

A Study on The Combination of Yoga Practices and Varma Therapy for Controlling Depression and Improving Self Confidence Among Insomnia Patients

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ABSTRACT

This study aimed to evaluate the use of Yoga Practices and Varma Therapy combination on Depression and Self-confidence among insomnia patients of middle-age. For this study, thirty insomnia patients aged between 40 and 50 years with their residence in Chennai, were found and grouped in two categories namely, the experimental and control groups of fifteen (15) numbers with a training session of 12 weeks. Depression and Self-confidence were assessed using the Psychological Questioners developed by Beck and Rekha Agnihotri. The experimental group is subjected to yoga practice with Varma therapy for 12 weeks. In that, a maximum of one hour 30 minutes in the morning for six days a week is essential for the control group, such that it is kept in an active rest state. Both the groups are subjected to the pre-test and post-test, which means before and after training of yoga practices with Varma therapy respectively. ANCOVA was used to analyse the data, such that a confidence level of 0.05 is kept for the level of significance. It was concluded that there was a significantly reduced level of Depression and Self-confidence (improved) among middle-aged insomnia patients due to the use of Yoga Practices with Varma Therapy compared to the control group.

Keywords: Yoga Practices, Varma Therapy, Depression and Self-confidence, Middle aged and Insomnia.

1. INTRODUCTION

Sleep is essential for restoring our energy. Insomnia, characterized as difficulty falling asleep, staying asleep, or both, is often linked to poor sleep quality. It affects around 30-50% of people, with approximately 10% facing chronic insomnia. Statistics suggest that insomnia rates vary from 28-40% across different nations, with age playing a significant role [1]. Research has revealed insomnia's association with a variety of conditions namely nocturia, depression, sarcopenia, metabolic syndrome, and neurodegenerative disorders such as Alzheimer's disease [2-3]. Studies show that as individuals age, they tend to feel good by going to sleep early and wake up soon during the morning time due to shifts in their circadian rhythms [4]. This change is often more pronounced in older people living alone or with distant family members, who are more susceptible to insomnia. Additionally, living in disrupted family environments, marked by conflict or estrangement, is connected to poor sleep quality [5-6]. Primary insomnia is driven by Depression or emotional issues, while secondary insomnia arises from medical conditions or past illnesses [7-8] numerous studies link sleep deprivation to weight gain and obesity. Although the exact mechanisms remain unclear, it's suggested that metabolic changes from lack of sleep may contribute to weight gain, insulin resistance, and hypertension. Therefore, improving sleep duration and quality could be a preventive and therapeutic strategy for metabolic issues [9]. Various factors contribute to chronic insomnia, including psychological conditioning, genetic predispositions, maladaptive beliefs, and heightened arousal, both cognitive and physiological. Insomnia can impair attention and memory, making its management crucial for overall well-being [10]. Chronic insomnia can elevate Depression due to the body's Depression response, leading to increased heart rate, constriction of blood vessels, and over time, heightened risk of hypertension [11-12].

Yoga Practices, which integrates postures, breathing exercises, and meditation, has emerged as a complementary treatment for insomnia, especially in middle-aged men. It helps calm the mind, enhance relaxation, and improve sleep quality, providing a holistic way to manage Depression and health issues [13]. Varmam therapy, an ancient South Indian martial art

that evolved into a healing practice, involves the manipulation of vital energy points in the body. By applying controlled pressure to these points, trapped energy is released, leading to improved energy flow and overall health. Varmam offers various benefits, including self-defense, disease treatment, and a deeper connection to nature through yogic practices [14].

Statement of the problem

This study is used for finding the impact of Yoga Practices and Varma Therapy among Middle aged insomnia patients to suppress depression and boost self-confidence.

2. HYPOTHESIS

It was assumed that there would be considerable difference due to the use of Yoga Practices and Varma Therapy for controlling Depression and enhancing Self-confidence among the insomnia patients of middle age than the control group.

3. REVIEW OF RELATED LITERATURE

[15] studied the symptoms of depression, insomnia and anxiety using Yoga. In this 8-week Training period, 1,505 samples were registered and applied using the YOI app in the study. There are 3 questionnaire ask over Participants. In study Generalized Anxiety Disorder questionnaire (GAD-7) and the Insomnia Severity Index (ISI) for the Patient Health Questionnaire, 8 items (PHQ-8). More than 1,297 participants there four times for three items were accomplished and before starting YOI, two extra times through use, and a fourth part time for training of 8-week processing period. All questionnaires (590 controls finished all questionnaires) complete Modifications in PHQ8, GAD7 and ISI in participants were associated to a control group, who did not use the YOI app. It was found that the significant 50% reduction on average after the 8-week training period for controlling depression and anxiety-related symptoms. The control group reflected that significantly greater than ($p < 0.05$) the training group. When compared to participants with not at all prior diagnosis ($p < 0.05$) to the participants, who reported a previous diagnosis of depression and generalized anxiety reported significantly reduces the PHQ-8 and GAD-7. The training 8-week period led to significant reduction in symptoms of both depression and anxiety for insomnia.

Similar studies were conducted by [1], to control the selected psychological variables among the insomnia male patients. This study intends to find out the effect of yoga practices on selected psychological variables among men with insomnia. The experimental group consists of forty males with insomnia, which were then classified into two groups such as the experimental and the control groups. The experimental group received eight weeks of yoga practices, while the control group in active rest did not receive any therapy. The stress value and the self-confidence scores for the pre-treatment and post-treatment of yoga were measured. It was found that there is a significant improvement in the stress scores and the self-confidence scores in the experimental group. Thus, it is found that the yoga practice is an effective treatment option for patients suffering from insomnia [16], with no major side effects.

4. METHODOLOGY

For this randomized group experimental study, 30 middle-aged male insomnia patients from Chennai were considered as participants based on their levels of depression and self-confidence. The participants, aged between 40 and 50 years, were divided into two groups such as experimental group and a control group with each group consisting of 15 individuals.

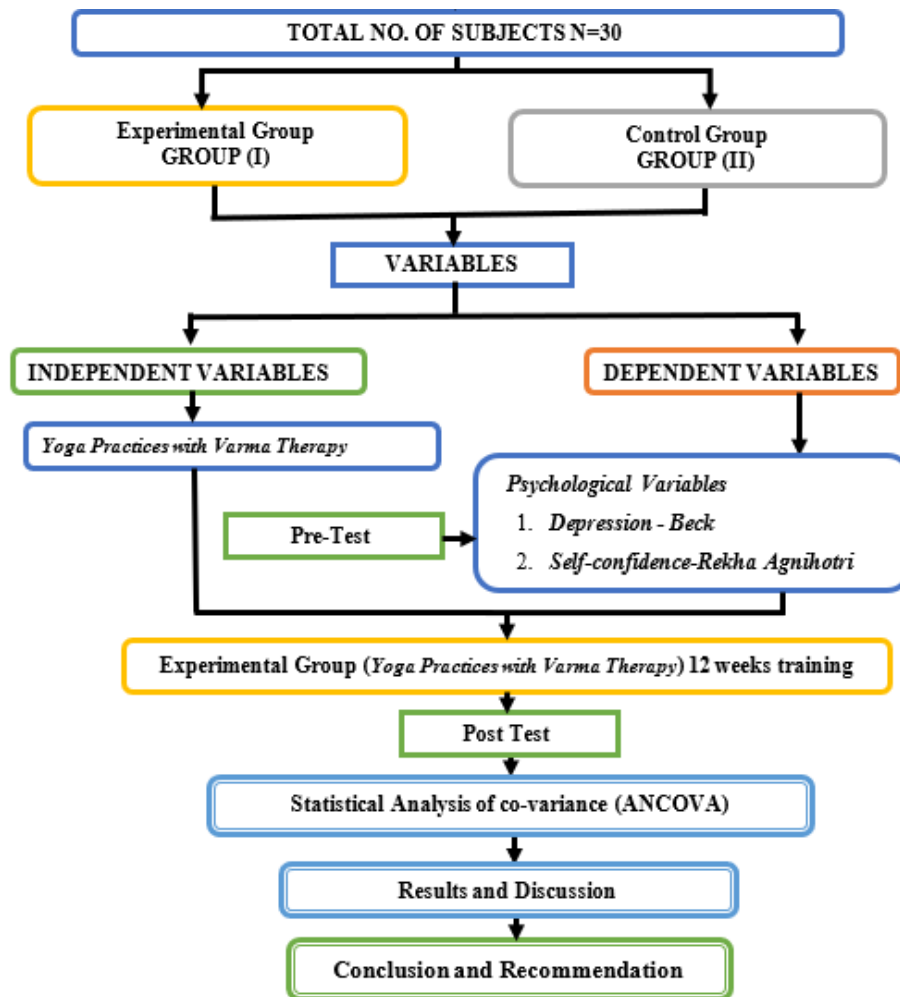


Fig. 1. Methodology adopted for data collection in this study.

The training group underwent yoga practices and Varma therapy starting from Monday to Saturday every week with a maximum practice time of one-hour 30 minutes and the control group remains rest during the testing phase. The experiments are conducted for 12 weeks, which were then subjected to pre-tests and after intervention post-tests.

Pre-tests were conducted before the intervention, and post-tests were administered after the 12-week experimental period. The changes in depression and self-confidence between the pre-test and post-tests were analysed to determine the effects of yoga practices combined with Varma therapy. Depression and self-confidence levels were measured using psychological questionnaires developed by Beck and Rekha Agnihotri. The combination of yoga and Varma schedule for the experimental group includes the following stages such as Starting Prayer, Loosening Exercises, Suryanamaskar, Tadasasana, Padahasthasana, Ardachakrasana, Ardha Matsyendrasana, Paschimottanasana, Viparita Karani, Halasana, Supta Baddha Konasana, Marjaryasana, Balasana, Shavasana, Kapalabhathi Pranayama, Ujjayi Pranayama, Brahmari Pranayama, Nadishodana Pranayama, Yoga Nidra, and End Prayer [17]. Similarly, the Varma Therapy techniques included Seerukolli Varmam, Thilartha Kalam, Pitari Varmam, Kuttri Varmam, Alavadum Chenni Kalam, Rudhira Kalam, Manthira Kalam, Kakkattai Kalam, Chenni Varmam, Moorthi Varmam, Kondakolli Varmam, Natchathira Kalam, Adappa Kalam, Patchi Varmam, Anna Kalam, and Ullankaal Vellai Varmam [18-19]. Analysis of Covariance (ANCOVA) was the major tool, which is used to assess the variations between the experimental and control groups with 0.05% level of significance.

5. RESULTS AND DISCUSSION

The data collected from the samples of both experimental groups were statistically analyzed using Analysis of Covariance (ANCOVA) before and after the training period, to assess significant differences.

RESULTS ON DEPRESSION

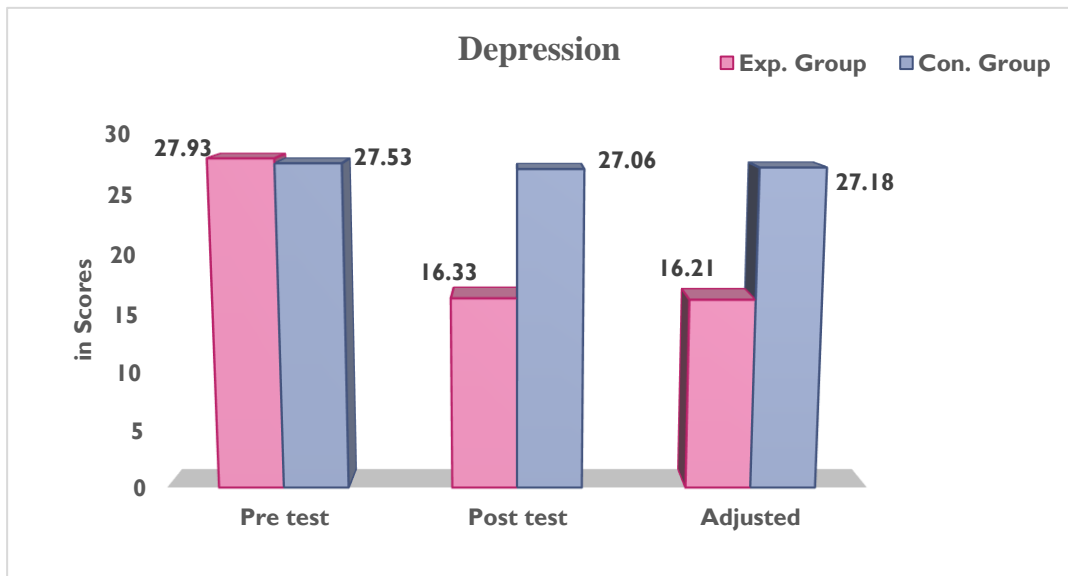
The Analysis of Covariance (ANCOVA) for depression through yoga practices, comparing the Varma Therapy and control groups, was conducted and the results are presented in Table I.

Table-I. Computation of Analysis of Covariance of experimental groups and one control group on depression (in scores).

Test	EXP GROUP	CON GROUP	SV	SS	Df	MS	F
Pre test	27.93	27.53	Between	1.2	1	1.2	
Mean			Within	24.66	28	0.88	1.36
Post test	16.33	27.06	Between	864.03	1	432.01	
Mean			Within	112.26	28	4.00	107.74*
Adjusted test Mean	16.21	27.18	Between	861.20	1	430.60	
			Within	103.38	27	3.82	112.45*
mean difference	11.6	0.46					

*Significant at 0.05 level of confidence (Table F-ratio at 0.05 level of confidence for 2 and 28 (df) =4.20, 1 and 27 (df) =4.21).

The pre-test F-value (1.36) was significantly lower than the required F value (4.21) at a significance level of 0.05. It was also observed that there was no change in the pre- and post-test values of the control group within the control group subjected to randomized values. The post-test scores were analyzed, and a significant reduction was observed between the groups, such that the required F value (4.21) was marginally lower than the obtained F value of 107.74. The differences between the post-test means of the experimental groups were analyzed. From the statistical analysis, the pre- and post-test scores were calculated for the group-mean adjusted values. The F value obtained in this study was 112.45, which was larger than the required F value of 4.21. Three different values from the study, pre-test, post-test, and adjusted post-test mean values of the combination of yoga practices with Varma therapy are presented in Fig. 2, which graphically depicts the results of the three tests.



*Significant at 0.05 level of confidence.

Fig. 2. Bar diagram showing the mean difference of experiment group and control group on Depression (in Scores)

6. RESULTS ON SELF CONFIDENCE

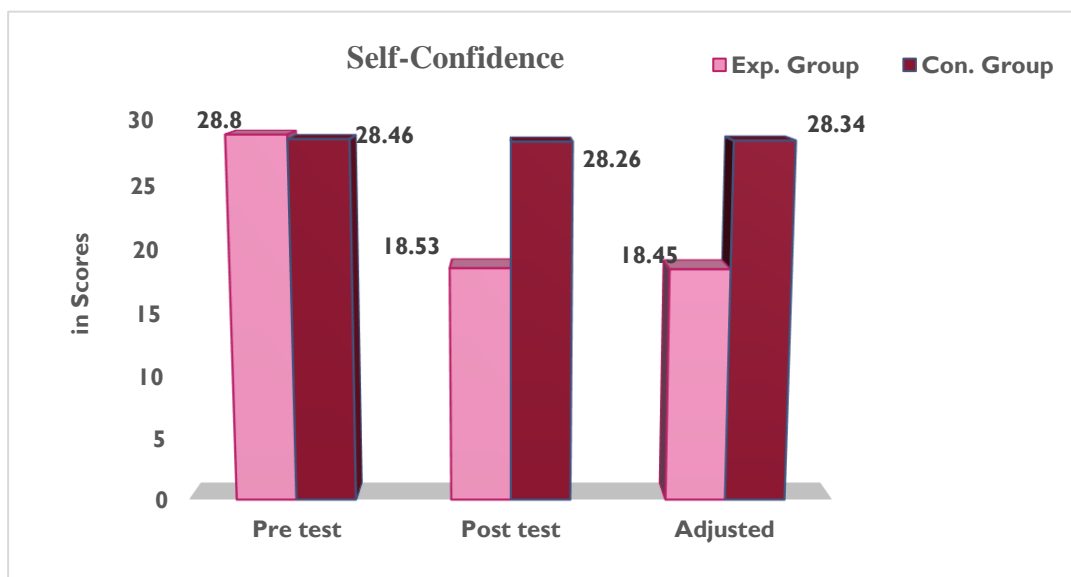
The Analysis of Covariance (ANCOVA) on Self-confidence through Yoga Practices with Varma Therapy practices and control group was analyzed and are presented in Table-II.

Table-II. Computation of Analysis of Covariance of experimental groups and one control group on self-confidence (Lower the score higher self-confidences) (in Scores).

Test	Exp. group	Control group	SV	SS	DF	MS	F
Pre test Mean	28.8	28.46	Between	0.83	1	0.83	0.77
			Within	30.13	28	1.07	
Post test Mean	18.53	28.26	Between	710.53	1	355.26	96.89*
			Within	102.66	28	3.66	
Adjusted test Mean	18.45	28.34	Between	714.76	1	357.38	101.07*
			Within	95.46	27	3.53	
mean difference	10.26	0.2					

*Significant at 0.05 level of confidence (Table F-ratio at 0.05 level of confidence for 2 and 28 (df) =4.20, 1 and 27 (df) =4.21).

At a significance level of 0.05, the pre-test F-value (0.77) fell well below the critical threshold of 4.21. Furthermore, the control group, exposed to randomized conditions, exhibited no measurable differences between its pre- and post-test results. Analysis of post-test scores highlighted a significant reduction between the groups, where the obtained F-value (96.89) notably exceeded the critical F-value (4.21). When comparing the post-test means across experimental groups, statistical analysis revealed that the F-value of 101.07 was substantially higher than the required threshold of 4.21. Fig. 3. provides a visual summary of the results, showcasing the pre-test, post-test, and adjusted post-test mean values for the integrated approach of yoga practices and varma therapy.



*Significant at 0.05 level of confidence.

Fig. 3. Bar diagram showing the mean difference of experiment group and control group on Self-confidence (Lower the score higher self-confidences) (in Scores)

7. CONCLUSIONS

This study found that the middle-aged insomnia patients, who participated in the yoga practices combined with Varma therapy experienced a significant reduction in depression and an improvement in self-confidence compared to the control group. The yoga practices and Varma therapy training was conducted for two weeks. This investigation was very effective to control depression and improve self confidence among the middle age insomnia patients. The current work can be extended to control other diseases of similar kind with the practice of yoga and Varma therapy combination.

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