

# Effect of Yoga on the Mental Health of Adolescents

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## Abstract

*Adolescence is the period in which a person's mental health is shaped by social, cultural and environmental factors. Mental health disorders can be developed in adolescents that can be caused by biological factors, the environment, or a combination of the two. And to deal with these disorders, yoga can be a powerful tool for emotional healing and maintaining physical and mental health. There is escalating interest in the use of yoga to calm the mind and increase overall health and well being. In the present study the investigators aims to study the effect of yoga on the mental health of adolescents. A sample of 100 students (aged 13-14 years) from various schools of Rohtak city was assessed through Mental Health Battery developed by Singh and Gupta. The present study was not exhaustive, nevertheless it is hoped that this study could form the basis for further analysis and investigation. The results revealed that yoga has positive and significant effect on the mental health of adolescents.*

• **Key words:** Adolescent, Mental Health, Yoga

The period of adolescence is of vital significance in a person's life. It is the period in which a person's mental health is shaped by social, cultural and environmental factors. In present scenario, the fabric of Indian society is threatened by violence, theft, rapes, drug addiction, terrorism and pollution etc. Modernization process is accompanied with manifold problems, anxieties and worries to human life, adversely affecting the core human values such as honesty, sincerity, morality and humanity and as such there is a great transition in human society. In this age of increasing urbanization and erosion of moral and human values, man has lost his identity and has become a part of social machine (Dagar & Dhull, 1994). But adolescents must learn how to cope with psychological stress, handle peer pressure, deal with their emotions, resolve conflicts, build bridges with friends and family, develop self-confidence, safeguard themselves from high pressure marketing strategies, particularly of the alcohol industry, as well as cope with other stresses like academic competition and a hankering for material gains. They necessitate having good mental health. Mental health refers to our cognitive, and/or emotional wellbeing - it is all about how we think, feel and behave. WHO defines mental health as the

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concept as: a state of well being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her own community (WHO, 2007, p. 1). The definition of mental health highlights emotional well-being, the capacity to live a full and creative life, and the flexibility to deal with life's inevitable challenges. Mental health in adolescents has many dimensions such as having healthy interactions with peers and teachers, and being able to show appropriate emotional responses while exerting control if necessary. Adolescents can have mental, emotional and behavioral problems which are real, painful and costly. Mental health disorders in adolescents are caused by biological factors, the environment, or a combination of the two. Biological factors may include genetics, chemical imbalances in the body, and trauma. Environmental factors such as exposure to violence or abuse, acute or chronic stress, and conditions which increase feelings of insecurity in them (e.g., loss of a parent) can contribute to mental disorders. Mental health can be seen as an unstable continuum, where an individual's mental health may have many different possible values (Corey, 2002).

Mental health is very much influenced by those discourage, decrease confidence or create inhibitions among children can be termed as stress which can be caused by academics, interactions, fear of under achievement and rejection of thoughts and ideas and lack of motivation and encouragement. The pressures exerted by present scenario on adolescents create blockages in energy flow and aggravate physical and mental health. To resolve conflicts faced by adolescents, Yoga can be a powerful tool for emotional healing and maintaining physical and mental health. There is also a progressive trend toward use of yoga as a mind-body complementary and alternative medicine intervention to improve specific physical and mental health conditions. Yoga is a century's old practice based on Eastern idea that health is based on the mind and body working in harmony. The word Yoga is derived from Sanskrit word 'Yuj', means to 'yoke or unite'. Yoga originated 4000 or 5000 years ago in what is now India. Over time, yoga developed as a science, philosophy, and psychology. Yoga is the union of mind, body, emotions and intellect (Ramanuj, 2010). The aims of yoga are the development of the following: 1) a strong and flexible body free of pain; 2) a balanced autonomic nervous system with all physiological systems, e.g., digestion, respiration, endocrine, functioning optimally; and 3) a calm, clear, and tranquil mind. Beyond these specific outcomes, yoga practices are intended to facilitate self transformation at every level of functioning, with the goal of improving the overall quality of life. Yoga is best known for its poses which reach deep into person's mind and body. Yoga is all about feeling good; feel the blood surging through veins, the energy pulsating through nerves, the bliss coursing through the whole being. Best of all, Yoga is apt for all, regardless of age, color, caste, creed or religion;

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from the healthiest to the sickest. Many people who practice Yoga report a deep sense of relaxation, substantially increased flexibility and blood and oxygen supply after regular classes. yoga being used in its facilitative capacity with children at risk for developing disorders, and in academic and treatment settings with children with diagnosed disorders of attention, anxiety, depression, and eating disorders. The high utilization rates for yoga suggest it is an intervention that children and adolescents are willing to try and to sustain with some degree of adherence. yoga might be appealing because it is non pharmacological, has few adverse risks if practiced as recommended, and may be an acceptable option to individuals who reject psychological diagnoses and treatments. In addition some reports suggest that Yoga can decrease stress and it may be helpful in improving the mental health of sufferers. Could Yoga for adolescents Help Prevent Mental Health Problems? Adolescence is an important time for the development of mental health, including healthy coping responses to stress. Several types of school-based stress management and wellness programs have been developed with the goal of encouraging healthy coping strategies and resilience among them. One promising approach is yoga, which combines strength and flexibility exercise with relaxation and meditation/mindfulness techniques. Studies have shown benefits of yoga in a wide range of mental and physical health problems, including a growing body of evidence showing positive effects in children and teens.

### **NEED OF THE STUDY**

The mental health of adolescents is one of the key issues in present world. Adolescence is a period of storm and stress. Various students, studying in different institutes when analyzed for their behavior were found to have distressed performance. A number of adolescents are in high risk category of drug and alcohol abuse, depression and sexually transmitted diseases (Dryfoos, 1990). Although parents realize the teenager years are challenging times, they wish there was something they could do to help relieve the stress, depression and anxiety, which are a severe strain on their children's mental health. The majority of available yoga studies have been conducted with adults, with recent epidemiological research indicating that many adults perceive yoga to be beneficial for musculoskeletal problems, mental health conditions, and overall health. However, studies to evaluate the potential benefits of yoga with children and adolescents are limited. Since mental health disorders commonly develop in the teenage years, "Yoga may serve a preventive role in adolescent mental health," according to the new study, led by Jessica Noggle, PhD, of Brigham and Women's Hospital, Harvard Medical School, Boston.

Yoga is a potent way to calm mind and increase overall health and wellbeing. Though a number of investigators made efforts to study the effect of yoga on various

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aspects of children but there is dearth of studies which try to study this effect on mental health at adolescent stage. So, the investigators visualized a need to study the effect of yoga on mental health of adolescents. The present study is an attempt to study the effect of yoga on the mental health of adolescents.

### **OBJECTIVES OF THE STUDY**

1. To study the mental health of adolescents before practicing yoga.
2. To study the mental health of adolescents after practicing yoga.
3. To study the effect of Yoga on the mental health of adolescents before and after practicing yoga.

### **HYPOTHESIS**

There will be no significant differences on the mental health of adolescents before and after practicing yoga.

### **SAMPLE**

Sample of 100 students of age 13-14years were selected randomly from the four Schools located in Rohtak, Haryana.

### **TOOLS OF THE STUDY**

The tool used in the study was Mental Health Battery (MHB) developed by Singh and Gupta(1985). MHB intends to assess the status of mental health of persons in the age range of 13 to 22 yrs. The battery has six tests having 130 items for each part i.e. Emotional Stability, over all Adjustment, Autonomy, Security- Insecurity, Self Concept and Intelligence.

### **DATA COLLECTION AND ANALYSIS**

The investigators first of all sought the permission from the Principal of the schools in which the test was to be administered. The day and time of the test and yoga classes was decided according to the suitability and convenience of the school time table. The classes consisted of physical yoga postures together with breathing exercises, relaxation, and meditation. Students completed a battery of psychosocial test before and after the ten-week yoga program. The students were asked to keep away everything and were asked to have only a pen or pencil with them for responding the questions of the test. Investigators explained the general instructions for the test. The test was supervised by the investigators. It was made sure that all of them were responding in a desired way. The students were given half an hour time to fill up the test. The test booklets were collected by the investigators.

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After the collection of data from the sample, scoring was done by the investigators. Each correct response was given one point score. There is no negative marking for wrong response. The maximum score one can obtain in this test was 130.

### **ANALYSIS AND INTERPRETATION OF DATA**

The data gathered from the sample of the study was organized and tabulated to facilitate application of appropriate statistical technique for the purpose of its analysis. Score were compiled, mean, SD was computed for table, 't' test was chosen because researcher wished to test null hypothesis. True level of significance was considered, i. e. 0.01 level of significance as arbitrary standard for accepting or rejecting null hypothesis.

**Objective 1-** To study the mental health of adolescents before practicing yoga.

**Table 1.1**  
**Mental Health scores of Senior School Students**  
**before practicing Yoga (Pre-Test)**

<b>Mental health scores</b>	<b>N</b>	<b>Mean</b>	<b>S.D.</b>
<b>(Pre-Test)</b>	100	21.92	2.113

**Table 1.1** shows that mean and S.D. of mental health scores of Sr. School students before practicing yoga was 21.92 and 2.113.

**Objective 2-** To study the mental health of adolescents after practicing yoga.

**Table 1.2**  
**Mental Health scores of Senior School**  
**Students after practicing Yoga (Post-Test)**

<b>Mental health scores</b>	<b>N</b>	<b>Mean</b>	<b>S.D.</b>
<b>(Pre-Test)</b>	100	32.37	3.173

**Table 1.2** shows that mean and S.D. of mental health scores of Sr. School students after practicing yoga was 32.37 and 3.173.

**Objective 3-** study the effect of Yoga on the mental health of adolescents before and after practicing yoga.

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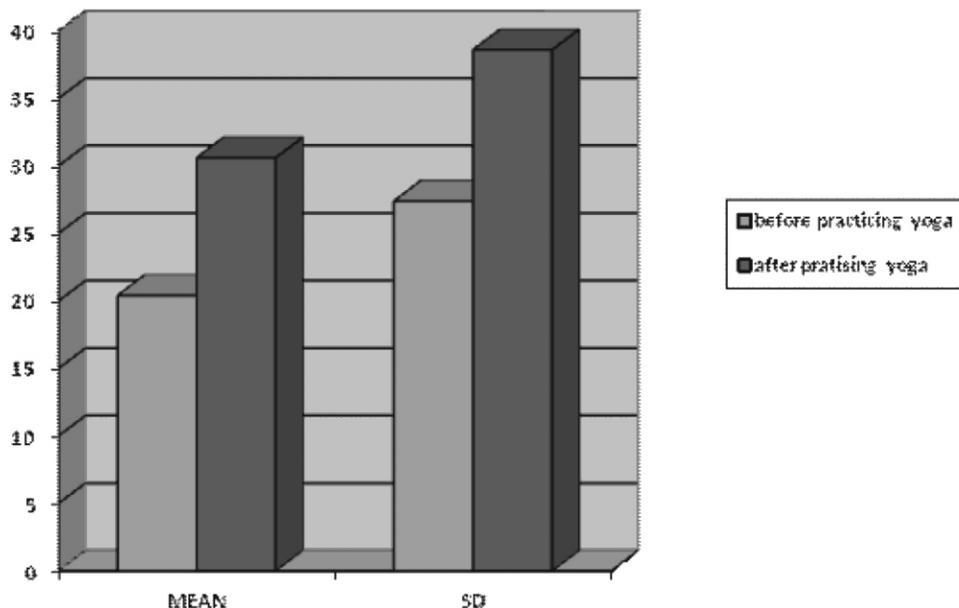
**Table 1.3**  
**t-value of Mental Health Scores of Sr. School**  
**Students before and after practicing Yoga**

Mental Health Scores	N	Mean	S.D.	t-value
Students before practicing Yoga (Pre-test)	100	21.92	2.113	42.71**
Students after practicing Yoga (Post-test)	100	32.37	3.173	

\* Significant 0.01 level of significance

Above t-value in the table 1.3 reveal that there is significant difference found between mental health scores of students before and after practicing yoga. In the context of mean scores, it was found out from the table 1.3 that the mean score of mental health before practicing yoga (21.92) is less than scores after practicing yoga (32.37). Result shows that t- value is 42.71 and this value is significant at 0.01 level. So we can say that there is significant difference found between mental health scores of students before and after practicing yoga and null hypothesis is rejected at 0.01 level of significance.

#### GRAPHICAL PRESENTATION OF RESULT



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## **DISCUSSION OF THE RESULT**

The investigators found that there is significant difference in mental health of adolescents before and after practising yoga. Chen et. al (2009) reported that yoga participants showed statistically significant difference on measure of anger, control and fatigue. Berger, Silver and Sternium (2009) pointed out that yoga practice can improve the likelihood of positive behavior patterns and reduce negative behavior.

This study further revealed that yoga is preventive intervention to improve children's wellbeing. However, Du Xi-Ru, Zhang Lin-ting (2005) reported that Yoga Practice can make human bodies stronger and healthier, alleviate stress and enhance physical functions and mental health level.

In our study it was found that there is significant difference in mental health of adolescents before and after practising yoga. Our results are in consonance with the study of Bowen et al (2006) who found a positive relation between the practice of yoga and improved mental health.

## **SUGGESTIONS**

From the research conducted few suggestions can be given –

- Yoga therapy should be provided in schools, hospitals, and community treatment centers.
- Yoga was taught by teachers in a group class as these classes are similar to those for group therapy: one teacher can provide instruction to more individuals at one time.
- The use of yoga programs should be a primary prevention strategy and the school environment as a primary context to enhance children's mental health.
- Yoga should be used as a remediation strategy for children who demonstrate clinically significant mental health concerns.
- Yoga should be used as a tool for reduction of anxiety and stress and improvement in coping abilities and mood states.

## **CONCLUSION**

The present investigation was an attempt to study the effect of yoga on the mental health of adolescents. As it is obvious from the findings that yoga practices have a significant impact in the lives of adolescents in shaping up their physical and mental health being, Yoga in particular allows for increasing mental acuity, concentration and prowess. Mental health has a deep connection with physical health. Good physical health fosters good mental health and the vice versa is also true and yoga works as a support system in the enhancement of overall health.

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