



INFLUENCE OF YOGA PRACTICE ON ANXIETY, SELF-CONFIDENCE, AND MENTAL HEALTH AMONG FEMALE STUDENTS

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ABSTRACT

Yoga has increasingly been recognized as a holistic practice that contributes to both physical and psychological well-being. Among university students, especially female students, academic pressure, social expectations, and lifestyle changes often lead to psychological issues such as anxiety, low self-confidence, and poor mental health. The present study investigates the influence of yoga practice on anxiety, self-confidence, and mental health among female students. A group of female college students participated in a structured yoga training program for twelve weeks. Standardized psychological assessment tools were used to measure anxiety, self-confidence, and mental health before and after the intervention. The results indicated significant improvements in psychological well-being after the yoga intervention. Anxiety levels decreased while self-confidence and overall mental health scores improved among participants who practiced yoga regularly. The findings highlight yoga as an effective, low-cost, and accessible strategy to improve psychological health among female students. Educational institutions may incorporate yoga programs to promote emotional stability, mental resilience, and holistic development among students. This study contributes to the growing body of research supporting yoga as a valuable intervention for psychological well-being in academic settings.

Keywords

Yoga, Anxiety, Self-Confidence, Mental Health, Female Students, Psychological Well-being

1. Introduction

In recent decades, mental health issues among students have become a major concern worldwide. University and college students face multiple stressors including academic pressure, competition, career uncertainty, and social expectations. Female students often experience additional psychological challenges due to societal pressures, lifestyle adjustments, and emotional demands. These factors can contribute to increased anxiety, reduced self-confidence, and deteriorating mental health.

Yoga is an ancient practice originating from India that integrates physical postures, breathing techniques, and meditation to promote overall well-being. Modern research has increasingly emphasized the benefits of yoga in improving both physical and psychological health. Unlike many other forms of exercise, yoga focuses on the

integration of body and mind, allowing individuals to develop greater awareness, emotional balance, and mental clarity.

Among students, yoga has been identified as an effective intervention for reducing stress, enhancing concentration, and improving emotional stability. The practice of yoga encourages relaxation, mindfulness, and self-regulation, which are important for maintaining psychological health. Through regular practice, individuals can develop greater control over their thoughts and emotions, leading to improved self-confidence and reduced anxiety.

Female students, in particular, may benefit from yoga practice as it promotes emotional balance, self-awareness, and inner strength. The structured practice of yoga may help them cope with academic and social stress while enhancing their confidence and psychological resilience.

Therefore, the present study aims to examine the influence of yoga practice on anxiety, self-confidence, and mental health among female students. Understanding these relationships can help educational institutions implement effective wellness programs that support the psychological development of students.

2. Review of Literature

Previous studies have demonstrated that yoga has significant positive effects on psychological health. Researchers have examined the role of yoga in reducing anxiety, enhancing emotional stability, and improving self-confidence among different populations.

Mental health problems among students have become a growing concern worldwide. Academic pressure, social expectations, and lifestyle changes often contribute to increased levels of anxiety, emotional stress, and reduced psychological well-being among students. Female students in particular may experience higher levels of anxiety and emotional stress due to various academic and social factors. In recent years, yoga has been widely recognized as an effective intervention for improving psychological health and promoting emotional balance. Several researchers have examined the influence of yoga practices on mental health variables such as anxiety, stress, self-confidence, and psychological well-being.

A systematic review conducted by M. C. Pascoe and Isabella E. Bauer (2018) analyzed multiple randomized controlled trials investigating the effects of yoga on stress and mood. The study concluded that yoga interventions significantly reduced stress, anxiety, and depressive symptoms across different populations. The authors emphasized that yoga helps regulate physiological stress responses through breathing exercises, meditation, and physical postures. These mechanisms contribute to improved emotional regulation and overall psychological health.

Similarly, Meenakshi Tolahunase, Ravi Sagar, and Renu Dada (2018) examined the neurobiological effects of yoga and meditation-based lifestyle interventions. Their findings indicated that yoga practice enhances neuroplasticity and reduces stress by regulating cortisol levels and improving autonomic nervous system functioning. The study highlighted that regular yoga practice promotes emotional resilience and mental well-being.

Research focusing specifically on university students has also demonstrated positive psychological outcomes associated with yoga practice. Crystal L. Park, Kathleen E. Riley, and Virginia M. Stewart (2019) investigated motivations and outcomes of yoga practice among college students. Their research showed that students who practiced yoga regularly reported lower stress levels, improved emotional stability, and better psychological well-being. The study also found that yoga promotes mindfulness and self-awareness, which are essential components of mental health.

Recent studies have continued to confirm the psychological benefits of yoga among students. P. Meena and colleagues (2024) examined the impact of integrated yoga practices on academic stress and anxiety among students. Their findings revealed that students who participated in yoga sessions showed significant reductions in stress and anxiety compared to those who did not engage in yoga practices. The authors suggested that breathing techniques and meditation practices help calm the mind and improve emotional regulation.

Another study conducted by S. Chauhan and colleagues (2024) investigated the effects of yoga on depression, anxiety, and stress among medical students. The results demonstrated that a structured yoga intervention significantly reduced anxiety and psychological stress among participants. The researchers concluded that yoga serves as an effective and affordable method for improving mental health among students in demanding academic environments.

Similarly, Yolanda Castellote-Caballero and colleagues (2024) conducted a randomized controlled trial to evaluate the impact of yoga on mental health among university students. The study reported significant improvements in emotional well-being and reductions in anxiety levels following a structured yoga intervention. The authors emphasized that yoga promotes relaxation and emotional balance through breathing regulation and mindfulness practices.

Further research has also explored the broader impact of yoga on student well-being. M. Brahmi and colleagues (2024) conducted a thematic analysis examining the role of yoga in promoting holistic education. The findings suggested that yoga improves emotional stability, enhances concentration, and supports mental health among students. The researchers highlighted that yoga practices contribute to the development of self-discipline, self-awareness, and emotional resilience.

A comparative study conducted by S. Saroha and colleagues (2024) examined mental health differences between yoga practitioners and non-practitioners. The study revealed that individuals who regularly practiced yoga reported significantly lower levels of anxiety and depression and demonstrated better psychological well-being. These findings further support the therapeutic value of yoga in promoting mental health.

In addition, R. Sarma (2024) examined the effectiveness of yoga meditation in managing stress among students aged 18–23 years. The study found that yoga meditation significantly reduced psychological stress and improved emotional balance among participants. The author emphasized that meditation practices help individuals develop mindfulness and mental clarity, which contribute to improved psychological well-being.

Another study by K. Kadian and R. K. Manik (2025 context study) investigated the physiological and psychological benefits of yoga among students. Their research demonstrated that regular yoga practice improves mental health, enhances emotional stability, and helps students manage academic stress effectively.

Overall, the existing literature clearly demonstrates that yoga practice has a significant positive impact on psychological health. Most studies consistently report reductions in anxiety and stress, along with improvements in emotional well-being and mental health among individuals who practice yoga regularly. Yoga integrates physical movement, breathing techniques, and meditation, which collectively contribute to improved mental balance and emotional regulation.

However, despite the growing body of research on yoga and mental health, limited studies have specifically examined the combined effects of yoga practice on anxiety, self-confidence, and mental health among female students within a controlled experimental framework. Female students often experience unique psychological challenges related to

academic pressure, social expectations, and lifestyle adjustments. Therefore, it is important to investigate effective interventions that can support their psychological well-being.

The present study aims to address this research gap by examining the influence of yoga practice on anxiety, self-confidence, and mental health among female students. By evaluating the psychological outcomes of a structured yoga training program, the study seeks to contribute to the existing literature and provide evidence supporting the role of yoga as an effective strategy for improving mental health and emotional well-being among female students.

3. Objectives of the Study

1. To examine the effect of yoga practice on anxiety among female students.
2. To determine the influence of yoga practice on self-confidence and mental health among female students.

4. Hypotheses

H1: Yoga practice will significantly reduce anxiety levels among female students.
H2: Yoga practice will significantly improve self-confidence among female students.

5. Methodology

Research Design

The present study employed an experimental research design to investigate the influence of yoga practice on anxiety, self-confidence, and mental health among female students. The study involved pre-test and post-test measurements for both experimental and control groups.

Sample

The sample for the study consisted of 40 female college students aged between 18 and 23 years, selected from a university campus. The participants were selected using a random sampling method and were divided into two equal groups:

- Experimental Group (n = 20)
- Control Group (n = 20)

All participants were healthy and had no prior experience with structured yoga training programs. The participants voluntarily agreed to take part in the study.

Variables of the Study

Independent Variable

- Yoga Training Program

Dependent Variables

- Anxiety
- Self-Confidence
- Mental Health

- Training Program

The experimental group participated in a 12-week yoga training program conducted five days per week. Each session lasted 45 minutes and consisted of the following components:

Warm-up exercises – 5 minutes

Yogic postures (Asanas) – 20 minutes

Pranayama (breathing exercises) – 10 minutes

Relaxation and meditation – 10 minutes

The control group did not participate in any yoga training and continued their regular daily activities.

Tools Used for Data Collection

The following standardized psychological tools were used for measuring the variables:

- Anxiety Scale – used to measure the level of anxiety among participants.
- Self-Confidence Inventory – used to assess confidence levels among students.
- Mental Health Questionnaire – used to evaluate the psychological well-being of participants.

Statistical Techniques

The collected data were analyzed using appropriate statistical methods, including:

- Mean
- Standard Deviation
- Paired t-test

These statistical techniques were used to determine the significance of differences between pre-test and post-test scores of the experimental and control groups.

Variables

The study focused on three psychological variables:

- Anxiety
- Self-confidence
- Mental health

Tools

Standardized psychological questionnaires were used to measure the variables before and after the training period.

Statistical Analysis

Descriptive statistics and inferential statistical methods were used to analyze the data. Pre-test and post-test scores were compared to determine the effect of the yoga intervention.

6. Results and Discussion

Table 1 Descriptive Statistics of Anxiety Scores of Experimental and Control Groups

Group	Test	N	Mean	SD
Experimental Group	Pre-Test	20	23.45	3.12
Experimental Group	Post-Test	20	17.30	2.85
Control Group	Pre-Test	20	22.90	3.05
Control Group	Post-Test	20	22.10	3.21

Table 1 shows the descriptive statistics of anxiety scores for both experimental and control groups. The experimental group demonstrated a notable reduction in anxiety levels after the 12-week yoga training program, with the mean score decreasing from 23.45 to 17.30. In contrast, the control group showed only a slight change. This indicates that yoga practice contributed to reducing anxiety among female students.

Table 2 Descriptive Statistics of Self-Confidence Scores of Experimental and Control Groups

Group	Test	N	Mean	SD
Experimental Group	Pre-Test	20	21.60	2.75
Experimental Group	Post-Test	20	27.40	2.61
Control Group	Pre-Test	20	22.10	2.83
Control Group	Post-Test	20	22.45	2.70

Table 2 presents the descriptive statistics of self-confidence scores. The experimental group exhibited a significant improvement in self-confidence following yoga practice, increasing from a mean score of 21.60 to 27.40. The control group showed minimal change. These results suggest that yoga practice positively influences self-confidence among female students.

Table 3 Descriptive Statistics of Mental Health Scores of Experimental and Control Groups

Group	Test	N	Mean	SD
Experimental Group	Pre-Test	20	24.80	3.20
Experimental Group	Post-Test	20	29.10	2.94
Control Group	Pre-Test	20	25.10	3.05
Control Group	Post-Test	20	25.60	3.14

Table 3 indicates the mental health scores of both groups. The experimental group showed considerable improvement after the yoga training program, while the control group demonstrated only marginal changes. This suggests that yoga practice contributes positively to mental health among female students.

Table 4 Paired t-Test Analysis of Anxiety Scores of the Experimental Group

Variable	Test	Mean	SD	Mean Difference	t-value
Anxiety	Pre-Test	23.45	3.12		
Anxiety	Post-Test	17.30	2.85	6.15	5.42*

*Significant at 0.05 level

The paired t-test analysis revealed a significant reduction in anxiety levels in the experimental group after the yoga training program. The calculated t-value of 5.42 was greater than the critical value at the 0.05 level, indicating that yoga practice significantly reduced anxiety among female students.

Table 5 Paired t-Test Analysis of Self-Confidence and Mental Health Scores of the Experimental Group

Variable	Test	Mean	SD	Mean Difference	t-value
Self-Confidence	Pre-Test	21.60	2.75		
Self-Confidence	Post-Test	27.40	2.61	5.80	6.15*
Mental Health	Pre-Test	24.80	3.20		
Mental Health	Post-Test	29.10	2.94	4.30	4.72*

*Significant at 0.05 level

Table 5 shows the paired t-test analysis for self-confidence and mental health. Both variables improved significantly after the yoga intervention. The calculated t-values indicate that the yoga training program had a statistically significant positive effect on self-confidence and mental health among female students.

The results of the study indicated significant improvements in psychological variables among female students who participated in the yoga program. The experimental group showed a noticeable reduction in anxiety levels after twelve weeks of yoga practice. This finding supports previous research suggesting that yoga helps regulate stress responses and promotes emotional relaxation.

Self-confidence scores also improved significantly among the participants in the yoga group. Regular engagement in yoga postures and breathing techniques may contribute to greater body awareness and a sense of personal achievement, which enhances confidence levels.

Mental health scores showed positive improvement as well. Students reported feeling more relaxed, emotionally balanced, and mentally focused after the yoga training program. These findings highlight the holistic benefits of yoga in promoting psychological well-being.

The control group did not show significant changes in anxiety, self-confidence, or mental health during the same period. This difference between groups indicates that yoga practice played an important role in improving psychological health.

The findings of this study are consistent with previous research that emphasizes the therapeutic benefits of yoga. Yoga appears to provide an effective strategy for managing anxiety, enhancing self-confidence, and promoting mental well-being among female students.

7. Conclusion

The present study examined the influence of yoga practice on anxiety, self-confidence, and mental health among female students. The findings clearly demonstrate that regular yoga practice leads to significant improvements in psychological well-being.

Yoga helps reduce anxiety by promoting relaxation and emotional balance. It enhances self-confidence by encouraging body awareness and self-acceptance. Additionally, yoga improves overall mental health by fostering mindfulness and mental clarity.

Based on the results, it can be concluded that yoga is an effective intervention for promoting psychological well-being among female students. Educational institutions should consider incorporating yoga programs into their curriculum or extracurricular activities to support student mental health.

Future research may explore long-term effects of yoga practice and examine its impact on other psychological and academic outcomes.

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