ISSN: 2583-7354

International Journal of Emerging Knowledge Studies

Publisher's Home Page: https://www.ijeks.com/

Fully Open Access Research Paper

EFFECT OF YOGA NIDRA ON ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS OF ASSAM

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Article Info: - Received : 03 November 2023 **Accepted** : 26 November 2023 **Published** : 30 November 2023

Abstract

The purpose of the study was to know the Effect of Yoga Nidra on Academic Achievement of Secondary School Students of Assam". Therefore 60 students (30 boys and 30 girls) aged 14-15 years old of class IXth had been selected from Juria Higher Secondary School of Nagaon district of Assam, India as convenience were made randomly in two equal (on the basis of their academic achievement scores) groups, one experimental group and another control group, i.e. 30 students in experimental group and 30 students in control group. The simple random sampling method had been used to select the samples for the study. This study had been employed "Pre-test Post-test Only Design" under experimental research. To measure the amount of Effect of Yoga Nidra on Academic Achievement (all subjects of class IXth) among class IXth students in pre-test and post-test, researcher had used self-made Academic Achievement tool. Both the groups had been pre-tested after that the experimental group had performed Yoga Nidra practices 30 minutes for 30 weeks regularly (5-day in a week), while control group did not perform any activities like Yoga Nidra during those 30 weeks. After completion of the treatment period once again both the groups were post-tested by same tool used for pre-testing. The collected data were analyzed by applying appropriate techniques such as t-test was used to test Null Hypotheses. The data had been analyzed by computer Programme such as SPSS & MS Excel statistics package (Free Student Version). The findings of the study revealed that the 30 weeks intervention Programme of Yoga Nidra Practices among students of class IXth have significant impact on their Academic Achievement (all subjects of class IXth).

Keywords: *Yoga Nidra, Academic Achievement, Class IXth Students, Assam.*

1. INTRODUCTION

Yoga plays an important role and has made unlimited contribution to the modern lifestyle. Yoga Nidra means a sleep with a trace of awareness. It is a state of mind between wakefulness and dream. Yoga Nidra is a best known technique to induce complete physical mental and emotional relaxation. It is a state of consciousness where one neither sleeps nor awakens. So it is an altered state of consciousness. Yoga Nidra referred as Yogic sleep offers a unique method

for inducing a state of consciousness relaxation while maintaining mental alertness. It gives peace to individual mind and decrease anxiety; stress etc. rooted in ancient yogic traditions, this practice involves Sankalp (Determination), fast Rotation of Consciousness, Breathing Awareness, Opposite Feeling and Sensation, Visualization for Physical and Mental Peace. Now a days most of the students, they are feeling academic pressure and challenges in this neck cutting competitive era. Here integrating Yoga Nidra in educational setting may provide a valuable practice for decreasing stress and enhancing cognitive function of students. Various studies on Yoga Nidra suggest that regular practice of yoga Nidra may contribute to improve focus, heightened attention and enhanced emotional well-being. This paper aims to examine the relationships between Yoga Nidra and academic achievement. This paper explore that is practice of Yoga Nidra impact students academic performance.

2. NEED AND SIGNIFICANCE OF THE STUDY

This study is significant because of these following reasons:-

Use of Yogic Science Technique to fight with low confidence, low self-esteem, stress, bipolar disorder, depression, anxiety, disease, disability is low cost expenditure for the health of the society. Yogic Science has proven many cases where students have got advantages when they faced so many disappointments from general education. Use of yogic science is spreading very fast all around the world. The present study put on light on the *Effect of Yoga Nidra on Academic Achievement of Class IXth students of Assam.* With a view to recent development of knowledge, very few studies draw our attention towards this problem, which are as follows:-

Devi, R., et al. (2018) Conducted a study on Yoga and found that Yoga intervention plays a very important role in intellectual and emotional development of child. It also helps in improve special memory task of children and increase memory level. **Karak. K., et al (2016)** Carried out a study on effect of Yogasana on academic performance. This study was conducted on 100 high school students, where 50 students got yoga training and 50 was in control group. This experiment revealed that experimental group had better academic performance compare to control group. **Kauts, A., et al. (2009)** in their study revealed that students who practiced Yoga better in academic. Low stress students performed better than high stress students in academics. **Lemay, v., et al. (2019)** carried out a study on Impact of yoga and meditation intervention on students stress and anxiety levels. This study found that after six week yoga and meditation program students experienced reduction stress and anxiety level. **Eastman-Mueller, H., et al. (2013)** found that i-rest yoga Nidra practice may reduce symptoms of perceived stress, worry and depression and it helps in increase mindfulness based skills of college students. **Parajuli, N., et al. (2022)** in their study found that yoga improved general intelligence, visuopatial working memory, attention, and also reduce anxiety of students with low academic performance. Compare to physical exercise yoga was more effective to student's fluid intelligence and executive function. In this context Yoga Nidra practice may help to establish the relationship with Academic Achievement.

3. OBJECTIVE OF THE STUDY

To know the effect of Yoga Nidra on Academic Achievement of class IXth Students of Assam.

4. HYPOTHESES

Researcher had formulated four separate Null Hypotheses for both the group's i.e. Control Group & Experimental Group.

H_{01}: There is no significant difference in pre-test scores of Academic Achievement between Experimental group and Control group before performing Yoga Nidra practices among class IXth Students of Assam.

H_{02}: There is no significant difference in post-test scores of Academic Achievement between Experimental group and Control group after performing Yoga Nidra practices among class IXth Students of Assam.

H_{03}: There is no significant difference in Academic Achievement between pre-test and post-test score of Control group after performing Yoga Nidra practices among class IXth Students of Assam.

H_{03}: There is no significant difference in Academic Achievement between pre-test and post-test score of Control group after performing Yoga Nidra practices among class IXth Students of Assam.

5. SCOPE OF THE STUDY

This study can directly help the young generation youth of Assam, and other state of India, School Teachers, Special Educators, Teacher Educators, Resource Teachers, Professionals, Researchers, curriculum planners, policy makers, administrators, policy makers, Private Schools, NGOs, Vocational Trainers, Service Providers, parents of students, all students etc.

6. DELIMITATION OF THE STUDY

- The study is restricted to study the Effect of Yoga Nidra on Academic Achievement of Secondary School students only.
- The study is delimited to Nagaon district of Assam only, and the samples had been selected

on the related & concern population in the Nagaon district only.

- The study is delimited to Class IXth students of Juria Higher Secondary School, Nagaon district of Assam only.
- The study is delimited to 60 students (30 boys and 30 girls) only.
- The study is delimited to one demographic variable i.e. gender (Male & Female) only.
- The study is delimited to 30 minutes of Yoga Nidra practice for 30 weeks (5-day in a week) only.

7. METHODOLOGY OF THE STUDY

The methodology for this study described here under the following heads:-

Research Design-This study had been employed **"Pre-test Post-test Only Design"** under Experimental Research.

Sampling Design & Size-

Researcher had selected two equivalent groups Experimental Group & Control Group for the purpose of the study. The target group that had been selected which included a total of 60 students, 30 boys and 30 girls with the ages of 14-15 years old of class IXth.

Table-1: Sample Distribution from Juria Higher Secondary School of Nagaon, Assam

Sample	Class	Experimental Group	Control Group	Total
Boys	IXth Class students	15	15	30
Girls	IXth Class Students	15	15	30
Total		**30**	**30**	**60**

Sampling Technique of the Study- For this study Simple Random Sampling Technique (Lottery Method) had been used to select the samples.

Table-2: Group Design

Group	Pre-Test	Treatment	Post-Test
Experimental Group	O_1	X_1	O_2
Control Group	O_2	X_2	O_2

O_1 & O_2 are Pre-test & Post-test respectively.

X_1 – Treatment or Intervention Programme (**Yoga Nidra Practice**).

X_2 – Without Treatment.

Table-3: Variables of the Study

Independent Variable	Yoga Nidra
Dependent variable	Academic achievement

Tool for Treatment:-It included Yoga Nidra practices selected after consultation from Psychologists, Experts of Yoga and Educationists.

8. STEPS OF YOGA NIDRA PRACTICES

Swami Satyananda Jee explains Yoga Nidra technique as having eight parts-

Step-1 Preparation for Yoga Nidra: The first stage of Yoga Nidra is preparation where it is performed in the posture of Shavasana (dead body posture). Here practitioners' body and mind should be relaxed, and then our body and mind prepare for Yoga Nidra by asking the practitioner to listen to the external sound. Because when we listen the external sound, the mind quickly gets tired and become prepared.

Step-2 Determination (Sankalp): After relaxation of body and mind the practitioners are instructed to choose Sankalp very carefully according to their own wish or comfort.

Step-3 Rotation of consciousness: At this stage the instructor guides the practitioner to take consciousness to various body parts mentally in a systematic and organized manner. Rotation of consciousness follows a definite sequence.

Step-4 Awareness of the breath: At this stage, practitioners begin to be aware of natural breathing without trying to change the flow of the breathing. Here practitioner became aware of each incoming and outgoing breath by counting them in their mind.

Step-5 Opposite feeling and sensation: Here the practitioner recalled the physical or emotional sensation and intensified and experiences it fully. It is a practice of pair of opposite feeling like; cold and warm, love and hate, polite and rude etc.

Step-6 Visualization: In the visualization stage, practitioner asks to close their eyes and then awareness is taken to the dark space. This stage referred to as *chidakasha* in yogic terminology. Then practitioner instructed to visualize or imagine some objects, stories or situation in their mind.

Step-7 Recapitulation of Sankalp; Here, practitioners again remember all the Sankalp taken into stage two. Sankalp is repeated mentally by the practitioner with more faith, dedication and optimism.

Step-8 Ending the practice; This is the last stage of Yoga Nidra. Before ending the session of Yoga Nidra, the awareness is slowly externalized by asking the practitioner to become aware of the external sounds, objects, and persons. They are then asked then to

slowly move the body parts and to stretch the body and come back to normal situation.

Validation of Tool for treatment- Yoga Nidra practice package was selected by researchers and sent to different Yoga Experts, yoga teachers, School teachers, doctors for collecting the suggestions for adopting Yoga Nidra as intervention programme. For the purpose of pilot testing the Yoga Nidra practices had been treated on 06 samples and then finalized for incorporated in the study.

Tool for Measurement:-Academic Achievement test (Class IXth All Subjects) was constructed by the researchers himself/herself.

9. PROCEDURE

- **Administration of Pre-Test-** The researchers administered above mentioned tool Academic Achievement test of class IXth including all subjects two times for pre-tests after certain time intervals, the gap was 7-day between 1st & 2nd pre-tests.
- **Treatment-** As a part of the treatment Yoga Nidra practices had been conducted in group situation for 30 minutes session per day for 30 weeks (5-day in a week).
- **Administration of Post-Test-** The researchers administered above mentioned tool Academic Achievement test of class IXth including all subjects two times for post-tests after certain time intervals, the gap was 7-day between 1st & 2nd post-tests.
- **Data Collection-** Written permission for data collection was taken from head of the school of Juria Higher Secondary School of Nagaon, Assam after explaining the purpose of the study and the consent from parents of samples were taken by researchers, the academic achievement test tool were supplied to the all 60-sample for pre-tests and post-tests.
- **Data Analysis-** The data collected from samples had been fitted in the data sheets of MS-Excel computer programme and data were analyzed and interpreted by using descriptive statistics like mean, standard deviation, inferential statistics, t-test for see the difference between pre-test scores and post-test scores of academic achievement and also mean comparison by descriptive statistics. The researchers had used SPSS package for data analysis.

10. RESULTS & DISCUSSION

Objective: To study the effect of Yoga Nidra on Academic Achievement of class IXth Students of Assam.

H_{01}: There is no significant difference in pre-test scores of Academic Achievement between Experimental group and Control group before performing Yoga Nidra practices among class IXth Students of Assam.

Hypotheses Testing Reports

Table-4 Result of Pre-Test Scores of Experimental and Control Group

Variable	Group	N	Mean	SD	MD	t-ratio	Significance
Pre Test Academic Achievement Score	Control group	30	44.03	5.129	5.600	3.411	0.5 level
	Experimental group	30	38.43	7.908			

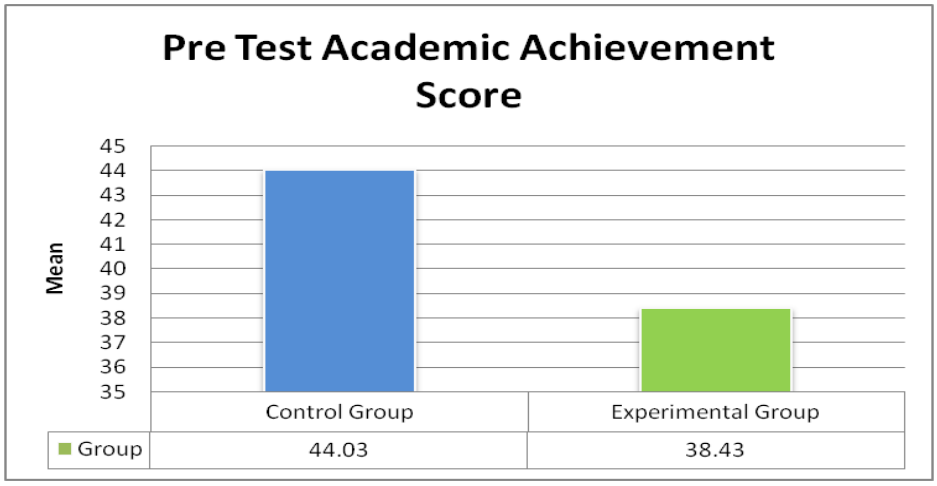

Figure-1

Interpretation

From the table-4 Result of the paired sample t-test showed that before giving Yoga Nidra treatment, Control Group Academic Achievement means score was 44.03 with 5.129 SD and Experimental Group mean score was 38.43 with 7.908 SD. Here, it is concluded that Control Group Academic Achievement was higher than Experimental group in Academic Achievement. It means that there is a significant difference in pre-test scores of Academic Achievement between Experimental and Control group before performing Yoga Nidra practices among class IXth Students of Assam. The Null hypothesis is accepted.

H_{02}: There is no significant difference in post-test scores of Academic Achievement between Experimental group and Control group after performing Yoga Nidra practices among class IXth Students of Assam.

Table-5: Result of Post-Test Scores of Experimental and Control Group

Variable	Group	Mean	SD	MD	t-ratio	Significance
Post Test Academic Achievement Score	Control group	51.70	5.260	5.400	4.122	0.5 level
	Experimental group	57.10	5.659			

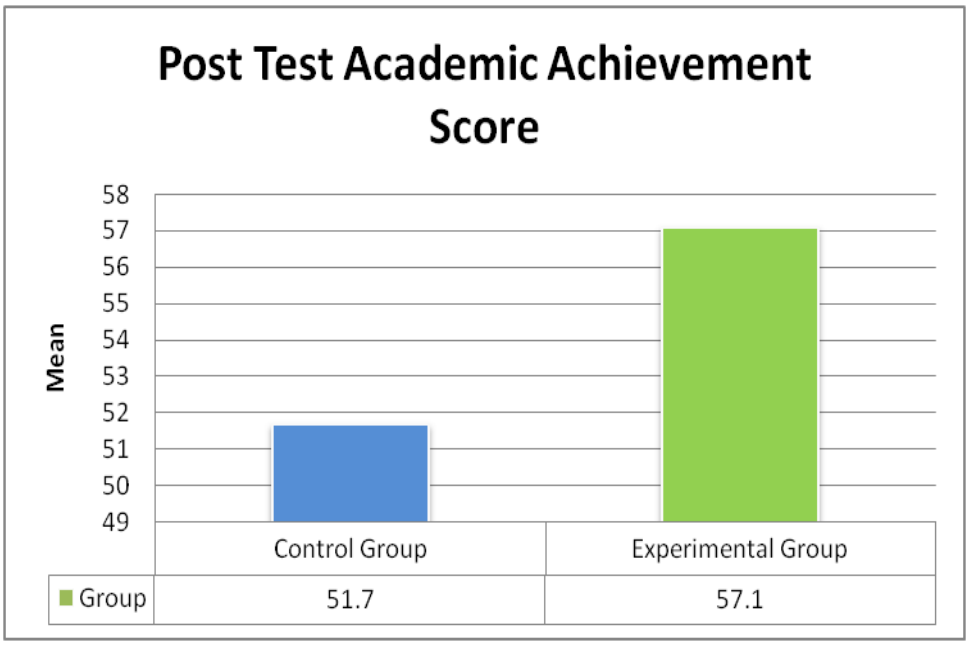

Figure-2

Table-5 showed that 'the difference in Academic achievement scores between the Experimental group (M=57.10, SD=5.659) and the control. Group (M=51.70, SD=5.260) was statistically significant, t-value =4.122 at .05 level. It is apparent from t-value 4.122 that there is significant difference between the mean scores of experimental and control groups with respect to their post-test Academic achievement scores, which indicates that the students practicing Yoga Nidra have high mean scores compared to the students without practicing Yoga Nidra. Hence hypothesis (H_{02}) There is no significant difference in post-test scores of Academic Achievement between Experimental and Control group after performing Yoga Nidra practices among class IXth Students of Assam. In other words: Yoga Nidra is found to be more effective in improve the Academic Achievement of secondary school students. The Null hypothesis is rejected.

H_{03}: There is no significant difference in Academic Achievement between pre-test and post-test score of Control group after performing Yoga Nidra practices among class IXth Students of Assam.

ISSN: 2583-7354

Table-6: Result of Pre-Test & Post-Test Scores of Experimental Group

Group	Group	Mean	SD	MD	t-ratio	Significance
Experimental Group	Pre Test	38.43	7.908	18.667	13.643	0.5 level
	Post Test	57.10	5.659			

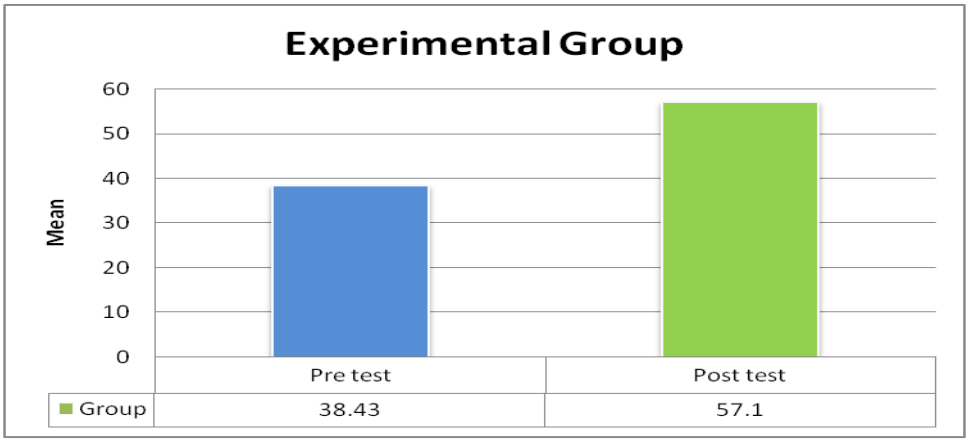

Figure-3

Table-6 showed that the difference in Academic achievement scores between the Experimental group pre-test (M = 38.43, SD. = 7.908) and the control Group post test (M = 57.10, SD = 5.659) was statistically significant, t-value = 13.643 at .05 level. It is apparent from "t value- 4.122 that there is significant difference between the mean scores of experimental and control groups pre test and post test Academic achievement scores, which indicates that the students practicing Yoga Nidra have high mean scores compared to the students without practicing Yoga Nidra. Hence hypothesis (H_{03}) There is no significant difference in pre test and post-test scores of Experimental group in Academic Achievement after Yoga Nidra practices among class IXth Students of Assam. In other words: Yoga Nidra was found to be more effective in improve the Academic Achievement of class IXth Students of Assam, as the Null Hypothesis is rejected.

H_{03}: There is no significant difference in Academic Achievement between pre-test and post-test score of Control group after performing Yoga Nidra practices among class IXth Students of Assam.

Table-7: Result of pre & post test scores of Control Group

Group	Test	Mean	SD	MD	t-ratio	Significance
Control Group	Pre Test	44.03	5.129	7.667	6.204	0.5 level
	Post Test	51.70	5.260			

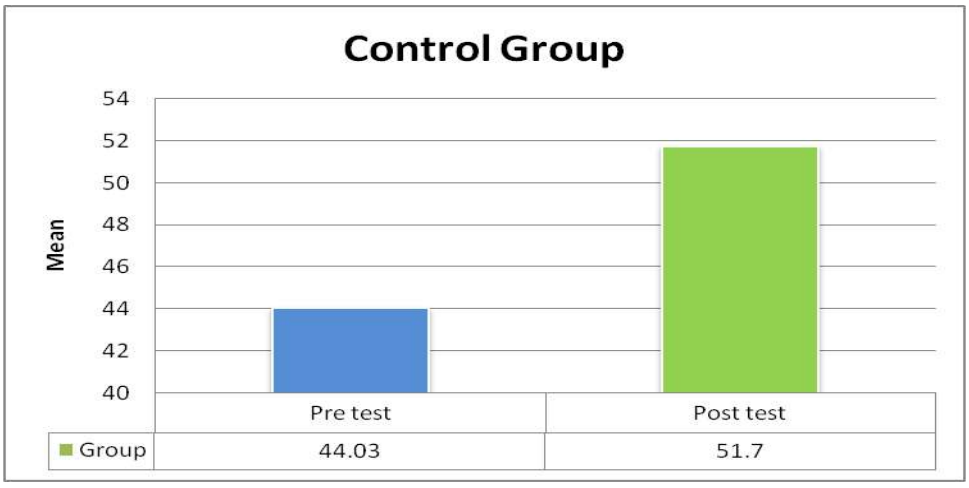

Figure-4

From the table-7 Result of the paired sample t test shows that before giving yoga Nidra treatment for control group Mean=44.03, SD=5.129 and after 30 weeks without any Yoga Nidra treatment mean=51.70 SD=5.260 at 0.5 level of significance. Paired sample t-test for control group indicates that there is a significant difference between the mean scores of pre-test and post-test scores of control group at 0.05 levels. Therefore the Null Hypothesis is rejected.

The average marks of the post-test in the control group students is (51.70), whereas in pre-test is (44.03) (t=6.204 p=0.05< 0.05). This result indicates that in control group students show moderate difference after 30 weeks gap.

11. THE MAJOR FINDINGS

- Yoga Nidra practice is effective technique in improving the Academic Achievement of secondary school students of Assam.
- Significant difference found in pre-test scores of Academic Achievement between Experimental and Control Group.
- Significant difference found in post-test scores of Academic Achievement between Experimental group and Control.
- Academic Achievement of Experimental group students was improved significantly in compare to Control group students.
- This result indicates that in control group students show moderate difference after 30 weeks gap.

12. CONCLUSION

The main objective of the study was to study the effect of Yoga Nidra on Academic Achievement. The 30 weeks Yoga Nidra practice has great impact on soothing mind and calming body which frees the stress level of the students. The result of this study revealed that Yoga Nidra has statistically significant impact on the Academic Achievement among class IXth Students of Juria Higher Secondary school of Nagaon district of Assam. The study had been done by **Kauts, A., et al. (2009), Karak. K., et al (2016)**. support the findings of the current study. So, it is evident from this study that Yoga Nidra practice has great impact on enhancing Academic Achievement of students.

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Cite this article as: Dr. Akash Ranjan and Sangita Borah., (2023). Effect of Yoga Nidra on Academic Achievement of Secondary School Students of Assam. International Journal of Emerging Knowledge Studies. 2(11), pp. 554-560.