

The Role of Yoga-Based Intervention on Anxiety Levels of Studying Women

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ABSTRACT

Anxiety is a widespread mental health concern that significantly impacts individuals' daily lives, particularly among women (Kuehner, 2017). The present study examined the effect of yoga-based intervention on the levels of anxiety among studying women. The study involved 187 female participants who reported varying levels of anxiety before participating in the intervention program. Pre-test and post-test anxiety levels were measured using the Hamilton Anxiety Rating Scale (HAM-A). The results showed a statistically significant mean difference, indicating that yoga-based intervention had a meaningful impact on participants' anxiety levels. The findings suggest that yoga offers a holistic, non-pharmacological approach to anxiety management, addressing the emotional and physical aspects of anxiety simultaneously.

Keywords: *Anxiety, Yoga-based intervention, Women students, Mind-body practice*

Anxiety is characterized by persistent feelings of worry, fear, and unease, which can interfere with daily functioning (American Psychiatric Association, 2013). Anxiety is more common among women, especially in their early adulthood, because of a variety of stressors such as societal expectations, life changes, and obligations related to school or work. In India, the prevalence of anxiety is particularly concerning, with studies indicating that about 3.6% of the population suffers from anxiety disorders (Reddy & Chandrashekar, 1998). Among women, this prevalence is even higher, often attributed to various societal, cultural, and economic stressors (Kuehner, 2017). Symptoms of anxiety include restlessness, fatigue, difficulty concentrating, irritability, and muscle tension (APA, 2013). Societal pressures, educational challenges, and cultural expectations further increase anxiety, particularly among women (Patel et al., 1999). Gender differences in anxiety disorders are well documented, with women being twice as likely as men to be diagnosed with an anxiety disorder (American Psychiatric Association, 2013). This increased vulnerability is thought to be caused by hormonal fluctuations, societal influences, and a propensity for emotional awareness (Altemus et al., 2014).

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The Role of Yoga-Based Intervention on Anxiety Levels of Studying Women

Yoga is a traditional physical practice that helps ease pain and tension in the muscles. The fundamental tenets of yoga emphasize the power of the mind over the body and maintain that spiritual and mental growth are essential to support the health advantages of physical activity (Monro, 1991). According to Jadhav and Havalappanavar (2009), yoga is regarded as one of the most significant, useful, and successful methods that man can use to overcome a variety of psychological and physical issues. Since stressors in daily life cannot be completely eradicated, many people find that reducing their response to stress through various techniques helps to reduce physical and mental stresses and strains, as well as stress-related disorders like melancholy and anxiety. One alternative therapy that addresses anxiety's physiological and psychological symptoms is yoga therapy (Braunwald et al., 2001).

The yoga poses, also known as asanas, work every muscle and joint in the body, as well as the spine and the entire skeletal system. Additionally, they maintain the radiance of health in all systems by working not only on the body's framework but also on the internal organs, glands, and nerves. They also release a great deal of energy by relieving mental and physical strain. Research suggests that yoga not only helps in reducing symptoms of anxiety but also improves overall emotional well-being by fostering resilience and coping skills (Cramer et al., 2018). In a yoga intervention study, Malathi et al. (1998) evaluated the students both before and after the exam, and they discovered that the students' anxiety had decreased.

The connection between yoga and anxiety management is particularly relevant for women, as yoga offers a holistic approach that addresses both physical and emotional aspects of health (Woodyard, 2011). For college-aged women, balancing academic, personal, and societal expectations can lead to elevated anxiety levels. Yoga, with its emphasis on mindfulness and stress reduction, provides an accessible and non-pharmacological solution to managing these stressors (Balasubramaniam et al., 2013). Women in this age group are often open to exploring alternative therapies, making yoga a suitable intervention for improving mental health (Smith & Pukall, 2009). The reduction in anxiety following yoga practice has been consistently supported by both qualitative and quantitative research (Riley & Park, 2015).

With anxiety being particularly prevalent in women in India, this research focuses on the pre and post levels of anxiety in female college students engaged in a structured yoga practice. The findings provide important insights into the potential of yoga as a non-invasive, cost-effective intervention for managing anxiety.

METHODOLOGY

Aim

The present study aimed to examine the effectiveness of yoga-based intervention on anxiety levels of studying women.

Objectives

To examine the effectiveness of yoga-based intervention on anxiety levels of studying women.

Hypothesis

H1: Yoga-based intervention would have a significant effect on the anxiety levels of studying women.

The Role of Yoga-Based Intervention on Anxiety Levels of Studying Women

Sample

A total of 187 female participants were involved in the study. They were enrolled in undergraduate and postgraduate programs, aged between 18 and 26 years, at colleges in Coimbatore, Tamil Nadu. The participants engaged in asana practice through offline sessions. Each participant practiced for a total of 75 days. The convenience sampling method was used and individuals with fractured bones or chronic conditions such as stomach ulcers, tuberculosis, hernias, and high blood pressure, as well as those recovering from surgery, were advised to avoid strenuous asanas. Asanas were not allowed to practice at the time of the menstruation period (6 days).

Materials

The Hamilton Anxiety Rating Scale was developed by Max R. Hamilton in 1959. It is a self-report scale developed to measure the levels of anxiety. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56. The HAM-A has established test-retest reliability and internal consistency (Patel et al., 2022). The Cronbach's alpha for the HAM-A is 0.89.

Procedure

The researcher contacted the participants and explained the confidentiality and purpose of the research. Once the researcher received consent from the participants, they were asked to fill the questionnaire. They were also informed regarding their right to withdraw themselves from the study at any point of time. A set of yogic techniques was introduced to the participants and made them to practise daily for 2.5 months. The participants practised the 20 sets of different exercises which include Surya namaskar, Pranayama (breathing techniques), Kriya (cleansing techniques), Asanas and Yoga Nidra. The total time for practice was 1 hour, where they start with Surya Namaskar, Nadishodhana Pranayama (21 times), Bhramari Pranayama (21 times), Sheetal Pranayama (21 times), Kapalabhati Kriya (75 strokes of breath), Chakravakasana (cat-cow stretch, 9 breaths in and breath out) were practiced. After Pranayama and Kriya, the participants continued with standing asanas, sitting asanas, supine asanas, and prone asanas and concluded with Yoga Nidra (deep relaxation technique). Following the intervention, the post-intervention levels of anxiety were measured among the participants.

RESULTS

Table 1. Demographic details of the sample (N = 187)

Variables	Group	N	%
Age	18	26	13.9
	19	57	30.5
	20	62	33.2
	21	33	17.6
	22	9	4.8
Education	UG	147	78.6
	PG	40	21.4

Table 1 shows the demographic details of the sample. It shows the participants ages ranged from 18 to 22 years. The largest group, 33.2%, were 20 years old, followed by 30.5% who were 19 years old. Those who were 21 made up 17.6%, while 13.9% were 18 years old, and

The Role of Yoga-Based Intervention on Anxiety Levels of Studying Women

only 4.8% were 22. The table also showed that most participants (78.6%) were undergraduate students, while 21.4% were postgraduate students.

Table 2. Effect of yoga-based intervention on anxiety levels of studying women

Variable	Phase	N	M	SD	Mean Difference	t
Anxiety	Pre-test	187	29.7	4.28	12.7	44.207**
	Post-test	187	17.0	3.36		

Table 2 shows the mean, standard deviation, and the mean difference between the pre-test and post-test of anxiety levels among studying women. Findings showed that there were significant mean differences between the pre-test and post-test. The pre-test score had an average mean value of 29.69 with a standard deviation of 4.28. The post-test score had an average value of 17.00, with a standard deviation of 3.355. The mean difference between the two scores was 12.7, indicating a substantial change in the variable under investigation due to the intervention. This indicates women exhibited lower scores on anxiety levels in the post-test compared to the pre-test scores. This suggests a significant positive impact of yoga-based intervention on the participants. The results revealed that yoga-based intervention had a consistent and highly significant positive effect on the levels of anxiety among studying women.

DISCUSSION

The study examined the effect of yoga-based intervention on anxiety levels of studying women. The results support the initial hypothesis, which posited that the yoga-based intervention would have a significant effect on anxiety levels of studying women. The findings show a significant positive change between the pre-test score and the post-test score following the implementation of yoga-based intervention.

Kinser et al. (2012) found that yoga practices led to significant improvements in emotional regulation and stress reduction, supporting the results of the current study. Similarly, Ross and Thomas (2010) showed that yoga interventions can have a more profound impact on mental health compared to other forms of physical exercise, with participants experiencing reduced anxiety and stress levels. Previous studies have demonstrated the effectiveness of interventions like yoga in reducing anxiety among women, which aligns with the findings of this study (Javnbakht et al., 2009; Shohani et al., 2018).

This study contributes to a growing body of evidence that supports the implementation of yoga and similar techniques as part of routine mental health care for women. These findings suggest that yoga can be a valuable tool in promoting emotional well-being among women. These findings underscore the positive impact of yoga as an intervention for anxiety reduction and provide valuable insights for further research and practical implementation in settings that aim to improve the mental health and quality of life for women.

The study's limitations include a limited and homogeneous sample of female college students, which may affect the generalizability of the findings to other populations, and the absence of a control group makes it difficult to determine the specific impact of the yoga-based intervention.

CONCLUSION

Yoga-based intervention was effective in reducing the anxiety levels of studying women.

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The Role of Yoga-Based Intervention on Anxiety Levels of Studying Women

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Conflict of Interest

The author(s) declared no conflict of interest.

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