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Effect of Six Weeks Kinhin Walking Meditation on Stress and Anxiety Management of Engineering College Students, H.V.P.M. Amravati, India

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Abstract: This paper presents the effect of six weeks Kinhin Walking Meditation on stress and anxiety management of first year engineering male students of H.V.P.M. Institution, Amravati, India. The objective was to compare adjusted mean scores of pre-test and post-test of stress and anxiety. The Hypothesis as Null Form that there is no significant difference of adjusted mean scores of pre-test and post-test of Stress and Anxiety of First Year Engineering Male Students of H.V.P.M. Institution by considering their pre-test mean score as covariate, when Stress assessed by Stress Scale developed by Singh (2002) and Anxiety assessed by Anxiety Test (Srivastava, 1977). The selection of sample on the basis of Simple Random Sampling Methods and size of sample was 40, and the source of subjects was 40 first year male students of Engineering College, H.V.P.M. Institution, Amravati. One-way Analysis of Co-variance was used for analyzing the data. Stress and Anxiety mean scores were found to be significant and Kinhin Walking Meditation found to be effective to manage Anxiety and Stress Level of first year engineering male students of H.V.P.M. Institution. Amravati.

Keywords: Stress, Anxiety, Kinhin Walking Meditation

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Introduction

Between two extended periods of zazen or sitting meditation, practitioners engage in Kinhin Walking Meditation. Aside from Zen, Chan Buddhism and Korean Seon also make frequent use of this technique. The goal of Kinhin Walking meditation is to enable the practitioner to continue the meditation while walking, hence the instructions are quite specific. Practicing Kinhin Walking Meditation increases one's meditative

endurance.

By walking clockwise around a room with clasped hands in Shashu, meditators engage in Kinhin Walking meditation. Shashu is a grip in which the left hand makes a fist and the right hand covers it. While walking in time with their breath, the practitioner needs to pay attention to every facet of their physical posture. Exhale when the front foot's ball contacts the ground and the

back leg relaxes; this is one way to include breathing into Kinhin Walking.

Take a deep breath in as you relax and advance half a step. Except for the position of the hands, zazen-like upper-body posture entails a calm lower abdomen, a relaxed neck, a tucked chin, and a downward gaze.

The objectives of the present study are to compare adjusted mean scores of stress and anxiety of control group and Experimental group of first year engineering male students of H.V.P.M. Institution by considering their pre-test and post-test stress and anxiety as covariate.

The hypothesis of the study was (i) there is no significant difference of adjusted mean scores of Stress of Control group and Experimental group of first year engineering male students of H.V.P.M. Institution by considering their pre-test stress as covariate, when stress assessed by Stress Scale developed by Singh (2002); and (ii) there is no significant adjusted mean scores of anxiety of control group and experimental group of first year engineering male students of H.V.P.M. Institution by considering their pre-test anxiety as covariate, when anxiety assessed by Anxiety Test developed by Srivastava (1977).

Materials and Methods

40 first year engineering male students of H.V.P.M. Institution, Amravati was selected through Purposive Sampling Method. The age of the subjects ranged from 18 to 23 years. Pre-test-post-test Equivalent-Groups Design was chosen. Pre-test was conducted to measure their initial level of stress, anxiety and considering their pre-test mean score as covariate, and after six weeks Kinhin Walking Meditation Practices at morning and evening for 30 min then the post-test was conducted to measure and compare the final results between experimental group and control group.

Collection of Data:

First-year male engineering students at H.V.P.M. Institution, Amravati, filled out the Stress Scale

Questionnaire and the Anxiety Test Questionnaire to provide the essential information for the research.

Analysis of Data:

One Way Analysis of Covariance was used to analyze the data from the Stress Scale and the Anxiety Test and to draw conclusions about the significance, if any, of the relationship between the two variables. The hypothesis was tested at a significance level of 0.01.

Results and Discussion

Table 1 shows that when df is set to 1/37, the corrected F-value is 36.06. This result is highly significant at the 0.01 level. Adjusted means of Stress in the Control and Experimental Groups varied significantly when taking the pre-test means of the two groups into account. Therefore, when stress is measured using the Stress Scale developed by Singh (2002), the Operational Hypothesis in Null Form is rejected, stating that there is no significant difference between the adjusted mean scores of stress of the control group and the experimental group. According to Partial Eta Square Kinhin Walking, meditation was 49.40% effective to reduce the stress level of first year engineering male students, while the adjusted mean stress score of the control group students was 42.761, which was significantly higher than those of the experimental group students, whose adjusted mean stress score was 36.33 (Fig. 1). College students' stress levels were shown to be greatly reduced with the practice of Kinhin Walking Meditation.

Adjusted F-value = 45.48, which is highly significant at the 0.01 level with df = 1/37 (Table 2). Adjusted mean scores of Anxiety for the Control Group and the Experimental Group vary significantly when taking the Pre-test mean score into account as a covariate. Therefore, when anxiety is measured using the Anxiety Test developed by Srivastava (1977), the Operational Hypothesis in Null Form is rejected, stating that there is no significant difference

Table 1: Summary of One-Way ANCOVA of Stress of Engineering students by considering their Pre-test mean score of stress as Covariate

Source of Variance	df	SS _{y.x}	MSS _{y.x}	Partial Eta Square	Adjusted F-value
Treatment	1	402.87	402.87	0.494	36.06**
Error	37	413.23	11.16		
Total	40				

**= Significant at 0.01 Level

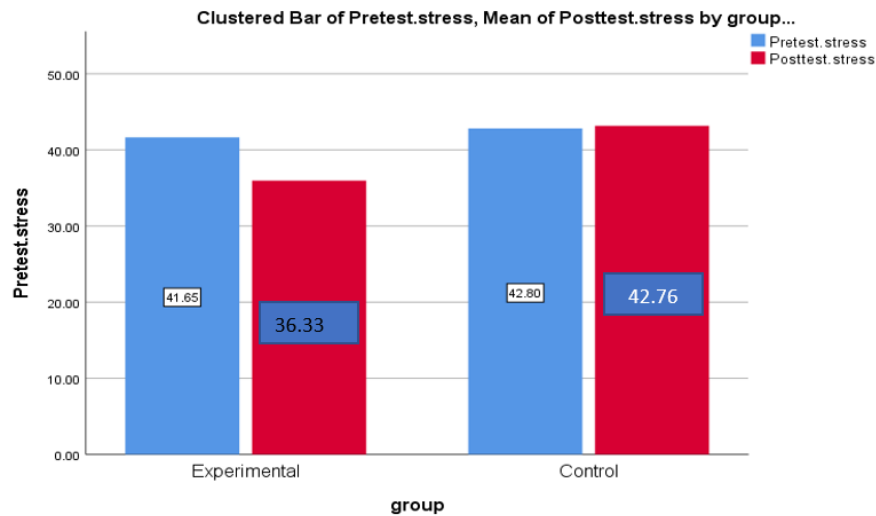


Fig. 1: Pre-test and post-test stress of control and experimental group.

Table 2: Summary of one-way ANCOVA of anxiety of engineering male students by considering their pre-test mean score of anxiety as covariate

Source of Variance	df	SS _{y.x}	MSS _{y.x}	Partial Eta Squared	Adjusted F-Value
Treatment	1	346.44	346.44	0.551	45.48**
Error	37	281.82	7.61		
Total	40				

**= Significant at 0.01 Level

between the adjusted mean scores of anxiety of the control group and the Experimental group, taking into account their Pre-test mean scores of Anxiety as covariate. Partial Eta Square Kinhin Walking Meditation was found to be 55.10 per cent effective at lowering the Anxiety Level of First-Year Male Engineering Students, compared to the control group's adjusted mean score of 40.67, which was significantly higher than that of

the experimental group's adjusted mean score of 34.60 (Fig. 2). Therefore, it is safe to say that college students who practice Kinhin Walking Meditation see considerable improvement in their anxiety levels (Alvarez *et al.*, 2016).

In the beginning of this study hypothesis were formulated and on the basis of statistical findings the formulated hypothesis not rejected or rejected are given in Table 3.

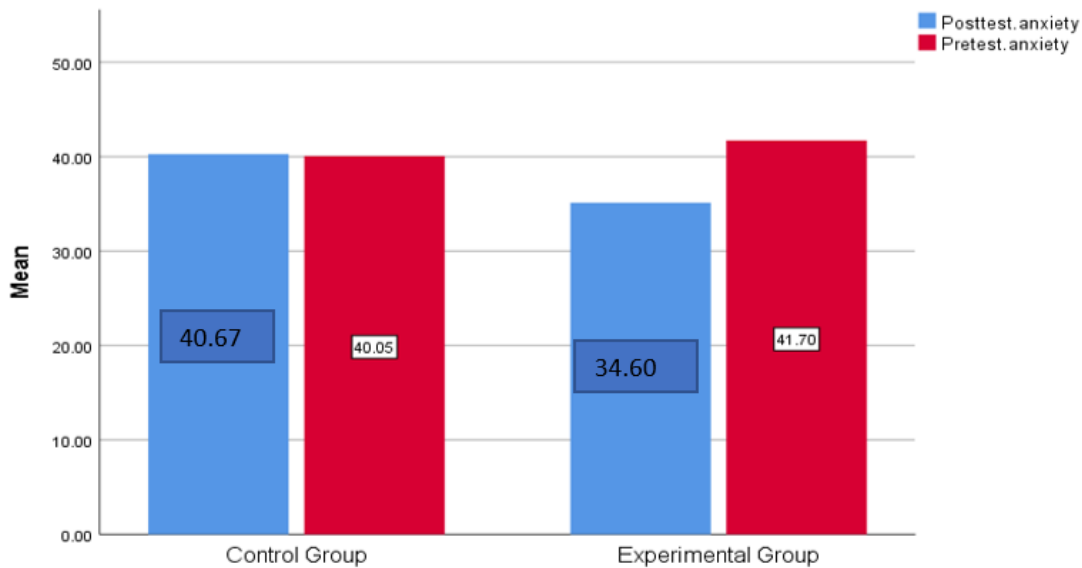


Fig. 2: Pre-test and post-test anxiety of control and experimental group.

Table 3: Formulated hypothesis (rejected/not rejected)

Hypothesis	Statement	On the basis of statistical results
H1	There is no significant difference of adjusted mean scores of Stress of Control group and Experimental group of first year engineering male student of H.V.P.M. Institution, by considering their Pre-test mean scores of Stress as covariate, when Stress assessed by Stress Scale developed by Singh (2002)	H0 is Rejected
H2	There is no significant difference of adjusted mean scores of Anxiety of Control group and Experimental group of first year engineering male student of H.V.P.M. Institution, by considering their Pre-test mean scores of Anxiety as covariate, when Anxiety assessed by Anxiety Test developed by Srivastava (1977).	H0 is Rejected

It this study six weeks Kinhin Walking Meditation was found to be effective to minimizing stress and anxiety level of engineering male students in improving of mental health of students.

Adjusted mean scores for Stress and Anxiety show significant differences between the control group and the experimental group of male engineering students (Tables 1, 2). The stress and

anxiety levels of engineering students were also shown to be reduced with daily practice of Kinhin Meditation.

Conclusion

Despite the study's limitations, the following conclusion may be made based on the data collected: (i) there was a statistically significant difference between the stress levels of the control and experimental groups of male engineering

students at H.V.P.M. Institution, Amravati; and (ii) anxiety among male engineering students at H.V.P.M. Institution, Amravati, was studied, and a statistically significant difference was discovered between the control and experimental groups.

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