

Optimizing Mental Health: The Impacts of Yoga Practices on Mental Health among Female College Student

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ABSTRACT

The purpose of this study was to determine how Asana and Meditational practices affected college women students' mental health. Twenty female students from SRM Institute of science and Technology, Kattankulathur, were selected at random as the study's subjects. They were between the ages of 19 and 22. The participants were split into two groups at random: group I practiced Asana and Meditation (n=10), while group II served as a control (n=10). For six weeks, members of Group I practiced Asana and Meditational practices on alternate days, attending one session per day. Group II took part in regular activities but did not receive any particular training. The data on a specific mental health criterion variable; The Warwick-Edinburgh Mental Wellbeing Scale was used to evaluate it. The dependent-t test and Analysis of Covariance (ANCOVA) were set at the 0.05 level of confidence for statistical analysis of the collected data. The statistical package SPSS- 22 version was used to analyze all of the data. It was determined that the group that combined Asana and Meditational practices had significantly better mental health than the control group, and the fact that the experimental and control groups differed significantly.

Keywords: Asana, Meditational Practices, Mental Wellbeing

1. INTRODUCTION

Yoga is a method of simultaneously teaching the “body, the mind (or intellect), and the inner soul” and it is a centuries-old Indian practice and science. Both healthy and chronically ill individuals may benefit physically and psychologically from yoga. According to [1], yogaasana are different ways to move and/or hold the body in different positions. We learn to recognize the relationship between our physical, mental, and emotional intensities through yoga practice [2,3]. Yoga is a very old practice. It is acknowledged as one of the Indian heritage's most significant and valuable gifts.

The world today looks to yoga as a solution to the various issues men face. According to [4], yoga has never before involved so much interest from persons in so many different places of the world. Yoga is a traditional form of mental and physical training. Masson Oural, a scholar from France, has said that yoga is the foundation of Indian culture always. According to [5], the various forms of yoga have had a significant impact on the spirit of modern India, resulting in its diversity and diversions.

Numerous religious traditions have used Meditational since antiquity, frequently as a means of achieving enlightenment and self-realization. Asana for Meditational can be used to improve peace, perception, self-concept, and well-being while also reducing stress, anxiety, depression, and pain [6]. According to [7], research is underway to determine the potential health (psychological, neurological, and cardiovascular) and other effects of Meditational.

Positive mental health is defined as a state that "allows individuals to realize their abilities, cope with the normal stresses of life, work productively and fruitfully, and make a contribution to their community," according to the World Health Organization. Positive mental health is the "foundation for well-being and effective functioning for both the individual and the community." Another crucial aspect of good mental health is the capacity for long-lasting, mutually satisfying relationships [8,9].

2. PURPOSE OF THE STUDY

The study's objective was to determine the Impacts of Asana and Meditational practices affected college women students' mental health.

3. LITERATURE REVIEW

The potential benefits of brain-yoga practice on university student's immune systems and quality of life were investigated by [10]. Thirty academic students from universities participated in the study to assess the effects of a 12-week brain-yoga program. The study's goal was to demonstrate the positive effects of brain-yoga practice on digital academic students stress management and quality of life. The results showed that after the 12-week brain-yoga program there were statistically significant improvements in immune markers quality of life and stress and anxiety levels.

The goal of [11] was to find out how students felt about yoga interventions in the classroom. The findings showed that practicing yoga improved young people's mental health and wellbeing and raised their awareness of the need to relax.

[12] evaluated the impact of a yoga-centered social-emotional wellness enhancement initiative, Transformative Life Skills (TLS), on measures of adolescent emotional distress, prosocial behavior, and school functioning. Findings indicated that students involved in the TLS program showed notable decreases in unexcused absences and detentions, along with increases in school engagement.

4. MATERIAL AND METHODS

The purpose of this study was to determine the Impacts of Asana and Meditational practices affected college women students' mental health [13]. Twenty female students from SRM Institute of science and Technology, Kattankulathur, The chosen individuals were split into two groups at random, with group I (n = 10) engaging in asana and meditational exercises and group II (n = 10) acting as a control. For six weeks, members of Group I practiced Asana and Meditational on alternate days, attending one session per day. Group II took part in regular activities but did not receive any particular training.

The data on a specific mental health criterion variable; The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) was used to evaluate it. The WEMWBS is a mental health assessment that focuses solely on the positive aspects of mental health. A total score is obtained by adding the five response categories on the 14-item WEMWBS scale. The concept is easier to comprehend because all of the elements are stated in a positive manner and target both the emotion and the functioning sides of mental health.

The scale has been widely used to monitor, evaluate, and investigate the factors that influence mental health both nationally and internationally." Sarah Stewart-Brown, Professor although there were no dropouts from the study, the subjects were free to withdraw their consent if they experienced any discomfort during the training.

The subjects were medically examined by a qualified physician, and the results showed that they were suitable for the study. Before each training session, the subjects went through their respective program under the strict supervision of the investigator. Figure 1 illustrates the work flow of the proposed study methodology. This systematic approach ensured the reliability of the research findings and highlighted the effects of yoga and meditation on mental well-being.

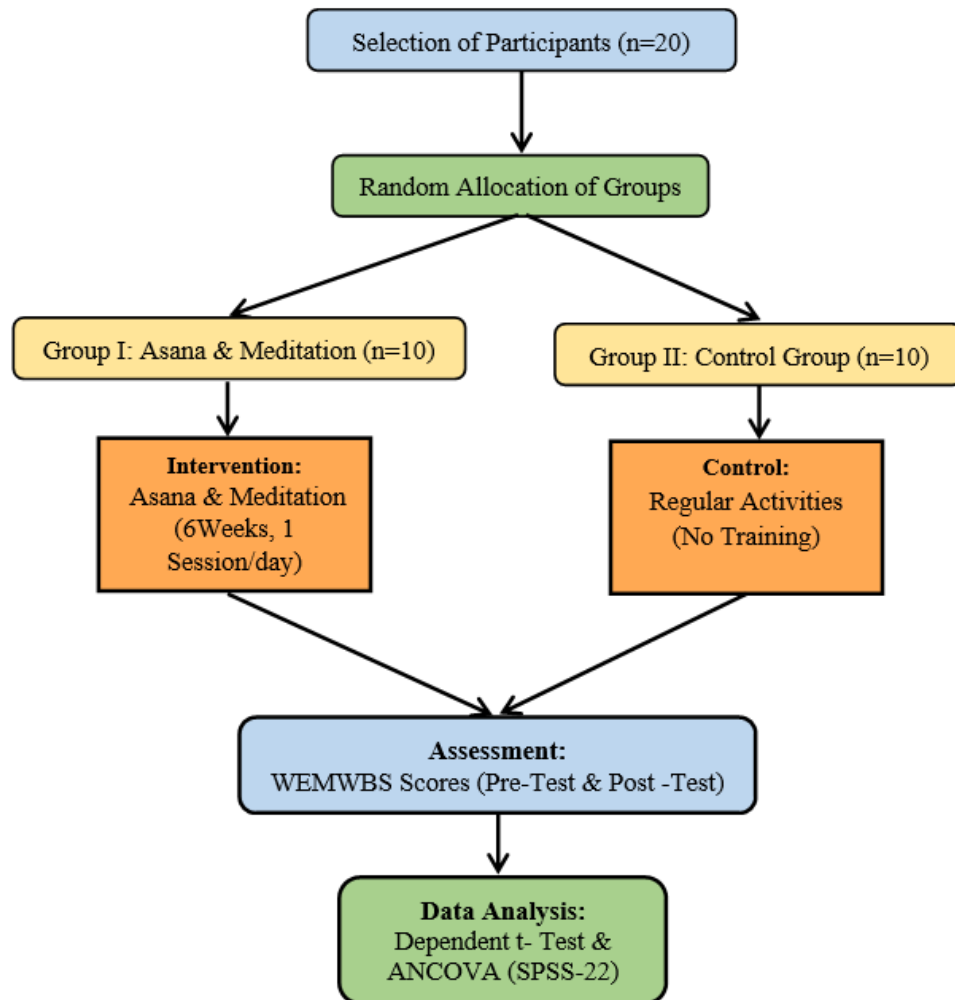


Figure 1. Proposed Flow Diagram

Throughout the training, all of the participants were questioned about their health. None of the new participants reported an injury, but muscle soreness was reported in the first few weeks, but it went away later. By dividing the total number of training sessions by the number of sessions that were attended, the experimental group's attendance was determined to be 96.5 percent respectively. Jogging and stretching were part of a ten-minute warm-up exercise for the experimental group. The chosen asanas are tadasana (palm tree pose with raised hands), trikonasana (triangle pose), natrajasana (triangle pose), janu sirasana (head to knee pose), sasangasana (rabbit pose), dhanurasana (bow pose), virabhadrasana (warrior pose), yogamudra (forward bend), padmasana.

The dependent-t test and Analysis of Covariance (ANCOVA) were set at the 0.05 level of confidence for statistical analysis of the collected data. The statistical package SPSS-22 version was used to analyze all of the data.

Analysis of Data

When compared to the control group, the study's findings showed that participants, who practiced asana and meditation, had significantly better mental health. Statistical methods such as the dependent t-test and Analysis of Covariance (ANCOVA) were used to examine the scores on the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) for both groups. Indicating improved mental health, the experimental group which engaged in asana and meditation demonstrated a significant rise in post-test scores when compared to pre-test scores.

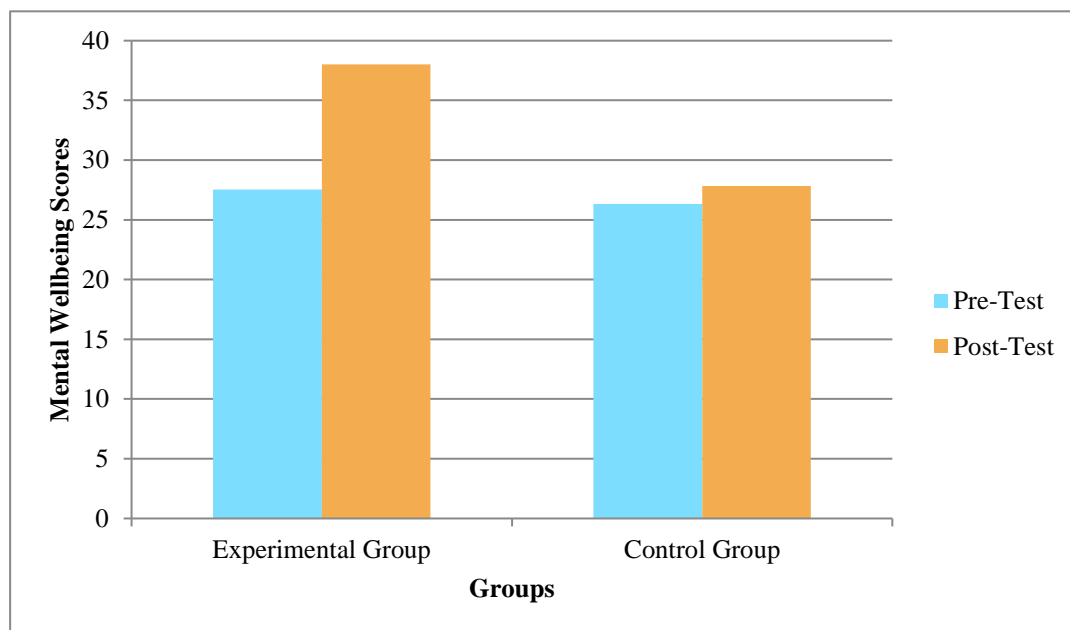
However, over the same time period there was no discernible change in the control group's mental health scores. The effectiveness of the intervention was highlighted by statistical analysis which showed that the differences between the experimental and control groups were significant at the 0.05 confidence level. These results confirm that yoga and meditation have a beneficial effect on mental health and point to their potential as useful strategies for enhancing college women's wellbeing.

Table 1: Means and Dependent 'T'-Test for the Pre and Post Tests on Mental Wellbeing of Experimental and Control Groups

Criterion variables	Mean	Experimental Group	Control group
Mental wellbeing (Points)	Pre test	27.54	26.32
	Post test	38.02	27.84
	't' test	11.38*	1.60

*Significant at .05 level. (Table value needed for significance at .05 level for 't'-test with df 9 is 2.26)

The experimental group significantly outperformed the control group in terms of mental wellbeing, as shown by table 1, where the dependent-t-test values of mental wellbeing between the experimental groups' pre and post-test means were greater than table value 2.26 with df 9 at the 0.05 level of confidence.

**Figure 2. Dependent T-Test: Pre-test vs Post-test**

The study's findings are visually represented by two significant graphs. The experimental and control groups mental health scores before and after the test are compared using the Dependent T-Test which is displayed in Figure 2. It demonstrates how practicing asana and meditation greatly enhanced the experimental groups post-test results. In contrast the control group shows a slight increase indicating that there was no discernible change in their mental health during that period.

Calculation of Covariance Analysis

The following tables present the descriptive measurements and the findings of the analysis of covariance on the criteria measures.

Table 2: Computation of Mean and Analysis of Covariance on Mental Wellbeing of Experimental and Control Groups

	Experimental group	Control group	Source of variance	Sum of squares	Df	Mean square	F
Mental wellbeing (Adjusted Post Mean)	38.24	27.95	BG	143.77	1	143.77	15.36*
			WG	159.12	17	9.34	

* Significant at 0.05 level. Table value for df 1, 17 was 4.45"

Based on the previously mentioned table 2, the modified mean scores for the experimental and control groups' mental health were 38.24 and 27.95, respectively. For the degrees of freedom of 1 and 17 required for significance at the 0.05 level of confidence, the computed F-ratio of 15.36 for the adjusted mean exceeded the table value of 4.45. In light of the study's results, there was a significant difference in mental well-being between the experimental and control groups.

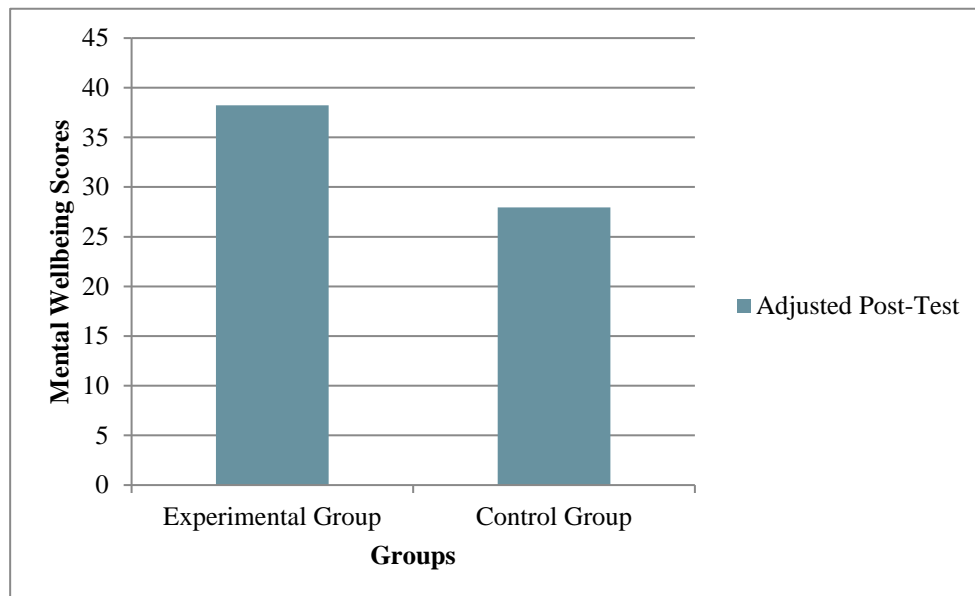


Figure 3. ANCOVA: Adjusted Post-Test Scores

Figure 3 presents the adjusted post-test results for both groups as determined by ANCOVA. Taking baseline differences (pre-test scores) into consideration this graph highlights the experimental groups that scored significantly higher than the control groups. These results suggest that while meditation and yoga can help with mental health the control group did not show any appreciable improvements.

5. DISCUSSION ON FINDINGS

Researchers [14] examined how yoga affected their ability to function and general well-being. An evaluation of the impact of Yoga's effects on subjective well-being and anxiety was conducted by [15]. According to a [16], yoga has positive effects on students' mental health. A study on the impact of yoga, pranayama, and Meditational on the mental health of female undergraduate medical students was undertaken by [17]. [18] Examined how yoga affected students' mental health. In a single session, [19] investigated how various yoga styles alter psychological resources and emotional wellbeing. Given the preceding studies that influenced me, I set out to undertake this research. The findings indicate that, compared to the control group, college women students experienced a considerable increase in their mental health as a result of Asana and Meditational practices.

6. CONCLUSIONS

1. There was a considerable improvement in mental wellness among college women students as a result of the influence of Asana and Meditational practices.
2. There was a substantial difference in the mental health of female college students between the experimental and control groups.
3. However, none of the examined characteristics had significantly improved for the control group.

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