



Influence of Yogic Intervention on Insomnia among Occupation Stress

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Abstract

The purpose of the study was to influence of yogic intervention on occupation stress. The study was conducted on 30 IT professionals. Totally two groups, namely, control & experimental group consisting of 15 IT professionals who underwent 8 weeks yogic practices whereas the control group did not undergo any type of training. The insomnia was measured before and after the experimentation using the standardized test to measure the insomnia questionnaire analyzed by Analysis of Covariance (ANCOVA) and it was concluded that the yogic practices had significant ($P < 0.05$) effect on the sleep disorder level.

Keywords: Yoga, Insomnia, IT, Asana, Pranayama.

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Introduction

Yoga plays a vital role to combat this modern menace of stress. According to yoga stress is a state of imbalance in the mental and physical level. When the stress and pain or relieved, productivity and creativity go up and therefore there is every justification for institutionalizing yoga into organizational system. This is logic of bringing yoga into the workplace. Job stress has become an important issue in today's world. The American institute of stress indicates that 43% of all adults experience stress - related health problems. This affects the work. Stress can lead to reduction in productivity, low levels of morale among the workers. Nearly 1 million Americans miss work every day due to stress later factors.

Yoga helps in overcoming stress and tension, removes the negative blocks, relaxing and strengthening muscles, cleansing of body attaining mental and physical equilibrium, increasing self awareness and developing concentrations. It helps develops immune system; It enhances digestive, respiratory and cardiovascular systems. Insomnia, also known as sleeplessness, is a sleep disorder where people have trouble sleeping. They may have difficulty falling asleep, or staying asleep as long as desired. Insomnia is typically followed by daytime sleepiness, low energy, irritability, and a depressed mood. It may result in an increased risk of motor vehicle collisions, as well as problems focusing and learning. Insomnia can be short term, lasting for days or weeks, or long term, lasting more than a month.

Yoga improves posture, increases the intake of oxygen, and enhances the functioning of the respiratory, digestive, endocrine, and the reproductive and excretory systems. Its effects on the emotions are equally beneficial by calming the mind, attuning as to the environment and diminishing insomnia caused by mental restlessness. Yoga is highly recommended for people in competitive, stressful working environments, for those who suffer from headaches, back and shoulder aches, allergies and asthma. Yoga also cures behavioral disorder, nerves breakdown and manic depression. The regular practice of yoga helps us to accept whatever physical or mental conditions we might be suffering from the increasing our immediate sense of well-being, concentration, and calmness. Much healing can be done, but it takes practice and consistency.

Purpose of the Study

The present study was designed to find out the influence of yogic intervention on insomnia among occupation stress.

Review of Literature

Bruyneel & Serste (2018) Sleep disturbances in patients with liver cirrhosis: prevalence, impact, and management challenges. Sleep-wake disturbances are common in liver cirrhosis and associated with impaired quality of life. The most common abnormalities are insomnia (difficulties falling asleep and maintaining sleep, or unrefreshing sleep), excessive daytime sleepiness, and sleep-wake inversion (disturbances of circadian rhythmicity). The underlying pathophysiological mechanisms for sleep disturbances in cirrhosis are complex and may include disturbed metabolism of melatonin and glucose, alterations in

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thermoregulation, and altered ghrelin secretion profiles. Sleep-wake abnormalities are related to the presence of hepatic encephalopathy (HE) and improvement in sleep parameters can be observed when HE is properly managed. A few non-specific treatments for sleep-wake abnormalities have been tried with encouraging results for hydroxyzine and modafinil. However, due to the potential for medication toxicity in these disabled patients, further studies are needed to address the potential role of non-drug therapies in this population (eg, cognitive behavioral therapy, mindfulness, yoga) that have demonstrated usefulness in insomnia disorders.

Wang et al. (2015) the effect of meditative movement on sleep quality: A systematic review. The purpose of this systematic review was to identify and assess evidence related to the efficacy of meditative movement (MM) on sleep quality. We conducted a comprehensive review of relevant studies drawn from English and Chinese databases. Only randomized controlled trials (RCTs) reporting outcomes of the effects of MM (tai chi, qi gong, and yoga) on sleep quality were taken into consideration. Twenty-seven RCTs fulfilled our inclusion criteria and formed the basis for this review. Due to clinical heterogeneity, no meta-analysis was performed. Seventeen studies received a Jadad score of ≥ 3 and were considered high-quality studies. Findings of the 17 studies showed that MM has beneficial effects for various populations on a range of sleep measures. Improvement in sleep quality was reported in the majority of studies and was often accompanied by improvements in quality of life, physical performance,

and depression. However, studies to date generally have significant methodological limitations. Additional RCTs with rigorous research designs focusing on sleep quality or insomnia and testing specific hypotheses are needed to clearly establish the efficacy of MM in improving sleep quality and its potential use as an intervention for various populations.

Methodology

For the present study 30 IT professionals aged between 25 – 35 years were selected as the subjects from Mahe, Pudhucherry. All the subjects were assigned to Experimental group underwent yogic practices consisting 15 subjects. The experimental groups practiced for 8 weeks for five days per weeks. The yogic practices given to the experimental group included Ekapadasana, Bhujangasana, Padhastasana, Ardachakrasana, Ujjai, Nadhi Sudhi, Sectional breathing, Chandrabhedhana, Brahamari, Seethali, Seethkari and Relaxation. The clinical variable is insomnia was measured by questionnaires.

Results and Discussions

The data pertaining to the variables collected from the two groups before and after the training period were statistically analyzed by using Analysis of Covariance (ANCOVA) to determine the significant difference and tested at 0.05 level of significance. The following tables illustrate the statistical result of the influence of yogic intervention on occupation stress.

Table 1

Computation of analysis of covariance of pre-test, posttest and adjusted post-test on insomnia of yogasana and control group (Scores in numbers)

| | Experimental Group | Control Group | Source of Variance | Sum of Squares | df | Mean Squares | Obtained F |
|---------------------------|--------------------|---------------|--------------------|----------------|----|--------------|------------|
| Pre Test | | | | | | | |
| Mean | 21.4 | 21.13 | Between | 0.53 | 1 | 0.53 | 0.04 |
| SD | 3.20 | 3.68 | Within | 333.33 | 28 | 11.90 | |
| Post Test | | | | | | | |
| Mean | 13.66 | 21.4 | Between | 448.53 | 1 | 448.53 | 57.89* |
| SD | 2.41 | 3.11 | Within | 216.93 | 28 | 7.74 | |
| Adjusted Post Test | | | | | | | |
| Mean | 13.62 | 21.44 | Between | 458.17 | 1 | 458.17 | 68.79* |
| | | | Within | 179.83 | 27 | 6.66 | |
| Mean Diff | 7.7 | 026 | | | | | |

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

Table 2

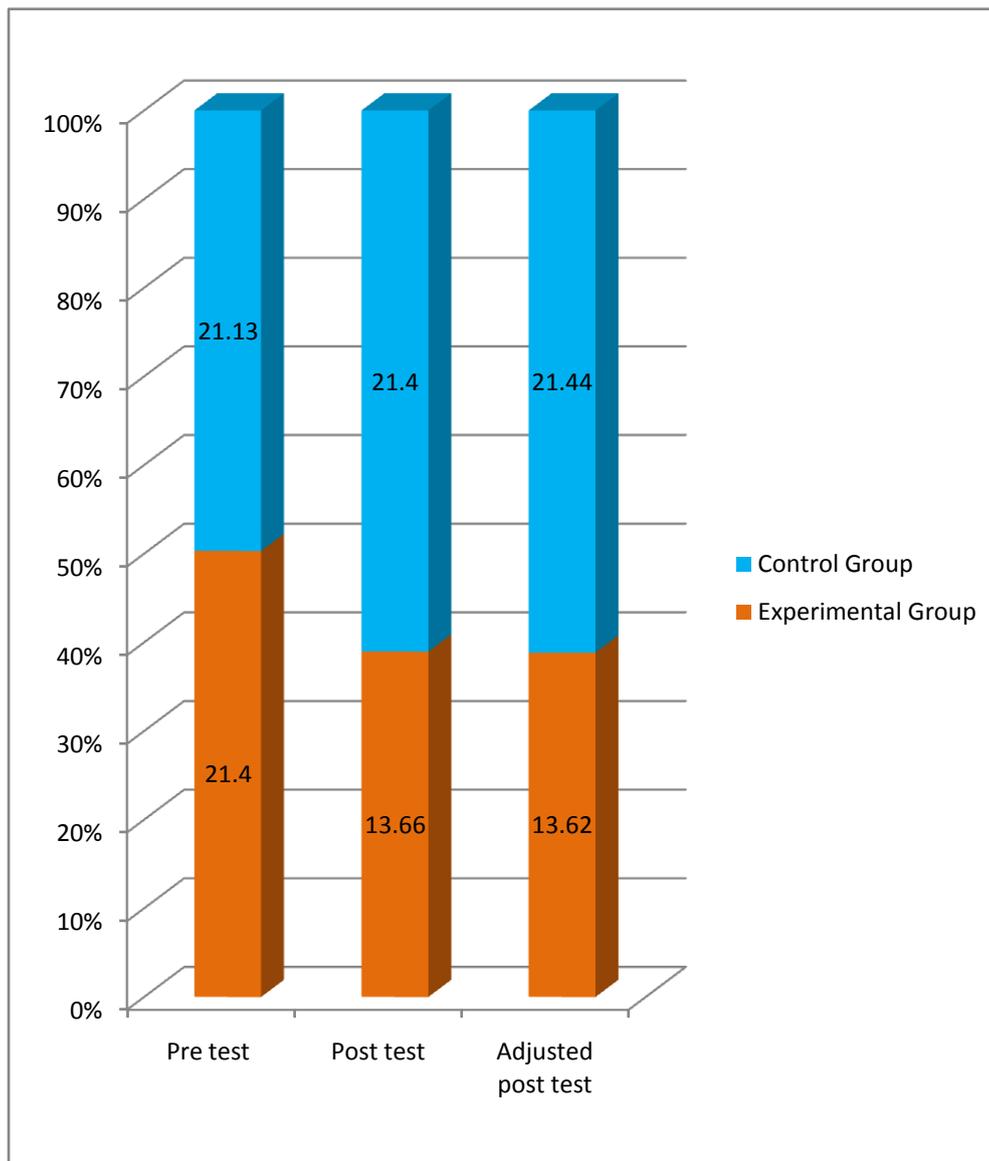
Ordered adjusted insomnia means, differences between means and scheffe's post-hoc test f-ratio of yogasana and control group (Scores in numbers)

| Experimental Group I | Control Group II | Mean difference | Required C.I |
|----------------------|------------------|-----------------|--------------|
| 13.62 | 21.44 | 7.82* | 1.55 |

* Significant at .05 level

Figure 1

Bar diagram on ordered adjusted means of insomnia (Scores in numbers)



Results of Insomnia

The analysis of covariance of insomnia data between pre-test and post-test of the two groups have been presented in Table I. Table I shows the analysis of covariance of insomnia. The pre-test means of yogic group and control group were 21.4 and 21.13 respectively. Since the obtained F-ratio of 0.04 is lower

than the table value, F-ratio of 4.20, the pre-test means were not significant at 0.05 level of confidence with the degrees of freedom 1 and 28. The post test means of yoga group and control group were 13.66 and 21.4 respectively. The obtained F-ratio of 57.89 is seen to be higher than the table F-ratio of 4.20. Hence, the differences among the post-test means were significant at

0.05 level of confidence with degrees of freedom 1 and 28. The adjusted post-test means of yoga group and control group were 13.62 and 21.44 respectively. Since the obtained F-ratio of 68.79 is higher than the table F-ratio of 4.21 the adjusted post-test mean difference amount the two groups were significant at 0.05 level of confidence with the degrees of freedom 1 and 27. Scheffe's post-hoc test was resorted-to, to find out the significance of ordered adjusted final means difference among the groups. Table II shows the Scheffe's post-hoc test results. The ordered adjusted insomnia means, differences between means and Scheffe's Post Hoc test F-ratio of yogic group and control group were tested for significance against Scheffe's post-hoc test F ratio.

Conclusion

Based on the results obtained, the following conclusion was drawn: It was concluded that Experimental (Yoga) group was effective than the control group in reducing insomnia among IT

professionals.

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