

## **Effect of Yoga on Academic Achievement of P. G. Students**

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### **Abstract**

**Introduction** : Education plays a most important role in society, for having a great carrier, good salary, nice placement and peace of mind as well, we all are well known about suicides has been attempted by the students now a days in India and entire world as well, and marks are symbolic for the quality of education which is being gain by a student in our society, but everyone can't achieve a good grade in their academic record, there may be many reasons for that, but a common& most popular reason is lack of concentration in students has been seen in many survey.

A question has been now arising that, can Yogic techniques help to achieve the good grade in academic too for post graduate students? That is why we are going to assess the efficacy of few of yogic procedures which is printed in many ancient books and well widespread for their effects.

**Aim** : The purpose of this study is “To analyze the effect of Yogic techniques and super brain yoga on academic achievement of the P. G. students.”

**Methods**: For this study we had selected randomly 50 Post graduate students with age ranging between 20 to 25 years of age. Practicing 40 minute/ day yogic intervention particularly and only those students were considered who were willing to participate in such type of practices. The students are male and almost equal in the term of education, mental status, socio economic status and types of work. Then at the initiation of practice 0th day pre-data was collected by the team on academic achievement motivation scale developed by Dr. T. R. Sharma in 2005 and at the end of schedule on 45th day of intervention post data was taken for their internal semester examination marks which is going to be held on 42nd day.

**Result**: According to obtained data we found that there was statistically significant difference at 0.01 levels between pre and post conditions in the level of Academic achievement. This reveals the efficiency of super brain yoga along with yogic practices in enhancement of mental activity and the state of concentration in special reference with college going post graduate students.

**Conclusion**: In conclusion, we can firmly state that selected yogic techniques and super brain yoga can play an efficient role in the enhancement of mental activity and state of concentration as well in the college going post graduate students for their academic achievement.

**Keywords**: Academic achievement, Super brain Yoga

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### **Introduction:**

The human brain is amazing – even so more sophisticated than any existing computer – that it gives people powerful potential. “A baby is born into the world

with around 100 billion brain cells, give or take a few million. A brain cell is technically called a neuron, and a neuron is so miniscule that 30,000 of them fit on a pinhead. The brain is so important to the

species that four weeks after conception, an embryo that will become a baby produces half a million neurons every minute. A complex system of 300 million neurons connects the brain's right and left lobes. Each person's 100 billion neurons have about 20,000 very important connecting branches called dendrites. There are said to be more possible connections in the human brain than the number of atoms in the entire universe."<sup>[1]</sup> Physician James Gordon, clinical professor of psychiatry at the Georgetown University School of Medicine, teaches deep breathing to most of his patients. For example, it has helped adults reduce the suffering from advanced cancer and crippling arthritis and aided young person's coping with attention deficit disorder.<sup>[2,3]</sup> "Slow, deep breathing is probably the single best anti-stress medicine we have," says Dr. Gordon. "When you bring air down into the lower portion of lungs, where oxygen exchange is most efficient, everything changes. Heart rate slows, blood pressure decreases, muscles relax, anxiety eases and the mind calms. Breathing this way also gives people a sense of control over their body and their emotions that is extremely therapeutic."<sup>[4]</sup>

The positive effect of physical activity on attention has been reported in previous research.<sup>[5]</sup> Studies also indicate that coordinated exercise increases one's attention the component of holding the earlobes seen only in the practice of super brain yoga may account for the significant improvement in alpha wave scores.<sup>[6]</sup> Overall, the reduction in hyperactivity and increased present moment awareness may be cited as a possible mechanism for the improved performance.<sup>[7]</sup> Further, the role of stimulating acupressure points on earlobes may enhance attention performance.

While a study on "super brain yoga for alpha E. E. G. brain waves towards adolescence" resulted in important findings, the researcher obtained a group

of adolescence age ranging between 15-22 years of age and the research team decided that students have to practice the super brain yoga, Gayatri mantra chanting and yognidra for 51 mins/ day for a period of one months and according to their findings there was a significant result gain in the study at 0.01 level of significance the results have to be considered in light of several limitations. Representation of males while females are not included in this study and small sample size does not allow for generalization of the findings to a realistic population. Moreover, neither psychological measurements nor the lasting effect of intervention was assessed. Furthermore, the study used a mix of novice and long-term yoga practitioners who were part of an on-going residential yoga course. Therefore, it is unclear what effect the yoga practice had in influencing the participant's performance and psychological states.

In the Indian tradition, the elephant-headed deity Ganapati is worshipped as the remover of obstacles, bestowed of knowledge and success.<sup>[8]</sup> Intrinsically, his blessings are sought before the commencement of any endeavor. Yogic squats with specific hand position (*Thoppukaranam*), i.e. super brain yoga. A physical act of worshiping the deity, are practiced throughout India.<sup>[9]</sup> "The super brain yoga is well known in south India by the name of *Thoppukaranam* and *Ganeshasanain* the northern region of India as well. So, it's being clear that the super brain yoga is well known by the people of entire world by the different name and slightly changed techniques."<sup>[10]</sup>

### **Super brain yoga:** <sup>[11]</sup>

1. Remove any jewelry. Face east, if you know where it is.
2. Roll your tongue in the inward direction and press it firmly towards the roof of your mouth.
3. Raise your left arm in front of you. Important, left arm first.

4. Fold at the elbow and reach for your right earlobe.
5. Hold your right earlobe with your left hand so that the thumb is on the outside and two fingers are on the inside, behind the ear.
6. Extend your right arm in front of you.
7. Fold at the elbow and reach for your left earlobe. The right arm will cross over the left one.
8. Position your thumb and forefinger in the same manner as on right earlobe.
9. Inhale deeply through your nose and simultaneously squat down gently to a sitting position, with your arms as above. No chair required, just squat. If you can go down almost to floor level, that is best.
10. If possible, hold the position for two or three seconds. Exhale gently and rise to standing position as you are exhaling.
11. Release your ears, leave your arms loose by your sides and disconnect tongue from roof of mouth.

### Methodology:

#### Sample:

The total sample of 50 post graduate students ranging in age from 20 to 25 years was selected from the Dev Sanskriti university of district Haridwar, Uttarakhand, (India). This sample consists of 50 Students in experimental group. A random sampling was done to select the best and interested samples. Pretest and posttest was administered to assess the effectiveness of yogic practices. Both male and female participants are considered and minimum education was at least graduation. The ratio for the male and female was 1:1 (i.e. 25 + 25)

#### Experimental session:

The intervention package of yogic practices was given to the experimental group. Participants assigned to the group and they performed the selected yogic intervention in group early in the morning at 05:30 A.M. for forty (40) minutes for just 45 days excluding Sundays and holidays under the supervision of researcher. Total 45 days intervention given to the students. The intervention schedules are as shown in given. During the course of this study they instructed not to do any other yogic practices as well.

S. No.	Yogic interventions	Round/day	Duration
1.	Gayatri Mantra Chanting	12 round / day	6 min
2.	Surya namaskar	2 round/ day	2 min
3.	Super brain yoga	18round/ day	10min
4.	Bhastrika pranayama	2 round/ day	2 min
5.	Bhramari pranayama	5 round/ day	5 min
6.	Relaxation/Yognidra	1 round / day	15 min
<b>Total</b>			<b>40 min/day</b>

#### Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pre	90.7140	50	36.53160	5.30636
	post	95.7540	50	26.29035	3.83893

**Design:**

Pretest and posttest research design was used in the present study; groups are practicing the yogic practices along with the super brain yoga techniques as intervention. At the end of the intercourse, group is measured again to evaluate the difference between pre and post condition as a result of the intervention.

**Tools:**

To measure the academic achievement level of the students, academic achievement motivation scale developed by Dr. T. R. Sharma in 2005 has been used for student in the pre and post condition.

**Procedures:**

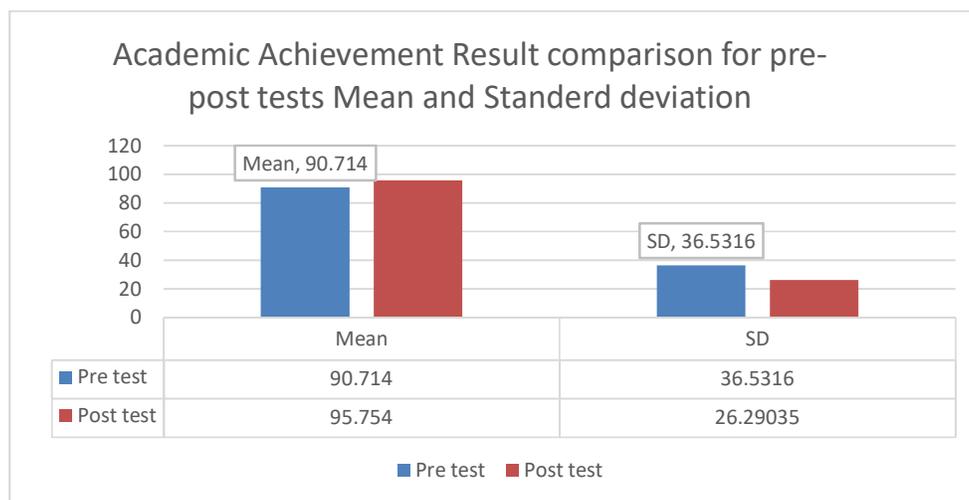
This study was conducted at Haridwar Uttarakhand. So, we have to consider the climate and atmosphere as an extraneous variable, however fifty students were selected through simple random sampling and the sample is for experimental group (n= 50) and their age range was 20 to 25 years of age. All students of experimental group followed there prescribed yogic

practices during the course of study and also instructed not to do any other yogic activities by themselves and during physical practices not to exert their body.

Along with the super brain yoga we include the Gayatri maha mantra as a Vedic mantra chanting, as we know that it is widely used for the calmness of the brain waves for just 12 times /day, Bhastrika and Bhramari pranayama for 2 & 5 mins.Sloping, for a gentle massage of the brain to regain the lost concentration and yoga nidra is introduces in this package as a relaxation technique for the relaxation of body after the heavy practices of super brain yoga for just 15min/day.

**Statistical analysis:**

Obtained data were tabulated and analyzed. The initial values on 0th day of parameter were compared with the final values obtained on 45<sup>th</sup> day’s measurement. Paired t- test was used for the statistical analysis with the help of SPSS ver. 23.



**Results:**

The mean & standard error of mean (M±SEd) of pretest and posttest on level of Academic achievement of the **experimental group** were consecutively found to be 90.714±5.30 and 95.754±3.83.

The PretestSD= 36.53 and Posttest SD= 26.29 as well. Obtained t-value is 2.49 which are statistically significant at 0.01 level of confidence.

On the basis of obtained result, it can be concluded that yogic intervention along

with the practice of super brain yoga techniques is **significantly (at .01 creases the level of Academic achievement)** of the Post Graduate level students in the experimental group.

### Conclusion:

On the basis of the findings of this study it can be concluded easily that this package can enhance the meditative state of mind which can further improve the overall performance of the Post graduate level students. In the Indian tradition, the elephant-headed deity Ganapati is worshipped as the remover of obstacles, bestowed of knowledge and success.<sup>[12]</sup> Intrinsically, his blessings are sought before the commencement of any endeavor. Yogic squats with specific hand position (*Thoppukaranam*), i.e. super brain yoga. A physical act of worshipping the deity, are practiced throughout India.<sup>[13]</sup> The super brain yoga is well known in south India by the name of *Thoppukaranam* and *Ganeshasanain* the northern region of India as well. So, it's being clear that the super brain yoga is well known by the people of entire world by the different name and slightly changed techniques.

According to a research by Cornell university of New York, mental health problems affect one in every five young

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people at any given time. Since to face all the problems such as: strain, tension, depression, anxiety and more our intellectual level adolescents are targeted first. So, for any type of mental as well as physical disorders yoga, along with asana, Super Brain Yogic technique and Surya Namaskar i.e. Sun Salutation proves it best of all.<sup>[14]</sup> Though super brain yoga [*Thoppukaranam, Ganeshasana*] is to be practiced throughout the world,<sup>[15]</sup> there have been several research studies carried out throughout the world to understand the effect of the practice of [*Thoppukaranam/ Ganeshasana*] till today. This is an attempt to study the effect of the Ganeshasana along with some yogic techniques. Future studies could measure psychological parameters using other techniques to understand the mechanism and fallout period of the effects. It is also recommended to include comparison of unguided individual practice across various age groups with varying needs such as students in primary, secondary, or tertiary level educational institutes as well as those with special needs, developmental and behavioral disorders. Again, the long-term impact of the intervention remains to be studied.

### References

1. Ehleringer J. Yoga for children on the autism spectrum. *Int J Yoga Ther.* 2010;20: 131–9.
2. Verma, S., Kashyap, G K., Kumar, K., Can Pranakarshan Pranayam helps to cope up with stress? *International Journal of Science and Consciousness*, Vol: 2, Issue 2 June 2016 pp: 38-45.
3. Kakkar D & Kumar K; Effect of Bhoot Suddhi Kriya on EEG Alpha; *Yoga Mimansa, Kaivalyadham Lonavala, Maharashtra* Vol. 43, No 4. pp 310-15.
4. [http://appranichealing.org/wp-content/uploads/2011/06/Ybrant\\_Prana\\_Newsletter-V2N2-2009-02.pdf](http://appranichealing.org/wp-content/uploads/2011/06/Ybrant_Prana_Newsletter-V2N2-2009-02.pdf)
5. Hillman CH, Castelli DM, Buck SM. Aerobic fitness and neurocognitive function in healthy preadolescent children. *Med Sci Sports Exerc.* 2005;37: 1967–74.
6. Verma, S.& Kumar, K. (2016), Evidence based study on super brain yoga and its application on alpha E.E.G. in adolescence. *International journal of science and consciousness*; 2(4): 40-46

7. Verma, S. and Gurvendra, A. (2016). A Study on the Effect of Collective Yogic Practices on Social Adjustment of Collage Students in Urban Area. *International Journal of Science and Consciousness*; 2(1): 36-40.
8. Chinmayananda Swami. *Glory of Ganesha*. Bombay: Central Chinmaya Mission Trust; 1987
9. Rajesh, SasidharanK, TM Srinivasan, and Angelica Chandrasekeran. "Effect Of Repetitive Yogic Squats With Specific Hand Position (Thoppukaranam) On Selective Attention And Psychological States". *International Journal of Yoga* 7.1 (2014): 76. Web.
10. Verma, S. & Kumar, K. (2016), Evidence based study on super brain yoga and its application on alpha E.E.G. in adolescence. *International journal of science and consciousness*; 2(4): 40-46
11. Verma, S. & Kumar, K. (2016), Evidence based study on super brain yoga and its application on alpha E.E.G. in adolescence. *International journal of science and consciousness*; 2(4): 40-46
12. Chinmayananda Swami. *Glory of Ganesha*. Bombay: Central Chinmaya Mission Trust; 1987
13. Rajesh, SasidharanK, TM Srinivasan, and Angelica Chandrasekeran. "Effect Of Repetitive Yogic Squats With Specific Hand Position (Thoppukaranam) On Selective Attention And Psychological States". *International Journal of Yoga* 7.1 (2014): 76. Web.
14. Kumar, P. (2016).Effect of Yoga on Mental Health of Adolescents. *International Journal of Science andConsciousness*; 2(1): 6-12.
15. Verma, S. & Kumar, K. (2016), Evidence based study on super brain yoga and its application on alpha E.E.G. in adolescence. *International journal of science and consciousness*; 2(4): 40-46

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