.

When it comes to the association between physical activity and mood changes, the majority of research demonstrate that they are helpful, especially in the case of aerobic exercise, even if the best intensity for aerobic PE for regulating and lowering symptoms is still unknown. According to one research, a 16-week aerobic exercise program significantly reduced the symptoms of depression in people suffering from major depressive disorder (MDD). In contrast, anaerobic exercise has been shown in several trials to have therapeutic benefits in the treatment of clinical depression. Physical exercise, regardless of kind, has been shown to help lessen the symptoms of anxiety disorders, even if the activity is just for a short amount of time.

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# 3. Research Methodology

To search the research articles, the advanced search option was used in Google Scholar and the following keywords were initially added into the database: "yoga," "therapeutic benefits," and other related terms. This search was carried out in order to gather broad information about yoga's therapeutic effects that may be found in current literature.

"Hatha yoga," "yoga treatment," "stress," "anxiety," "depression," and other key terms or exact phrases were included in our second search to help us narrow down the results. Based on the findings of the first search, it was decided to conduct a second search. They must have been peer-reviewed and published between 1990 and 2009, incorporate some kind of yoga or meditation, and illustrate the results in ways that can be quantified.

A number of measures were followed in order to choose the papers that were included in this book. First and foremost, the title was read. It was stored to a folder if it looked to be relevant to the investigation of the therapeutic benefits of yoga. If it did not, it was deleted. The publications detailing treatments that made use of yoga as a way of achieving a specific health objective were selected for further consideration. The team then meticulously investigated and evaluated each of the articles that were chosen before they were published. The articles picked include a wide range of themes related to the health advantages, application, and therapeutic impacts of yoga, as well as other related concerns.

The Aahper youth physical fitness exam [3], as well as the sit and reach test for assessing physical fitness characteristics, were conducted on the first, second, and third days, respectively, and physiological measurements were taken on the fourth day. The Aahper youth physical fitness exam and the sit and reach test were conducted on the first, second, and third days, respectively. Immediately following the collection of pre-test scores on all of the variables that were selected, the participants participated in a yoga program. Immediately following the collection of data from the 12-week yoga program, a post-test was conducted, and all data on all health indicators were gathered (in the same manner as the data from the pre-test) on all participants.

Students from a government high school in Vijayapur district in Karnataka were asked to participate in the study, which was designed to evaluate the effects of yoga and physical activities on selected

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psychological, physiological, and motor variables. The physiological research variables that were chosen for the study included blood pressure, vital capacity, cardiovascular endurance, body fat, resting pulse rate, motor variables such as speed and agility, and psychological variables such as anxiety, stress, depression, and social maturity variables. The results of the data collection to determine the impact of yoga and physical exercise are discussed in this chapter. The level of anxiety among the students that were subject to the sample was measured with the help of the 'Anxiety Test' proposed by [4]

## 4. Results and Discussion

Individuals are increasingly depending on mind-body therapies to help them manage with stress, in addition to normal psychiatric and pharmaceutical treatments for anxiety and depression. Individuals are increasingly turning to mind-body therapy to help them cope with stress. Yoga, a mind-body practice that has grown in popularity in recent years as a means to enhance wellness and treat a variety of health disorders and illnesses, is becoming increasingly popular as a technique to promote wellness and cure a variety of health infirmities and diseases. Yoga is recommended to promote feelings of well-being and relaxation, as well as self-confidence and body image. In various studies, it has also been shown to improve interpersonal interactions, attention, and irritability, as well as to produce a cheerful outlook on life.

### 4.1 Statistical Analysis

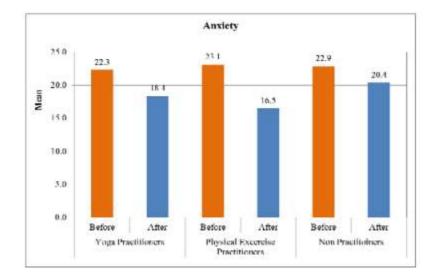
Immediately following a summary of the research findings covering the benefits of yoga and physical activity on a variety of physiological markers, including anxiety, the next section goes deeper into the findings. Participants in the yoga and physical exercise group had an average level of anxiety of 22.32.1, whereas those in the control group had an average level of anxiety of 22.92.4, according to the results of the study (non-practitioners). The average level of anxiety in the yoga group was 22.32.1, the average level of anxiety in the physical exercise group was 23.13.1, and the average level of anxiety in the control group was 22.92.4, according to the results (non-practitioners). The researchers followed up with the participants immediately following the session to determine their level of concern about the session. A substantial increase in anxiety was seen in both yoga practitioners and physical exercise practitioners, as well as in non-practitioners, according to the findings of the study. These three groups experienced an average level of anxiety that ranged from 18.42.9 to 16.52.8 to 20.42.6, according to the data collected.

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		Mean	SD	MD	t' Value	P Value
Yoga Practitioners	Before	22.3	2.1	3.9	3.018	< 0.05
	After	18.4	2.9		c, c	
Physical Exercise Practitioners	Before	23.1	3.1	6.6	4.673	< 0.05
	After	16.5	2.8		0 8	
Non Practitioners	Before	22.9	2.4	2.5	1.529	NS
	After	20.4	2.6		8 8	

SD: Standard Deviation; MD: Mean Difference

According to the conclusions of the study, data from pre- and post-training measures revealed that anxiety levels in the Yoga and Physical Exercise Practitioners group decreased significantly over the training period. Individuals who participated in the trial did not show a statistically significant change in their degree of anxiety when compared to those who did not engage in the experiment, according to the findings. In this study, the researchers discovered that by participating in yoga and fitness training, individuals' levels of anxiety were dramatically reduced.



Yoga and physical activity, according to the conclusions of the study, may greatly reduce emotions of worry and stress. It was discovered that the computed F ratio was greater than the F ratio in the table. Using the value and data approach, it was possible to uncover the adjusted paired means that were statistically significant in addition to being adjusted. Students who participate in physical activity have lower mean test scores and are less concerned about education than their sedentary peers, according to statistics (Yogic exercise and control group). In addition to the activities, they can engage in, physical exercises can aid practitioners in developing expertise and control over their emotions, confidence, positive attitudes, personalities, and behaviors as a result of their training and experience.

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Yogic practices may be beneficial in the treatment of anxiety since they are primarily focused on the mental (Manomaya kosha) and intellectual (Vijnanamaya kosha) levels of the nervous system, rather than the physical level. When there are abnormalities in neuronal activity in the brain, as well as undesirable, unrealistic conceptions and hurdles in the intellectual layer, these are all variables that contribute to feelings of anxiety when they are present. Incorporating yoga postures, pranayama, and meditation into one's daily routine can help to keep the body in a relaxed state while reducing the dominance of the sympathetic nervous system.

It is possible that mantras can assist in diverting the mind's attention away from unpleasant thoughts and other bad ideas in a variety of different ways. Physical activity, according to the findings of this study, can help people better manage their emotions and worries because it helps them to stay in control. There is now data to support the hypothesis that there is a substantial difference in how people respond to anxiety when they practice yoga vs when they do other physical activities.

## 5. Conclusion and Future Scope

Individuals are increasingly depending on mind-body therapies to help them manage with stress, in addition to normal psychiatric and pharmaceutical treatments for anxiety and depression. Individuals are increasingly turning to mind-body therapy to help them cope with stress. Yoga, a mind-body practice that has grown in popularity in recent years as a means to enhance wellness and treat a variety of health disorders and illnesses, is becoming increasingly popular as a technique to promote wellness and cure a variety of health infirmities and diseases. Yoga is recommended to promote feelings of well-being and relaxation, as well as self-confidence and body image. In various studies, it has also been shown to improve interpersonal interactions, attention, and irritability, as well as to produce a cheerful outlook on life.

The researchers intended to find out how yoga improved their students' anxiety as well as their sleep, mindfulness, and overall well-being by conducting a large randomized controlled trial. Yoga may be an appealing choice for students looking for a practical and cost-effective mental health treatment option that is easily accessible, adaptive, and cheap. We observed that yoga significantly reduced psychological discomfort and sleep disturbances in students, with effects lasting at least three months after finishing an active yoga session. As a consequence of our findings, we believe that yoga may be beneficial to

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students who are suffering from mental health issues. Colleges should consider including yoga into a larger strategic plan to assist students during their initial years of study in order to appropriately address their students' mental health needs.

As a consequence, yoga should be made a widespread movement, and it should be incorporated into all disciplines, including the commercial and corporate sectors, in order to develop human resources and, as a result, to minimize sickness and health-related ailments in the general population. Other psychological characteristics, such as perception, attention, visual and auditory capacity, and intelligence behavior in secondary school pupils, are also advised to be investigated.

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