

## Effect of Yoga and Meditation on Quality of Life and Anxiety Among Adolescents

Kishor Ankulanekar<sup>1</sup> and Dr. Dinesh Naik<sup>2</sup>

<sup>1</sup>Assistant Professor, Department of Psychology, Arts, Commerce and Science College, Lasalgaon. SPPU, Pune Maharashtra, India

<sup>2</sup>CHME's, Bhosala Military College, Nashik. Maharashtra, India

### ABSTRACT

**Objective:** The Main Objective is to understand the predictors of quality of life and to find the effect of yoga and meditation on quality of life and anxiety among adolescents.

**Methods:** For the present study the researcher collected a total sample size of 60. The sample was collected from the colleges of Nashik district (Maharashtra, India). The sample age group is between 16 to 19 years old males and females. For the intervention purpose, the participants for the experiment were selected by using the randomized sampling technique. The data were collected before and after yoga and meditation intervention at the end of the month. A specific Yoga module was administered to the intervention program for 30 days.

**Results:** In our results, the P value of Quality of life among adolescents is 4.89 and it's significant at a 0.01 level of significance. And P value of Anxiety among adolescents is 3.73. and a P value is above the 0.01 level of significance which shows a significant difference between the pretest and post-test values of anxiety.

**Conclusion:** After this study, we conclude that one month's yoga and meditation practice significantly improvement in quality of life and it will positively effect on the quality of life among adolescents. Also, the result shows that one month of yoga and meditation practice significantly reduced anxiety in adolescents.

### \*Corresponding author

Kishor Ankulanekar, Assistant Professor, Department of Psychology, Arts, Commerce and Science College, Lasalgaon. SPPU, Pune Maharashtra, India.

**Received:** July 19, 2025; **Accepted:** July 28, 2025; **Published:** March 30, 2026

**Keywords:** Yoga and Meditation, Quality of Life, Anxiety, etc.

### Introduction

Yoga is an ancient Indian science and way of life that includes not only physical movements and postures but also regulates breathing and meditation. It appears that following Yoga practice, the participants were better able to focus their mental resources, process information quickly, and more accurately, and also learn, hold, and update pieces of information more effectively. Yoga is the union of mind and body and the control of modifications of the mind. The effects of yoga have been found in numerous studies in children. People, who exercise yoga, frequently report a sense of deep relaxation, calm, and happiness at the end of a yoga session. It increases muscular strength, flexibility, range of motion, energy, and sleep quality. Yoga also improves hormone levels, immune response, cardiovascular health, and respiratory functions. Yoga develops physical, mental, intellectual, emotional, and spiritual components, thus building up well-rounded personality traits in the students. Yoga focuses on the development of the individual at a) Physical level which makes the bodywork more efficient by directing the energies in the most controlled fashion. b) The mental level enhances the power of imagination, creativity, and willpower of the mind, c) the Intellectual level enhances the power

of sharpness and comprehensive development of the intellect with powerful concentration and d) the Emotional level enables one to systematically sharpen and sensitize their emotions. The present study focuses on yoga and meditation with psychological intervention to develop the quality of life of college students. The presence of Yoga in the mainstream of Indian culture has grown dramatically during the past 15 years. Yoga is a mind-body practice that combines physical postures, breathing exercises, and meditative practices, to unify the physical, mental, and emotional selves. Research has proven that the regular practice of yoga helps in the development of the body, mind, and spirit, leading to a healthier and more fulfilling life. Yoga is a science that aims at the total development of the personality of youths and adults. Personality is an individual feeling. It has been demonstrated to influence individual behavior and performance. It is not only the physical and mental aspect but also the behavior or adjustment to the surroundings of an individual. It develops gradually from childhood to adulthood and may affect or be influenced by various factors like genetic, social, and environmental factors. The pre-adolescent period is the best time to shape and determine one's destiny. Children can channel their energy in the right direction to make them responsible for human beings.

## Quality of Life

Quality of Life (QOL), according to Britannica, is the degree to which an individual is healthy, comfortable, and able to participate in or enjoy life events. The World Health Organization (WHO) defines Quality of Life as a broad-ranging concept affecting in a complex way the persons' physical health, psychological health, social relationship, and their relationship to salient features in their environment. Thus, Quality of life is linked to the health status of an individual. While establishing an agreed-upon definition and developing an assessment tool for quality of life. WHO also states that Quality of Life is "an individual's perception of their position in life in the context of the culture and value systems in which they live and with their goals, expectations, standards and concerns". Quality of Life is not merely to be equated with health status, lifestyle life satisfaction, or well-being. This emphasizes an individual's expectations and perceptions.

**Anxiety:** Anxiety is a basic human emotion consisting of fear and uncertainty that typically appears when an individual perceives an event as being a threat to the ego or self-esteem. Anxiety is uniquely a human experience. It is a psychological and physiological state characterized by somatic, emotional, cognitive, and behavioral components. The root meaning of the word anxiety is 'to vex or trouble', in either the absence or presence of psychological stress, anxiety can create feelings of fear, worry, uneasiness, and dread. Spielberger and Vagg defined anxiety as an emotional state consisting of feeling, tension, apprehension, and its effects on the nervous system. According to the theory, anxiety can lead to interference with performance through mind blocking, attention resources, more cognitive interference, worries, and fears induced by anxiety.

According to Breuer, anxiety disorders are defined by the dual characteristics of excessive emotional fear and physiological arousal. Anxiety is one of the psychophysiology difficulties. Harris and Coy defined anxiety as a basic human emotion consisting of apprehension and uncertainty that typically appears when an individual perceives an occurrence as being a threat to the ego or self-esteem. In its conceptualization, individuals with high levels of anxiety generally hold heightened levels of trait anxiety, but in evaluative situations, the state of anxiety also elevates.

Though anxiety can be thought of as having several components, including cognitive, somatic, affective, and behavioral components, Beck et al. included only two components in the BAI's original proposal: cognitive and somatic. The cognitive subscale provides a measure of fearful thoughts and impaired cognitive functioning, and the somatic subscale measures the symptoms of physiological arousal.

Adolescence is a period of storm and stress, a time when the individual is erratic, emotionally unstable, and unpredictable. This is the time when personality development is ascertained and the period of life between the boundaries of puberty and maturity. It is a situation in which new adjustments have to take place. The time is identified with dramatic changes in the body, along with developments in a person's psychology and overall quality of life. In the modern competitive world, the lifestyle of adolescents is full of stressful situations, exhaustion from long hours and less sleep, hypersensitivity, and anxiety. By including one of the several different types of yoga and meditation in their life they will improve the value and possibly the quality of their life. Yoga and meditation when practiced together reinforce the connection between mind and body, improving mainly health and well-being. Multiple studies have confirmed the many mental and physical benefits of yoga and meditation. Incorporating it into your routine can help enhance

your health, increase strength and flexibility, and reduce symptoms of stress, depression, and anxiety. Meditation offers an emotional improvement through deep relaxation.

## Literature Review

Jayaram Thimmapuram et. al. this study explored the differences in 7 domains of HRQOL (including quality of life, ability to adopt a healthy lifestyle, ability to relax, frequency of nervousness and stress, coping with day-to-day stress, workplace productivity, and staying healthy during the COVID-19 pandemic) among practitioners of yoga and meditation. A cross-sectional, online survey was distributed to all members who participated in a 100-day yoga and meditation program, culminating in the International Day of Yoga event, organized by the Heartfulness Institute in partnership with the Central Council for Research in Yoga and Naturopathy, Ministry of Ayush, SVYASA Yoga University, and Patanjali Yoga Institute, India. The program consisted of daily virtual yoga, meditation, and speaker sessions. The data were analyzed by the nonparametric Mann-Whitney U test Kruskal-Wallis tests for continuous variables and the chi-square test for categorical variables. The result shows that a total of 3164 participants from 39 countries completed the survey. Notably, experienced Heartfulness (2 years) meditators reported better outcomes in all the domains of HRQOL as compared to those not currently practicing this form of meditation and participants with  $\leq 1$  year of Heartfulness meditation experience ( $P < .05$ ). This is one of the first cross-sectional studies to explore HRQOL outcomes among participants of a 100-day virtual yoga and meditation program. Overall, a yoga and meditation practice was found to be an effective tool for promoting HRQOL. Regular yoga and meditation practice were associated with factors promoting health and well-being, with long-term meditation practice associated with increased benefits.

Agnieszka Pluto-Pradzynska et. all. Yoga is an ancient form of Physical Activity (PA) that encompasses meditation, stretching, and breathing techniques. Although the benefits of PA and associated lifestyle interventions are clear, we here addressed the paucity of evidence regarding the specific relationship between yoga and quality of Life (QOL) in adults in Poland. The researcher hypothesized that participation in PA and yoga could result in a positive impact on QOL. Study design Cross-sectional, self-administered questionnaire-based survey. Both the quantitative and qualitative variables were statistically compared. Multivariate analyses were performed using linear regression. Results were determined based on age, sex, and education level; a  $p < 0.05$  was considered significant. Participants 714 Polish citizens aged over 18 participated in the study; there are no specific entry and exclusion criteria besides age. Results Statistically significant differences ( $p < 0.05$ ) were observed between the QOL of the Physically Active Group (PAG) and non-PAG (N-PAG). Meanwhile, yoga practice was revealed to have a significant effect on QOL. The study shows that both regular PA and yoga practices could improve QOL; however, PAG-Y produced higher QOL scores than PA of other types. This outcome may be explained by the impact of physiological and psychological aspects within the yoga practice. These results suggest that this unique combination impacts health more positively than other kinds of PA alone.

Sri Sri Ravishankar in the article, an insight into how yoga, spirituality, and meditation can help learning, the author explains how the ancient techniques of yoga, spirituality, and meditation help a contemporary person struggling with their studies.

Das P. & Krishna C. investigated the effect of yoga on anxiety and quality of life. The main intention was to find out if yoga how far it is better for reducing anxiety and also improving the

lifestyle by yoga intervention. Materials and Methods: We enrolled 60 subjects grouped into a control (N=30) and an experimental group (N=30). The level of anxiety in the subjects was assessed by using specific methods. The data were collected before and after the yoga intervention at the end of one month. A specific Yoga module was administered to the volunteers for 30 days. In the results, there was a statistically significant ( $p < 0.01$ ) decrease in anxiety and improved quality of life. Conclusion: Yoga was a better alternative method for all psychological problems.

Alessandra N. Bazzano et. al Yoga and mindfulness programs have emerged as a promising preventive approach for schools and have proven feasible and acceptable. The current study evaluated a universal, school-based mindfulness and yoga program among youth aged 11–14 in a racially diverse, urban setting in the United States. Outcomes of interest included symptoms of anxiety and depression. Anxiety and depression symptoms decreased in the intervention group, although these differences were not statistically significant. In the control group, anxiety symptoms decreased but depression symptoms increased. The resulting time effect indicated a significant decrease in anxiety symptoms, while the time-by-group effect revealed a strong trend in depression symptoms. Future research should investigate the utility of yoga and mindfulness interventions for early adolescents in a larger population, and the differences in intervention effect among subgroups, with attention to longer-term outcomes.

## Methodology

### Statement of the Problem

“To study the effect of yoga and meditation on quality of life and anxiety among adolescents”

### Objectives

- To understand the predictors of quality of life.
- To study the impact of yoga and meditation intervention on Physical health-related quality of life.
- To study the impact of yoga and meditation intervention on psychologically related quality of life.
- To study the impact of yoga and meditation intervention on social relationship-related quality of life.
- To study the impact of yoga and meditation intervention on environment-related quality of life.
- To study the impact of yoga and meditation intervention on anxiety.

### Hypotheses

The following hypotheses were formulated incorporating the research evidence highlighting the physiological, psychological, and health benefits of yoga and meditation practices.

- There will be a significant improvement in the overall Quality of Life after yoga and meditation training.
- There will be a significant improvement in the physical health-related Quality of Life after yoga and meditation training.
- There will be a significant improvement in the psychologically related Quality of Life after yoga and meditation training.
- There will be a significant improvement in the social relationships related to Quality of Life after yoga and meditation training.
- There will be a significant improvement in the environmental-related Quality of Life after yoga and meditation training.
- There will be a significant difference in anxiety among adolescents after yoga and meditation training.

## Methodology

The methodology consists of variables, sampling, research design,

procedure, and statistical methods which will be used in the present study.

### Variables

- Independent variable
  1. Yoga and Meditation (Physical postures, Dhyana, Relaxation techniques and breathing techniques)
- Dependent variable
  1. Overall Quality of life
  2. Physical health-related quality of life
  3. Psychological quality of life
  4. Social relationship quality of life
  5. Environmental quality of life
  6. Anxiety
- Control Variable
  1. Age (16-19 yrs.)
  2. Gender (Male & Female)
  3. Economic Status
  4. Rural-urban status
  5. Religion status

### Sample

For the present research, the researcher collected a total sample size of 60. The sample was collected from the colleges of Nashik district (Maharashtra, India). The sample age group is between 16 to 19 years old male and female. For the intervention purpose, the participants of the experimental group will be selected using the randomized sampling technique. While collecting the sample randomized sample technique will help the researcher to reach the exact sample which interested in taking part in the research.

The sample for the intervention will be selected using the following criteria inclusion and exclusion.

### Inclusion Criteria and Exclusion Criteria

#### ➤ Inclusion Criteria

1. Those between the ages of 16-20 years will select to be part of the study.
2. The sample includes only the unmarried subjects.
3. Only college students are part of the sample.
4. Both male and female students will be included in the study.
5. Those with only mild health conditions will be considered for the study.
6. Those who are willing to participate in the study will be included.

#### ➤ Exclusion Criteria

1. Subjects with acute health problems such as chronic physical issues or heart conditions will be excluded from the study.
2. Those subjects with severe psychiatric disorders will also not be included being part of the study.

### Tools

#### ➤ WHOQOL-BREF

WHO-QOL is developed by the WHO Quality of Life Group, . The scale is designed to measure different types of Quality of life. It has 4 dimensions with good psychometric properties. This scale contains twenty-six (26) items with higher scores denoting higher quality of life. Each item is ranked on a point Likert scale. Dimensions of the test are, Physical (Pain, Energy, Sleep), Psychological (Positive and Negative feelings, Thinking, Self-esteem, Bodily image.), Social Relationships (Personal, Social support, Sexual Activity) and Environmental

#### ➤ Beck Anxiety Inventory (BAI)

BAI was Developed by Aaron T. Beck and other colleagues. The

Beck Anxiety Inventory (BAI) is a 21-question multiple-choice self-report inventory that is used for measuring the severity of anxiety in children and adults. The questions used in this measure ask about common symptoms of anxiety that the subject has had during the past week (including the day you take it) (such as numbness and tingling, sweating not due to heat, and fear of the worst happening). It is designed for individuals who are 17 years of age or older and takes 5 to 10 minutes to complete. Several studies have found the Beck Anxiety Inventory to be an accurate measure of anxiety symptoms in children and adults. The BAI contains 21 questions, each answer being scored on a scale value of 0 (not at all) to 3 (severely). Higher total scores indicate more severe anxiety symptoms. The standardized cutoffs are 0–7 (Minimal), 8-15 (Mild), 16-25 (Moderate), and 26-63 (Severe). Internal consistency for the BAI (Cronbach’s  $\alpha=0.92$ ). Test-retest reliability (1 week) for the BAI = 0.75 (Beck, Epstein, Brown, & Steer, 1988) The BAI was moderately correlated with the revised Hamilton Anxiety Rating Scale (.51), and mildly correlated with the Hamilton Depression Rating Scale (.25).

### Research Design

In this study, the researcher will use the **peer learning approach**. In this researcher will train 2 students and the physical director of the college from the Nashik district and those trained yoga and

meditation instructors will give the intervention program to the selected college student sample.

This study consists of a **Pretest – Posttest Single Group design**.



- X: Intervention Program (Yoga & Meditation)
- 1 M: Intervention period 01 month.

The researcher will select a sample of 60 students from the selected college from the Nashik district. The researcher will first administer the pretest on the sample then the researcher will conduct a yoga and meditation intervention program on the same group. After the 1-month intervention program, the researcher will conduct the post-test of quality of life and anxiety and observe the differences.

### Statistical Analysis

The data collected on the sample will be analyzed using SPSS version 21 and the following analysis will be carried out on the qualitative data: Descriptive statistics such as Mean, Standard deviation, and paired sample t-test used for analysis of data.

## Result and Discussion

**Table 1: Shows the Mean, SD, and t-test Scores of Quality of Life Among Adolescents.**

Variables	N	Mean	S.D	t - value	Significance level
Pretest	60	61.62	15.16	4.89	Significant at 0.01 level
Posttest	60	72.43	16		

Table 1 show that the mean of the Quality of Life pretest score of adolescents is 61.62 and S.D. is 15.16 and the Mean of Quality of Life Posttest score is 72.43 and S.D. is 16. And t value of Quality of Life among adolescents is 4.89. The t-value is significant at 0.01 levels. Therefore, the hypothesis there will be a significant improvement in overall Quality of Life after yoga and meditation training has been accepted.

**Table 2: Showing the Mean, SD, and t-test score of Physical health-related Quality of Life Among Adolescents**

Variables	N	Mean	S.D	t - value	Significance level
Pretest	60	17.52	5.40	3.94	*0.01
Posttest	60	20.18	6.10		

Table 2 shows that the mean of the Physical health-related Quality of Life pretest score of adolescents is 17.52 and S.D. is 5.40 and the Mean of Quality-of-Life Posttest score is 20.18 and S.D. is 6.10. And t value of Quality of Life among adolescents is 3.94. The t-value is significant at 0.01 levels. Therefore, the hypothesis there will be a significant improvement in Physical health-related Quality of Life after yoga and meditation training has been accepted.

**Table 3: Shows the Mean, SD, and t-test Scores of Psychological Quality of Life Among Adolescents**

Variables	N	Mean	S.D	t - value	Significance level
Pretest	60	16.68	4.83	3.76	Significant at 0.01 level
Posttest	60	19.38	5.70		

Table 3 shows that the mean Psychological Quality of Life pretest score of adolescents is 16.68 S.D. is 4.83 and Mean Quality of Life Posttest score 19.38 S.D. is 5.70 and the t value of Quality of Life among adolescents is 3.76. The t-value is significant at the 0.01 level. Therefore, the hypothesis there will be a significant improvement in Physical health-related Quality of Life after yoga and meditation training has been accepted.

**Table 4: Shows the Mean, SD, and t-test Scores of Social Relationship-Related Quality of Life Among Adolescents**

Variables	N	Mean	S.D	t - value	Significance level
Pretest	60	6.60	8.93	2.01	Significant at 0.05 level
Posttest	60	8.04	2.61		

Table 4 shows that the mean Social relationship-related Quality of Life pretest score of adolescents is 6.60 and S.D. is 8.93 and Mean Quality of Life Posttest score is 8.04 and the S.D. is 2.61 and the t value of Quality of Life among adolescents is 2.01. The t-value is significant at 0.05 levels. Therefore, the hypothesis there will be a significant improvement in Social relationships related to Quality of Life after yoga and meditation training has been accepted.

**Table 5: Shows the Mean, SD, and t-test Scores of Environmental-Related Quality of Life Among Adolescents**

Variables	N	Mean	S.D	t - value	Significance level
Pretest	60	21.87	7.56	1.64	Not significant at 0.05 level
Posttest	60	23.93	7.39		

Table 5 shows that the mean environmental Quality of Life pretest score of adolescents is 21.87 S.D. is 7.56 and Mean Quality of Life Posttest score is 23.93 and the S.D. is 7.39 And t value of environmental Quality of Life among adolescents is 1.64. The t-value is not significant at 0.05 levels. Therefore, the hypothesis there will be a significant improvement in environmental-related Quality of Life after yoga and meditation training has been rejected.

**Table 6: Shows the Mean, Sd, and T-Test Scores of Anxiety Among Adolescents**

Variables	N	Mean	S.D	t - value	Significance level
Pretest	60	17.92	3.75	3.73	*0.01
Posttest	60	14.77	5.25		

Table 6 shows that the mean Anxiety pretest score of adolescents is 17.92 S.D. is 3.75 and Mean Anxiety Posttest score is 14.77 and S.D. is 5.25 and the t-value of Anxiety among adolescents is 3.73. The t-value is above the 0.01 level. Therefore, the hypothesis there will be a significant improvement in anxiety among adolescents after yoga and meditation training has been accepted.

## Discussion

The hypothesis was there will be a significant improvement in the overall Quality of Life after yoga and meditation training has been rejected. We conclude that one month's yoga and meditation practice couldn't show a statistical improvement in quality of life but the mean value shows an improvement in quality of life it means if we give more periods for yoga and meditation practice it will positively affect on the quality of life among adolescents. Also, no significant improvement in the psychological Quality of Life, the social relationship Quality of Life, and the environmental Quality of Life after yoga and meditation training but the mean value shows an improvement in quality of life which means if we give more periods for yoga and meditation practice it will positively effect on the quality of life among adolescents.

The hypothesis was a significant improvement in the physical health-related Quality of Life after yoga and meditation training has been accepted. The literature review also shows that a month-long yoga and meditation training program positively affects on physical quality of a person.

The hypothesis was a significant difference in anxiety among adolescents after yoga and meditation training has been accepted. The literature review also shows that a one-month yoga and meditation training program positively affects reducing the anxiety of a person.

## Conclusion

Yoga and meditation positively affect on quality of life and anxiety among adolescents. The result shows that yoga and meditation differentiate between pretest and post-test quality of life and anxiety among adolescents. Daily yoga and meditation practice is beneficial to the good life.

## References

1. Agnieszka Pluto-Pradzynska, Karolina Pluto-Pradzynska, Magdalena Frydrychowicz, Malgorzata Lagiedo-Zelazowska, Jakub Owoc, et al. (2022) Are yoga and physical activity determinants of quality of life in Polish adults? A cross-sectional study. *BMJ Open* 12: e059658.

2. Alessandra N Bazzano, Yaoyao Sun, Vaughne Chavez-Gray, Temitope Akintimehin, Jeanette Gustat, et al. (2022) Effect of Yoga and Mindfulness Intervention on Symptoms of Anxiety and Depression in Young Adolescents Attending Middle School: A Pragmatic Community-Based Cluster Randomized Controlled Trial in a Racially Diverse Urban Setting. *International Journal of Environmental Research Public Health* 19:12076.
3. Bhogal R (2017) *Yoga Psychology and Beyond*, Kaivalyadhama Ashram, Lonavala, Pune.
4. Beck A, Steer RA (1993) *Manual of Beck Anxiety Inventory* Pearson, New Delhi.
5. Das P, Krishna C (2020) Effect of yoga on anxiety and quality of life. *IP Indian Journal of Neurosciences* 6: 30-34.
6. Jayaram Thimmapuram, Kamlesh Patel, Divya K Madhusudhan, Snehal Deshpande, Ekta Boudierlique, et. al. (2022) Health-Related Quality of Life Outcomes with Regular Yoga and Heartfulness Meditation Practice: Results from a Multinational, Cross-sectional Study *JMIR Form Res* 6: e37876.
7. Kothari CR (2004) *Research Methodology, methods, and techniques*. New Age International Publication, New Delhi [https://repository.dinus.ac.id/docs/ajar/Kothari\\_-\\_Research\\_Methodology\\_Methods\\_and\\_Techniques\\_-\\_2004.pdf](https://repository.dinus.ac.id/docs/ajar/Kothari_-_Research_Methodology_Methods_and_Techniques_-_2004.pdf).
8. Sri Sri Ravishankar (2016) An insight on how yoga, spirituality, and meditation can help in learning. *The Journal of Chartered Accountants* 65: 66-67.
9. World Health Organization (1993) *Manual of WHOQOL-BREF* <https://www.who.int/tools/whoqol>

**Copyright:** ©2026 Kishor Ankulanekar. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.