



## **Role of Yogic Life style and Motivational Lectures on General Anxiety of Adolescents**

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### **Abstract**

**Background:** Recently, schools and colleges have drawn much attention as prominent places for remedies of adolescents' mental health problems. Yoga is beginning to be recognized by researchers and clinicians as a complementary therapy that encompasses multiple components of healing that are being singled out or used in pieces as parts of traditional treatment methods. Recent research had demonstrated yoga and motivational lectures as powerful means to reduce anxiety. **Aims:** The current study aimed at exploring the effect of Selected Yogic Practices and Motivational Lectures on General Anxiety of Adolescents. General Anxiety Scale for Children developed by: A. Kumar (2003). **Statistical Analysis Used:** Independent sample t-test for Mamta Dwivedi statistical analysis has been used for comparing control post and experimental post-mean scores and computing the magnitude of the effect of intervention, respectively. Yogic Practices and Motivational Lectures are highly effective in decreasing General Anxiety level of participants, which was significant at 0.01 levels.

**Keywords:** Adolescents, Mental Health problems, General Anxiety, Yoga Practices, Motivational Lectures

### **Introduction**

Adolescents (10-19 years) comprise 16% of the world population and 21% of the Indian population. UNICEF. (2024), NHM (2024) This period between childhood and adulthood, with continuous mental and physical changes, dynamic brain development, and complex socio environmental interactions, can have diverse effects on their mental health. Madasu S. et. Al. (2019) Adolescence

Adolescence is the most favorable occasion of life. The future of a country depends on the mental health and strength of young people. In India, human life can be compared to a four-storied mansion. The four stories are: Brahmacharya (celibacy), Grihastha (householder), Vaanaprastha (recluse) and Sanyasa (renunciate). Today, adolescents are laying the foundation for the mansion of life. The safety and security of the mansion is assured once they make the

foundation strong and sturdy. The main task of adolescence is preparation for adulthood and the future of any nation depends upon how the adolescences are prepared (Larson & others, 2002). Recent studies indicate that these developmentally critical years also are the time in lifecycle, when there are high rates of mental health problems, particularly affective disorders (Kessler et.al, 2003) and adjustment disorders.

Adolescents face many adjustment problems such as poor socialization, loneliness, study difficulties, feelings of inferiority and insecurity, financial problems, and relational problems with friends, teachers, and family members (Posses & Smith, 2007). When adolescents experience emotional and adjustment problems, they often find it difficult to express their feelings on one hand, and on the other hand, they find it equally difficult to suppress them. Emotions should be expressed positively, without hurting others or harming oneself. Unexpressed emotions can be detrimental to one's psychological and physical health.

Due to aforementioned reason they get entangled in trap of anxiety, sadness, depression, inferiority, lack of concentration, indulgence in masturbation, loneliness, exam anxiety, frustration, upset, excessive worry, suicidal tendency, fantasy, indecision, idealistic thinking, lack of self-confidence, identity crises, addiction and so on. In India, the prevalence of major mental and behavioral disorders is estimated to be 65 per 1000 population, which translates to 70 million patients (Ganguli, 2000). Studies from India have revealed the prevalence rates to be 12.5% in 0-16 yrs. community-based sample from Bangalore (Srinath, Girimaji, Gururaj, Seshadri, Subbakrishna, Bhola, 2005); and 6.3% in 4-11 yrs.' old school children in Chandigarh (Malhotra, Kohli, Arun, 2002). Modern medical science has been trying to tackle these problems in many ways, but frankly speaking, they have failed to deliver the necessary health to man. This is because the real problem does not lie in the body; it originates in man's changing ideals, in his way of thinking and feeling.

At present, various Indian techniques are being applied to address physical and psychological problems within the community. Along with prescription medications, healing approaches such as naturopathy, energy balancing, and yogic practices are widely and effectively used across the world, encompassing the physical, psychological, spiritual, and social dimensions of an individual's life.

Among the many Indian complementary and alternative therapies, yoga practices constitute one important approach. Yoga is an ancient discipline that originated in India, and the term signifies union or communion. According to Swami Satyananda Saraswati (1997), "*Yoga is not an ancient myth buried in oblivion. It is the most valuable inheritance of the present. It is the essential need of today and the culture of tomorrow.*"



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## REVIEW

Anxiety disorders among the participants, as found in this study, were similar to the prevalence reported in the study done by **Kumar et al.(2019)** in Delhi (33.3%) and **Waghachavare et al. (2016)** in Maharashtra (38.7%), whereas studies done by **Madasu et al.(2024)** in rural areas of North India, **Nair et al.(2013)** in South Kerala reported a relatively lower prevalence of 22.7% and 25.8%, respectively. In comparison, a study conducted in Mangalore by **Jayashree et al. (2018)** reported a higher prevalence of 54.7%. This might be due to differences in study settings, socio - demographic features, and study tools. **Mallya et al. (2024)** in their study, tried to determine the prevalence of depression, anxiety, and stress among adolescents in both rural and urban areas of Karnataka. They found that there was a lower prevalence in rural areas than in urban areas. et al. Also, increasing focus on preparation for competitive exams burdening the children could be some of the reasons for the high proportion of anxiety disorders found in this study.

**Mallya et al. (2024)** and **Wesselhoeft R et al. (2015)**, also found that there is a significant difference between males and females having anxiety disorders in both rural and urban areas. Female preponderance in anxiety disorders was seen in most studies irrespective of the geographic settings and the tools used. The study conducted by Wesselhoeft et al. among nearly 1 million Danish children in the age group of 3 to 18 years found that female gender is significantly associated with post-pubertal anxiety disorders.

**M. Javnbakht (2009)** suggested that yoga can be used as a supplemental therapy for managing anxiety disorders. According to **Amber W. Li (2012)**, even with pharmaceutical intervention, anxiety remains associated with various chronic conditions and a decline in quality of life. Positive outcomes have been observed using yoga as a non-pharmacological therapy for anxiety. Yoga training serves as an effective tool for alleviating emotional distress, highlighting the necessity and significance of yoga practice on multiple levels—personal, professional, and social.

**Pramanik T. et al. (2009)** reported that practicing Bhastrika pranayama at a slow breathing pace can significantly reduce both systolic and diastolic blood pressure. Additional evidence from heart rate variability (HRV) fluctuations suggests that pranayama enhances cardiac and sympathovagal balance as well as respiratory performance. According to **Zaccaro A. et al. (2018)** and **Kjellgren A. et al. (2007)**, yoga benefits the cardiorespiratory system by promoting slower breathing, which correlates with lower heart rate and reduced blood pressure. Conversely, rapid breathing leads to a gradual but sustained increase in heart rate—an important psychological and physiological response to stress (**Gupta et al., 2010; Tyagi, 2016**).

**Santaella D.F. et al. (2011)** found that pranayama supports better self-regulation, improved mood, and reduced stress. Other studies also affirm the significant positive impact of various yoga practices on anxiety and depression (**Jeter P.E. et al., 2015**). However, despite the breadth of

research supporting these effects, relatively few studies have explored pranayama's influence on neurophysiological, psychological, and psychiatric parameters (Nemati A., 2013; Gupta P.K. et al., 2010).

A recent feasibility study showed that pranayama was beneficial for individuals with treatment-resistant generalized anxiety disorder, with evidence indicating a reduction in anxiety levels (Tiwari N. et al., 2012). It has been proposed that the vagus nerve, through its connections with the solitary nucleus, thalamus, limbic system, and prefrontal cortex, serves as the psychobiological pathway through which pranayama exerts its effects (Brown R.P. et al., 2005). According to Patel V. et al. (2018), over time, increased parasympathetic activity reduces stress hormone release and enhances GABAergic inhibition from the prefrontal cortex and insula to the amygdala. This leads to decreased amygdala activity and a reduction in psychological and somatic symptoms of stress.

Recent research by Grecucci A. et al. (2015) has linked yoga asana, meditation, and improved emotional regulation. However, it remains unclear whether these changes result from bottom-up or top-down mechanisms. In their study, an emotional regulation task was used to evaluate both processes. Brain regions involved in emotion regulation—such as the amygdala, insula, and anterior cingulate cortex (ACC)—are also implicated in anxiety disorders (Büchel C. et al., 1998). Hayes J.F. (2011) noted that individuals prone to anxiety show increased activity in the amygdala and insula compared to healthy controls. Moreover, meditation, which emphasizes mindful breathing, enhances emotional regulation by fostering greater acceptance and awareness of the present moment.

### **Selected Yoga Practices for research:**

**Surya Namaskar:** The Sun is venerated as it is regarded as the central and divine source of energy; therefore, the regular practice of Surya Namaskar not only improves the functioning of our system but also revitalizes and rejuvenates the entire body simultaneously. It is a holistic practice that offers physical health benefits along with mental, emotional, and spiritual benefits. Surya Namaskar promotes the higher emotions of love, peace, and compassion, thereby creating a sense of harmony and well-being. Salutation to the Sun consists of a sequence of 12 asanas designed to bring peace, harmony, and strength to the body. It incorporates asana, pranayama, mantra, and chakra meditation. These practices should preferably be performed early in the morning while facing the rising Sun.

**Nadi Shodhan Pranayama:** The Hatha Yoga Pradipika (II, 6-9, 19-20), describe a type of pranayama which cleanses the nadis. The Sanskrit term Nadi means 'channel' or 'flow' and Shodhana means 'purification'. The logic behind Nadi Shodhana is that the practice of it purifies the network of psychic energy channels in the body. Swami Swatmarama (2001) recommends

Nadi Shodhan Pranayama, for purifying Ida Nadi and Pingala Nadi. It is truly a balancing pranayama and it is considered to be an excellent preparation for meditation techniques.

**AUM Chanting:** According to Shankya philosophy: In Sanskrit the sound of latter A and U produced when combined together the sound equivalent to the latter O thus the sound by three latter A, U and M. In Om chanting, A produces vibration at the navel region which moves down. U generates waves at the chest region and M helps for response in the head and face region.

OM represents all time: past, present, and future; and is beyond time itself. OM is the eternal oneness of all that is, and thus represents the ultimate goal of yoga: to become integrated in the body, mind and spirit. It can heal the stress and anxiety accumulation in the minds of people living in this ultra-modern and busy life. OM is known to be the spirit of all mantras, and is used as the all Mula-Mantras. According to Rig Veda 1.164.39, only AUM knowers sit in peace and harmony, AUM is the name of supreme Lord.

**Bhramari Pranayama:** The word bhramari means 'bee' and the practice is so called because a sound is produced which imitates that of the black bee. Breath is quickly, making a reverberating sound like the male black bee and exhale slowly while making the sound of the female black bee. By this yogic practice one becomes lord of the yogic and the mind is absorbed in bliss.

Bhramari Pranayama induces a relaxation state by harmonizing the mind and directly the awareness inwards. The vibrations of the sounds create a soothing effect on the mind and nervous system. It is also an important aspect of Nada Yoga which uses subtle sound vibration to attune the practitioners with their true nature.

**Motivational Lectures:** Motivation is an important aspect of human psychology. It stimulates an individual to act toward a desired goal. Motivational lectures develop human skills that inspire the audience and viewers, while illuminating the path ahead. The best lectures engage both the minds and hearts of people (Marsha, 2002). Patience and hope enable individuals to face challenging situations. Courage ensures that one remains guided by one's soul and conscience. Therefore, it is one's responsibility to cultivate qualities such as courtesy, simplicity, empathy, and compassion.

### **Research Hypothesis**

1. Yoga Practices and Motivational Lectures have significant effect on General Anxiety of adolescents.
2. Experimental Group and Control Group differ significantly on General Anxiety of adolescents.

### **Materials and Methods**

#### **Sample -**

Students of 11<sup>th</sup> to 12<sup>th</sup> grade, 17-18 yrs.’ of age in an urban schooling from Stepping Stone Intermediate College in Uttar Pradesh. Convenience sampling technique was used for the data collection.

**Inclusion Criteria -**

The age range between 17-18 years both Males and Females. Self-rated normal health. Educational qualification: 11<sup>th</sup>- 12<sup>th</sup> standard students.

**Exclusion Criteria -**

Adolescents suffering from mental disorders, physically disabled or taking medicines, psychotherapy or psychotropic medication.

**Design of the Study: Pre –Post Control – Experimental Group Design.**

**Ethical Considerations -**

Informed consent of the respondents was obtained before administering the questionnaire. The participants in the study were explained in detail about the nature of the study and the voluntary nature of participation. Confidentiality was assured as part of the research process.

**Table -** Yoga Practices and Motivational Lectures have significant effect on General Anxiety of adolescents.

Group	Test	N	M	SD	SED	r	Df	t-value	Level of Significance
GA Control Group	Post	100	29.34	5.702	.742		198	-11.102	P<0.01
GA Experimental Group	post	100	21.10	4.751					

Above table shows that the directional hypothesis was undertaken in order to analyze. Yoga Practices and Motivational Lectures decrease the General Anxiety level of adolescents. General Anxiety score from control post-test (M = 29.34, SD = 5.702) and experimental post-intervention (M = 21.10, SD = 4.751), (11.102) the mean decreasing General Anxiety score was -8.24 with a 99% confidence interval which was significant on p<0.01.

**Discussion**

The findings in this study reveal that the yogic practices and motivational lectures have decreased the level of General Anxiety of adolescents, enjoyed the classes and felt benefits. Most students wanted to continue yoga and would continue if it were offered in school. Positive reports

include a greater kinesthetic awareness, which some students associated with a greater respect for the body and improved self-image. These results suggest that school-based yoga programs may be appropriate for promoting healthy behaviors at a societal level by focusing on the prevention of negative patterns during the adolescent transition.

To test the hypothesis – post intervention of control group mean ( $M = 29.34$ ,  $SD = 5.701$ ) and post intervention of experimental group mean ( $M = 21.1$ ,  $SD = 4.751$ ), of General Anxiety scores were not equal; independent samples t-test was conducted for analyses. t value (-11.102) is significant on  $p < 0.01$ . So it can be concluded that psycho yogic intervention is associated with decreasing the General Anxiety level of adolescents.

*Yogasana* and breathing exercises have long been considered in obtaining the “optimum mental and physical health state.” Yoga could perhaps be causing better anxiety control and improving the psychological well-being as well as quality of life. This assertion is supported by several studies (Khire, Bhogal, Walimbe and Khaire, 2006; Brown and Gerbarg, 2005; Mamtani & Mamtani, 2005; Bhushan, 1998). One of these studies showed that a measurable decline in anxiety scores could be achieved as early as within 10 days if the patients adopt healthy lifestyle interventions consisting mainly of *asana*, *pranayama* and relaxation techniques (Gupta et al., 2006). Others have reported that yoga promotes well-being, improves quality of life (Mamtani & Mamtani, 2005). Adhikari, (2015) found significant result in his work, “The Effect of Yogic Exercises on State Anxiety and Trait Anxiety among the adolescents.”

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