

EFFECT OF YOGA THERAPY ON ANXIETY AND DEPRESSION OF WOMEN'S

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ABSTRACT

The present study was aim to find out effect of yoga therapy on Anxiety and Depression level of women's. The samples of 60 women's (30 women's in each group) were selected. The Anxiety test by Sinha & Sinha and Depression test by Thakur and Sing was used to data collection for pre and post-test. For statistical analysis paired sample t test was used. The obtained findings show that the level of anxiety and depression was decreased after the successful completion of yoga program.

Keywords: Anxiety, Depression, Yoga Therapy.

Yoga is an ancient discipline designed to bring balance and health to the physical, mental, emotional, social and spiritual dimensions of the individual. In modern hectic life the problem of psychological health are increased in women's. If women become aware about their own as well as family health society will be healthy. In any society the happy and healthy mind of woman is the mirror of a family. It is also the reflection of healthy society. Yoga therapy will be useful to keep this reflection of healthiness and happiness. Yoga has minimal side effects and is cost-effective in comparison with pharmacological treatments and psychotherapy. Yoga's added benefit is that it improves physical fitness and encourages self-reliance. By 2020, the World Health Organization predicts that depression will

be the second largest contributor to the global disease burden. Anxiety is also being diagnosed at a greater rate than it was in the past. Despite these increases in diagnosis, treatment regimens typically include pharmaceutical therapies that are not sufficient to prevent further illness or promote mental well-being. Effectively addressing mental health concerns entails a comprehensive approach that addresses the root of the problem. The application of yoga as a therapeutic intervention, which began early in the twentieth century, takes advantage of the various psycho physiological benefits of the component practices. The physical exercises (asanas) may increase patient's physical flexibility, coordination, and strength, while the breathing practices and meditation may calm and focus the

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mind to develop greater awareness and diminish anxiety (Kirkwood G. et.al. 2005), and thus result in higher quality of life.

Review of Literature:

Gurav, T. and Wankhede, S. (2016) studied Effects of yoga on depression, anxiety and stress of women. Findings conclude that the participation in a 3 month yoga class can lead to significant reduction in perceived levels of anxiety in women who suffer from anxiety disorders. This study suggests that yoga can be considered as a complementary therapy or an alternative method for medical therapy in the treatment of anxiety disorders.

Patel, N., Baria, D., Joshi, V. (2016) concluded that Yoga helps to reduce stress and anxiety in working as well as non-working women. Practicing yoga daily improves the psychological functions significantly even in the absence of any other form of physical exercise.

Weintraub, A., (2004) describes in detail various yoga practices that can be used to treat depression. Her work is grounded in research and based as well on the experience of healing and managing her own depression through Yoga.

Objectives of the study:

- 1) To study the effect of yoga therapy on the anxiety in woman.
- 2) To study the effects of yoga therapy on the depression in women.

Hypotheses:

- 1) The yoga therapy reduces the level of anxiety in women.
- 2) The yoga therapy reduces the level of depression in women.

RESEARCH METHODOLOGY:

Statement of problem:

To Study the Effect of Yoga Therapy on Depression and Anxiety in women.

Research Variables:

Independent variables:

Yoga Techniques:

- a) Aasan b) Pranayam c) Shuddhikriya
- d) Bandh e) Mudra
- f) Cyclic Meditation g) Yognidra

Dependent Variables:

- a) Anxiety level b) Depression level
- Control variables : a) Diet b) Exercise
- c) Medication

Operational Definition:

Anxiety: It is composite score obtained on the Anxiety test developed by P.K.Sinh and, L.N.K.Sinha.

Depression: It is composite score obtained by subject on the Depression test developed by G.P. Thakur and R. N. Sing.

Yoga treatment:

The training of techniques such as Aasan, Pranayam, Mudra, Bandh, Meditation, Yognidra is known as yoga treatment.

Research Design:

- A) Pre-test: Measurement of Anxiety and Depression level in women's
- B) Yoga Training Intervention (programme)

Duration: Three months, one and half hour in morning.

Sr. No.	Yoga Techniques	Types	Duration
1	Aasan	Wajraasan, Bhujangaasan, Halaasan, Sarwangaasan, Pawanmuktiaasan, Mandhukaasan, Kurmaasan, Aardhamustyaasan, Gomukhaasan, Shirshasaan, Supta-Wajraasan.	25 minutes
2	Prannayam	Anlom-Wilom Bhramari Bhstrika	10 minutes
3	Shuddhikriya	Kapalbhati, Agnisar	10 minutes
4	Bandh	Jiwabandh, Uddiyanbandh	10 minutes
5	Mudra	Mahamudra, Shambhavimudra, Yogmudra, VipritKarnee	15 minutes
6	Cyclic Mediation	Ddhyana	10 minutes
7	Yognidra	Shawasan	10 minutes

C) Post-test: Measurement of Anxiety and Depression level in women's

Sample:

In this research, sample had been taken from Baramati and Phaltan taluka having age group 25 to 50. There were two groups of women for five dependent variables. Researcher selected 30 women's for each group by using purposive method of sampling. The women's sufferings from anxiety were selected for anxiety group and those suffering from depression were selected for depression group. Required sample were selected from psychiatric hospitals those were diagnosed as anxiety and depression. The women's from each group had given yoga treatment for one and half hour in the morning for three months. Researcher collected information about their daily diet. The subjects were from local community and recruited through personal contacts with various women's organizations and self-help groups. The informed

consent was obtained from the subjects before starting the intervention.

Tools of study:

Sinha's Comprehensive Anxiety Test (SCAT): This test constructed by A.K.P. Sinha & L.N.K. Sinha, was used for determining comprehensive Anxiety. It consists 90 items. The coefficient of reliability was determined by using the product moment correlation was 0.85 and by using Spearman Brown formula was 0.92. Both the values ensure a high reliability of the test. The coefficient of validity was 0.62, which is significant beyond 0.01.level of confidence. There was no time limit for completing the test. However, usually an individual takes 15 to 20 minutes in completing the test. The inventory can be scored accurately by hand. For any response indicated as 'Yes', the score of one should be awarded, and zero for 'No'. The sum of the entire positive or yes responses would be the total anxiety score of the individual.

Depression Scale: Depression in the subjects was measured with T.S. Depression Scale developed by G.P. Thhakur and R. N. Sing (1994). This scale consists of 60 items and each item is accompanied by five alternative responses namely always, often, generally, sometime and never. It contains positive as well as negative items. The reliability and validity of T-S depression scale are reported to be quite high. Its reliability co-efficient have been calculated by implying split-half (0.84) and test-retest (0.87) methods. Its validity co-efficient has been found to be 0.78. The positive items are scored on the patterns of 4, 3, 2, 1 and 0 respectively. While the negative items are scored in reverse order (0 to 4). The items numbered 3, 9, 18, 20, 22, 25, 27, 29, 35, 40, 42, 45, 46, 48, 51, 54 and 56 are negatively worded. This scale provides global score for the respondents. Thus it is obvious that T-s Depression Scale possesses

good psychometric characteristics, and can be comfortably used to ascertain the level of depression in the respondents.

Statistical Analysis: Researcher had used mean, S.D. and Paired sample 't', test for the analysis of data.

RESULT AND DISCUSSION:

There was 60 women's participated in the study. The suitable statistical method was used to analyze the data by using IBM statistics SPSS 20. The mean, S.D. is used as a part of descriptive statistics. For finding the effect of yoga treatment on anxiety and depression the paired sample t test analysis was used as inferential statistics.

Hypothesis: The yoga therapy reduces the level of anxiety in women.

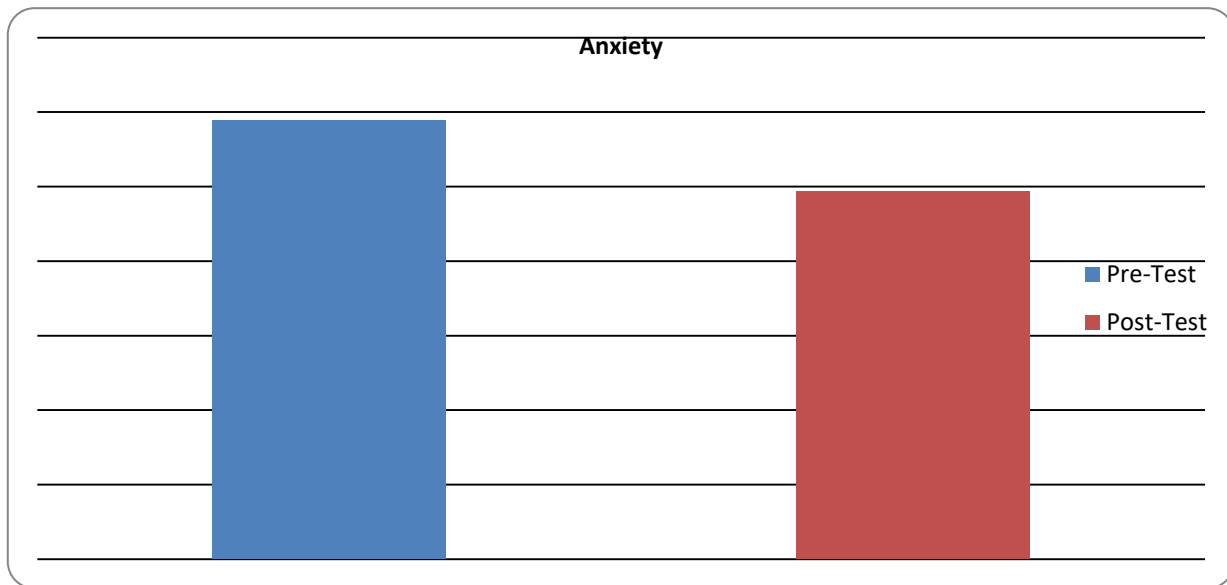
Table 1 Mean, S. D. and t value on Anxiety for the women from Anxiety group.

	Pre-test	Post-test	df	t
Mean	29.43	24.66	29	4.1**
S. D.	4.78	4.03		
N	30	30		

** p<0.01

* p<0.05

Results of the paired-samples t-test show that mean anxiety differs on pre-test score (M = 29.43, SD = 4.78) and post test score (M = 24.66, SD = 4.03) at the .01 level of significance (t = 4.1, df = 29). The results of the study indicated that there was a significant difference between the pre-test mean and post-test mean.

Graph 1 Comparison between pre-test and post-test score of women on Anxiety

The pre-test and post-test mean values of Anxiety were graphically represented in figure 4.4. For Anxiety, the obtained value for pretest (M = 29.43, SD = 4.78) was higher (t = 4.1) than Post-test (M = 24.66, SD = 4.03). There is significant difference on anxiety on pretest and post- test. It means that women from Anxiety group show the decrease in the level of anxiety after the successful completion of yoga program. In this, the hypothesis stating that the yoga therapy reduces the level of anxiety in women" is proved.

A previous study has also shown similar result as therapeutic effects of yoga practice reported by Woodyard (2011), such as 1. Improvement in depression, anxiety and stress 2) Improvement in sleep patterns. 3). Boost in overall quality of life and wellbeing. Kirkwood et al. (2005) found that asanas is very helpful in enhancing the physical flexibility, coordination and strength, while the breathing practices and meditation is helpful to diminish anxiety leading to higher quality of life.

The findings of this study are in consonance with the findings of Khalajzadeh,

M., Shojaei, M., Mirfaizi., M., (2012) found that yoga is effective to reduce anxiety in pregnant women, regarding mobility restrictions on pregnant women. Michalsen, A., et. al (2005) focused on anxiety, females who perceived themselves as emotionally distressed attended two weekly 90-min yoga sessions. Those who participated in the yoga training showed decreased stress, anxiety, fatigue and depression as well as increased well-being and Vigor. The result of the study supported by the findings of Javnbakht et al. (2009) evaluated the influence of yoga in relieving symptoms of depression and anxiety in women and found a significant reduction in perceived levels of anxiety. Joshi and De Sousa have also emphasized the benefits of incorporating yoga practice in the management of anxiety and depressive disorders. The result of this study on anxiety has in line with the study conducted by Gupta, Khera, Vempati, Sharma, and Bijlani (2006) evaluated anxiety levels in 175 male and female participants, The participants engaged in an eight day yoga intervention, Following the eight day yoga intervention there was a significant decrease in participant anxiety levels as

compared to a matched control group.

While anxiety (feelings of worry, fear and tension) is a normal reaction to stress, a constant state of anxiety or excessive levels of anxiety is a primary symptom of an anxiety disorder. Anxiety disorders are quite common, and are complex in nature, most likely occurring as a result from a combination of genetic, environmental, psychological, and developmental factors. Recent studies as discussed above have shown that a regular practice of yoga and meditation is effective at lowering levels of anxiety. Excessive anxiety can be alleviated through a slow, gentle yoga practice focusing on postures that calm the heart and the mind, balance the emotions, and release body tension. Pranayama (yogic breathing) and

meditation will also be helpful to calm the mind and body, and to reduce stress and negative thinking. Emotions play a large role in anxiety disorders. Excessive feeling of fear, worry, irritability, anger and depression can all add and exasperate our level of anxiety. During feelings of anxiety, the breath becomes shallow, rapid and constricted, which in turn reinforces our nervous system's state of anxiety. When practicing pranayama, yogic breathing exercises, the nervous system is naturally calmed and soothed. Yoga, pranayama and meditation are all powerful tools in the reduction and prevention of excess states of anxiety.

Hypothesis: The yoga therapy reduces the level of depression in women.

Table 2 Mean, S. D. and t value on Depression for the women from Depression group.

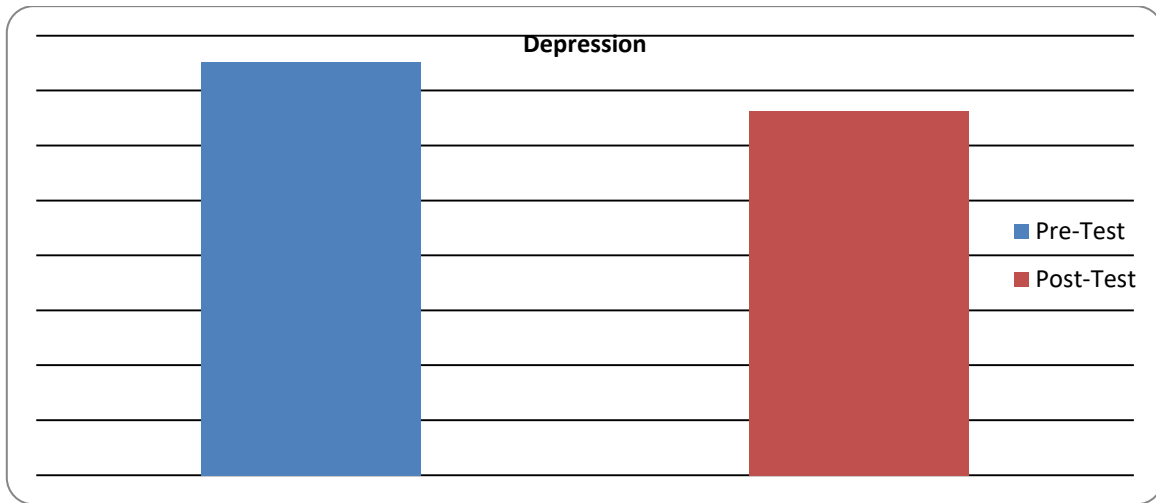
	Pre-test	Post-test	df	t
Mean	75.20	66.30	29	5.16**
S. D.	6.51	4.49		
N	30	30		

** $p < 0.01$

* $p < 0.05$

To analyze the results of the yoga training first descriptive statistics were calculated for the pre-test and post-test score for depression. The pretests mean score and standard deviation was 75.20, and 6.51. The post-test mean and standard deviation was 66.30, and 4.49. Next a paired- samples t-test was conducted to

determine if there was a significant difference between the pretest and posttest mean scores for depression. There was a significant difference between the depression pretest mean and post-test mean $t(29) = 5.16, p < 0.001$, in favor of post-test.

Graph 2 Comparison between pre-test and post-test score of women on Depression.

On the Depression, the obtained value of score in post-test ($M = 66.30$, $SD = 4.49$) was lower ($t = 5.16$) than obtained value in pre-test ($M = 75.20$, $SD = 6.51$). Thus, significant difference in pre and post-test on depression was found. Thus, the hypothesis stating that the „The yoga therapy reduces the level of depression in women“ is proved.

The findings of this study are in consonance with the findings of Devi, S., Devi, S. and Bilagi, A. (2015) investigate the effect of yoga on self-esteem and depression of women labors. There were significant reductions after yoga intervention in depression level. A study conducted by Kinser, Bourguignon, Whaley, Hausenstein, and Taylor (2013) found that the women diagnosed with major depressive disorder who were assigned to the yoga intervention group showed a decrease in depression and experienced less ruminations, increased feelings of connectedness, and the added benefit of a new coping method.

The result of the study supported by the findings of McCall, (2014) stated that Yoga is described as be an effective treatment method for high blood pressure, heart disease, chronic pain, depression, and stress. The result of this study on

anxiety has in line with the study conducted by Pilkington *et al.* (2005) conducted an experimental study where emotionally distressed women are treated with 90-min yoga classes a week for 3 months. At the end of 3 months, women in the yoga group reported improvements in perceived stress, depression, anxiety, energy, fatigue, and well-being.

A previous study has also shown similar result as Woolery, *et al* (2004) found that Subjects who participated in the yoga class confirmed significant decrease in self-reported symptoms of depression, trait anxiety, levels of negative mood and fatigue. Ray, et.al. (2001) found that there was improvement in various psychological parameters like reduction in anxiety and depression and a better mental function after yogic practices.

Yoga can be considered as an effective alternative and complementary treatment for patients with emotional disorders because yoga is deemed to be a practical and accepted practice/therapy for patients to practice at home and it is cost-effective. Another main reason yoga has been gaining importance as a therapy is that it has no side effects, which is a main concern in the case of psychiatric medication.

Yoga as an effective treatment and it should be used as an independent or add-on treatment to pharmacology, compliance and effect of non-adherence and continued practice. Although yoga can be done individually, patient should get supervised and training for the practice to be effective as a therapy. There are numerous studies that have proved the effectiveness of yoga on depression. Our results are in concordance with several other studies done in this area as discussed above. In the light of the above, it is evident that yoga therapies including asanas, pranayam, meditation helps to improve not only the physical fitness but also relaxed the person suffering from depression, anxiety, etc.

CONCLUSION AND IMPLICATION:

Conclusion:

Comparison between pre-post and post-test data showed statistically significant differences for all two domains Anxiety and Depression. It indicates decreased levels of depression and anxieties after the yoga therapy program. Findings are substantial and relevant on the line of hypotheses. These results are mentioned here in brief.

1. The yoga therapy reduces the level of anxiety in women.
2. The yoga therapy reduces the level of depression in women.

Implications: Based on the result of the study the following recommendations have been made.

1. It is recommended that yoga should be a part of health-care facilities as it can enhance the quality of life by improving women's overall mental health status.
2. Yoga is relatively simple to learn and is economical, non-invasive with multiple

collateral lifestyle benefits. Group and individual practice may also help to improve physical health and enhance psychological well-being.

3. The advantages of yoga are that, it is a holistic philosophy, in which physical exercises are linked to a wider lifestyle and behavioral change that includes diet, relaxation, and stress management.
4. Present Research findings support the use of yoga for mental health, for both the healthy general population and for people with some common health conditions.

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