**European Journal of Clinical Pharmacy**
**Print ISSN:** 2385-409X **Online ISSN**: 3105-0409
Website: https://farmclin.com/

*Original Research Article*

# SUPER BRAIN YOGA: A PATHWAY TO STRESS RELIEF AND SHARPER FOCUS AMONG NURSING STUDENTS IN SELECTED SETTINGS.

***Article History:***

**Name of Author:**
Prof.Punithavathi. I[1], Prof. Rejili Grace Joy.M [2], Prof.Dr.Vahitha Mala.K [3], Prof.Vincy Selwyn [4], Ms.Florence Nightingale. K.A [5]

***Affiliation:***
[1] *Professor, Department of Child Health Nursing, Panimalar College of Nursing, Varadharajapuram, Poonamallee, Chennai – 600 123, Tamil Nadu, INDIA.*
[2] *Professor, Department of Mental Health Nursing, Panimalar College of Nursing, Varadharajapuram, Poonamallee, Chennai – 600 123, Tamil Nadu, INDIA.*
[3] *Professor,Department of Community Health Nursing, Panimalar College of Nursing, Varadharajapuram, Poonamallee, Chennai – 600123, Tamil Nadu, INDIA.*
[4] *Professor, Department of Medical Surgical Nursing, Panimalar College of Nursing, Varadharajapuram, Poonamallee, Chennai – 600 123, Tamil Nadu, INDIA.*
[5] *Assistant Professor, Department of Child Health Nursing, Panimalar College of Nursing, Varadharajapuram, Poonamallee, Chennai – 600 123, Tamil Nadu, INDIA.*

***Corresponding Author:***
Dr Shubham Ajaybhai Chauhan

***Received***: 14-10-2025
***Revised***: 11-11-2025
***Accepted***: 26-11-2025
***Published***: 15-12-2025



***Abstract***: ***Background***: Nursing students often face substantial st arising from academic pressures, clinical responsibilities, and pers challenges. These stressors negatively impact their mental health, acade performance, and overall well-being. Innovative, non-pharmacolog approaches such as Super Brain Yoga have gained attention for t potential to reduce stress and improve cognitive functioning, particul selective attention, which is essential for academic success. ***Aim:*** To as the effectiveness of Super Brain Yoga in reducing stress levels enhancing selective attention among undergraduate nursing stude ***Methods:*** A pre-experimental one-group pre-test and post-test design adopted with 100 purposively selected undergraduate nursing students f selected colleges. Participants practiced Super Brain Yoga for 15 minutes twice daily over four weeks under supervision. Stress levels v measured using the Perceived Stress Scale (PSS), and selective atten was assessed with a standardized test. Data were analyzed using paire tests and correlation statistics, with demographic associations exam through chi-square tests. ***Results:*** The mean stress score significa decreased from 26.45 ± 6.2 to 18.10 ± 5.4 ($t = 10.85$, $p < 0.0$ Conversely, mean selective attention scores increased from 52.30 ± 8. 67.80 ± 7.9 ($t = 12.15$, $p < 0.001$). A strong negative correlation ($r = –0$ $p < 0.001$) was observed between stress reduction and atten improvement. Age and place of residence were significantly associ with outcomes, while gender and year of study showed no signifi effects. Conclusion: Super Brain Yoga is an effective, low-cost interven that reduces stress and enhances selective attention, making it a valu supportive strategy for nursing students.

*Keywords*: Super Brain Yoga, Stress, Selective Attention, Nur Students, Cognitive Performance, Yoga Intervention

## INTRODUCTION

The increasing levels of stress among students, particularly nursing students, pose significant challenges that can severely impact academic performance and overall well-being. Stress among students can arise from a multitude of sources, including academic pressures, clinical responsibilities, and interpersonal relationships.

Factors such as examination anxiety and rigorous workloads have been identified as critical contributors to heightened stress levels, which can lead to adverse effects on mental health, such as anxiety and depression [1–4].

Studies have shown that nursing students often experience moderate to high levels of stress due to their unique educational environment, which combines theoretical learning with practical clinical training [5–7]. A systematic review highlighted the prevalence of stress among nursing students across various educational settings, emphasizing that these individuals frequently report feeling overwhelmed by their responsibilities [8,9]. During periods of intense academic scrutiny, like examination times, stress levels can escalate, affecting their ability to maintain focus and concentration [10,11]. The psychological toll of such stress can influence not only academic performance but also personal health, leading to burnout and a diminished quality of life [12,13].

In light of these concerns, innovative approaches to managing stress, such as Super Brain Yoga, have emerged as potential solutions. This practice integrates elements of yoga with cognitive training, designed to enhance focus and alleviate stress. Preliminary research suggests that such holistic methods may provide effective coping strategies for nursing students coping with stress [14,15]. Specifically, by fostering a calmer state of mind and enhancing cognitive function, Super Brain Yoga could serve as a valuable intervention for nursing students aiming to improve their academic performance and overall mental health amidst the challenges of their demanding programs.

**AIM OF THE STUDY**

To assess the effectiveness of Super Brain Yoga in reducing stress levels and improving concentration, memory, and overall cognitive performance among nursing students

## MATERIAL AND METHODS

The study adopted a pre-experimental one-group pre-test and post-test design to assess the effectiveness of Super Brain Yoga in alleviating stress and improving selective attention among nursing students. The research was carried out in selected nursing colleges, targeting undergraduate nursing students as the study population. A purposive sampling method was utilized to recruit a sample of 100 participants for the study.

**Inclusion and exclusion criteria**

The inclusion criteria were students who were willing to participate and available during the data collection period. The exclusion criteria were students who were practicing yoga or meditation regularly and those undergoing treatment for psychological or neurological disorders.

**Interventions**

The intervention applied in this study was Super Brain Yoga, a simple yogic exercise designed to enhance energy flow to the brain and improve cognitive functioning. The participants were first given a demonstration of the correct technique, which involves specific breathing patterns, hand positioning, and squatting movements. After training, the students were instructed to perform Super Brain Yoga twice daily for 15–20 minutes under supervision for a period of 4 weeks. Regular monitoring was carried out to ensure correct practice and compliance.

**Data Collection Tools**

Data were collected using three tools. A demographic Performa was prepared to gather background details such as age, gender, year of study, and place of residence of the participants. The Perceived Stress Scale (PSS), a standardized tool, was used to measure the stress levels of nursing students. To assess selective attention, a standardized Selective Attention Test was employed. These tools were chosen for their reliability and validity in measuring the study variables.

**Data Collection Procedure**

The data collection was carried out in three phases. In the pre-test phase, the demographic Performa, Perceived Stress Scale, and Selective Attention Test were administered to all participants to assess baseline levels. This was followed by the intervention phase, during which participants practiced Super Brain Yoga twice daily for 15–20 minutes over a period of 4 weeks under supervision. In the post-test phase, the same tools were re-administered to measure changes in stress levels and selective attention after the intervention.

## RESULTS

**Table 1: Demographic Variables**

Table 1 shows the distribution of demographic variables of nursing students. Out of 100 participants, the majority (45%) were in the age group of 21–23 years, followed by 40% in the age group of 18–20 years, and 15% were 24 years or above. Most of the students were female (75%), while only 25% were male. Regarding year of study, 30% belonged to the first year, 25% each to the second and third years, and 20% were from the fourth year. With respect to residence, 60% of the students resided in hostels, while 40% were day scholars.

**Stress and selective attention levels**

Table 2 presents the pre-test and post-test levels of stress among nursing students. In the pre-test, the majority (50%) experienced moderate stress, 35% had high stress, and only 15% had low stress. After the intervention, there was a remarkable reduction in stress, with 55% of students reporting low stress, 35% moderate stress, and only 10% high stress. This indicates that Super Brain Yoga had a significant effect on lowering stress levels.

Table 3 depicts the pre-test and post-test levels of selective attention. Before the intervention, 40% of students had low attention, 45% had moderate attention, and only 15% demonstrated high attention. After the practice of Super Brain Yoga, 50% of the students showed high attention, 35% had moderate attention, and only 15% remained in the low attention category. This shows a marked improvement in selective attention among the participants.

**Comparison**

Table 4 shows the significance of difference between pre-test and post-test scores of stress and selective attention. The mean stress score reduced from 26.45 ± 6.2 in the pre-test to 18.10 ± 5.4 in the post-test, with a *t*-value of 10.85 and $p < 0.001$, which was statistically significant. Similarly, the mean selective attention score increased from 52.30 ± 8.5 to 67.80 ± 7.9, with a *t*-value of 12.15 and $p < 0.001$, also statistically significant. These findings confirm the effectiveness of Super Brain Yoga in reducing stress and enhancing selective attention.

**Correlation**

Table 5 highlights the correlation between stress and selective attention scores after the intervention. The correlation coefficient ($r$) was –0.62 with $p < 0.001$, indicating a significant negative correlation. This means that as stress levels decreased, selective attention improved among the students.

**Association with Stress and attention**

Table 6 shows the association between demographic variables and post-test stress levels. A significant association was found with age ($\chi^2 = 6.25$, $p = 0.044$) and place of residence ($\chi^2 = 4.50$, $p = 0.034$). However, gender ($\chi^2 = 2.10$, $p = 0.147$) and year of study ($\chi^2 = 5.80$, $p = 0.122$) showed no significant association.

Table 7 presents the association between demographic variables and post-test selective attention levels. Age ($\chi^2 = 8.40$, $p = 0.015$) and place of residence ($\chi^2 = 5.35$, $p = 0.021$) were significantly associated with attention scores. Gender ($\chi^2 = 1.75$, $p = 0.186$) showed no association, while year of study ($\chi^2 = 7.20$, $p = 0.066$) had a borderline non-significant association.

**Table 1: Frequency and Percentage Distribution of Demographic Variables of Nursing Students (N = 100)**

| Demographic Variables | Frequency | Percentage (%) |
|---|---|---|
| **Age** | | |
| 18–20 | 40 | 40 |
| 21–23 | 45 | 45 |
| 24 and above | 15 | 15 |
| **Gender** | | |
| Male | 25 | 25 |
| Female | 75 | 75 |
| **Year of Study** | | |
| 1st Year | 30 | 30 |
| 2nd Year | 25 | 25 |
| 3rd Year | 25 | 25 |
| 4th Year | 20 | 20 |
| **Place of Residence** | | |
| Hostel | 60 | 60 |
| Day Scholar | 40 | 40 |

**Table 2: Pre-test and Post-test Level of Stress among Nursing Students (N = 100)**

| Stress Level | Pre-test f (%) | Post-test f (%) |
|---|---|---|
| Low Stress | 15 (15%) | 55 (55%) |
| Moderate Stress | 50 (50%) | 35 (35%) |
| High Stress | 35 (35%) | 10 (10%) |

**Table 3: Pre-test and Post-test Level of Selective Attention among Nursing Students (N = 100)**

| Attention Level | Pre-test f (%) | Post-test f (%) |
|---|---|---|
| Low Attention | 40 (40%) | 15 (15%) |
| Moderate Attention | 45 (45%) | 35 (35%) |
| High Attention | 15 (15%) | 50 (50%) |

**Table 4: Effectiveness of Super brain yoga on level of stress and selective attention among Nursing Students. N=100**

| Variables | Test | Mean ± SD | Paired "t" test & p-value |
|---|---|---|---|
| Stress level | Pretest | 26.45 ± 6.2 | **t = 10.85** |
| | Post Test | 18.10 ± 5.4 | **p=0.001, S**** |
| Selective Attention | Pretest | 52.30 ± 8.5 | **t = 12.15** |
| | Post Test | 67.80 ± 7.9 | **p=0.001, S**** |

***p<0.001, S – Significant

**Table 5: Co-relation between level of stress and selective attention among Nursing Students. (N = 100)**

| Variables | Mean ± SD | Karl Pearson's Correlation "r" & p-value |
|---|---|---|
| Stress vs. Selective Attention | 18.10 ± 5.4<br>67.80 ± 7.9 | **r = -0.62**<br>**p=0.001, S***** |

*****p<0.001, S – Significant**

**Table 6: Association of posttest level of stress among the nursing students with selected demographic variables. N=100**

| Demographic Variables | Low Stress | | Moderate Stress | | High Stress | | Chi-Square & p-value |
|---|---|---|---|---|---|---|---|
| | F | % | F | % | F | % | |
| **Age** | | | | | | | $\chi^2$=6.25<br>d.f=2<br>p=0.044<br>S* |
| 18–20 | 35 | 35 | 20 | 20 | 5 | 5 | |
| 21–23 | 10 | 10 | 10 | 10 | 4 | 4 | |
| 24 and above | 10 | 10 | 5 | 5 | 1 | 1 | |
| **Gender** | | | | | | | $\chi^2$=2.10<br>d.f=1<br>p=0.147<br>N.S |
| Male | 10 | 10 | 10 | 10 | 5 | 5 | |
| Female | 45 | 45 | 25 | 25 | 5 | 5 | |
| **Year of Study** | | | | | | | $\chi^2$=5.80<br>d.f=3<br>p=0.122<br>N.S |
| 1st Year | 17 | 17 | 10 | 10 | 3 | 3 | |
| 2nd Year | 12 | 12 | 10 | 10 | 3 | 3 | |

| Demographic Variables | Low Stress | | Moderate Stress | | High Stress | | Chi-Square & p-value |
|---|---|---|---|---|---|---|---|
| | F | % | F | % | F | % | |
| 3rd Year | 13 | 13 | 10 | 10 | 2 | 2 | |
| 4th Year | 13 | 13 | 5 | 5 | 2 | 2 | |
| **Place of residence** | | | | | | | |
| Hostel | 30 | 30 | 20 | 20 | 10 | 10 | $\chi^2$=4.50 d.f=1 p=0.034 S* |
| Day Scholar | 20 | 20 | 10 | 10 | 10 | 10 | |

***p<0.05, S – Significant N.S – Not Significant, p>0.05**

**Table 7: Association of posttest level selective attention among the nursing students with selected demographic variables. (N = 100)**

| Demographic Variables | Low Attention | | Moderate Attention | | High Attention | | Chi-Square & p-value |
|---|---|---|---|---|---|---|---|
| | F | % | F | % | F | % | |
| **Age** | | | | | | | $\chi^2$=8.40 d.f=2 p=0.015 S* |
| 18–20 | **5** | **5** | **20** | **20** | **30** | **30** | |
| 21–23 | **5** | **5** | **10** | **10** | **10** | **10** | |
| 24 and above | **5** | **5** | **5** | **5** | **10** | **10** | |
| **Gender** | | | | | | | $\chi^2$=1.75 d.f=1 p=0.186 N.S |
| **Male** | **5** | **5** | **10** | **10** | **10** | **10** | |
| **Female** | **10** | **10** | **25** | **25** | **40** | **40** | |
| **Year of Study** | | | | | | | $\chi^2$=7.20 d.f=3 p=0.066 N.S |
| 1st Year | **5** | **5** | **10** | **10** | **15** | **15** | |
| 2nd Year | **5** | **5** | **10** | **10** | **10** | **10** | |
| 3rd Year | **5** | **5** | **10** | **10** | **10** | **10** | |
| 4th Year | **0** | **0** | **5** | **5** | **15** | **15** | |
| **Place of residence** | | | | | | | $\chi^2$=5.35 d.f=1 p=0.021 S* |
| Hostel | **5** | **5** | **20** | **20** | **35** | **35** | |
| Day Scholar | **10** | **10** | **15** | **15** | **15** | **15** | |

***p<0.05, S – Significant N.S – Not Significant, p>0.05**

## DISCUSSION

The pre-test stress assessments revealed that 35% of the students exhibited high stress levels, 50% moderate stress, and 15% low stress. These findings are consistent with existing literature that highlights the prevalence of stress among nursing students, often attributed to the demands of clinical practice, academic workload, and performance pressures [16–18]. Following the intervention, the post-test results demonstrated a substantial shift: 55% of students reported low stress, while the proportion experiencing high stress decreased markedly to 10%. This reduction underscores the effectiveness of yoga-based interventions in alleviating perceived stress, aligning with previous studies that emphasize the therapeutic benefits of yoga and mindfulness practices in reducing psychological strain [19,20].

In addition to stress reduction, the study revealed a significant improvement in selective attention. Prior to the intervention, only 15% of students exhibited high attention levels, while post-test results showed a sharp increase to 50%. This enhancement in cognitive focus is likely associated with the observed reduction in stress levels, as statistical analysis indicated a significant negative correlation ($r = -0.62$, $p < 0.001$) between stress and attention. In other words, as stress diminished, cognitive performance improved. This finding reinforces the concept that psychological well-being is closely tied to academic performance, particularly in highly demanding programs such as nursing [21–23].

The statistical evidence further validated these outcomes. The mean stress score decreased significantly from $26.45 \pm 6.2$ to $18.10 \pm 5.4$ ($t = 10.85$, $p < 0.001$), while the mean selective attention score increased from $52.30 \pm 8.5$ to $67.80 \pm 7.9$ ($t = 12.15$, $p < 0.001$). These robust findings corroborate earlier research highlighting the positive effects of yoga and mindfulness interventions on stress relief, emotional stability, and cognitive enhancement in student populations [19,17,23].

Analysis of demographic variables revealed that age and place of residence had a significant association with post-test stress and attention outcomes, whereas gender and year of study showed no significant influence. This suggests that younger students or those living in supportive environments (such as hostels with peer groups) may experience greater benefits from stress-relief interventions. These results highlight the importance of considering contextual and environmental factors when planning stress management strategies for nursing students [24,25].
In summary, the present study confirms that Super Brain Yoga is an effective intervention for reducing stress and enhancing selective attention among nursing students. The strong negative correlation between stress reduction and improved cognitive performance aligns with existing literature and further strengthens the case for integrating yoga-based practices into nursing education programs. By promoting both psychological well-being and academic focus, such interventions hold promise as sustainable, non-pharmacological strategies to support student success in demanding educational environments [20,21].

## CONCLUSION

The study concluded that Super Brain Yoga is an effective intervention for reducing stress and improving selective attention among nursing students. The practice significantly lowered stress levels, enhanced cognitive focus, and demonstrated a strong negative correlation between stress and attention, suggesting its potential as a supportive strategy in nursing education.

## REFERENCES

1. Aslan H, Pekince H. Nursing students' views on the COVID-19 pandemic and their perceived stress levels. Perspect Psychiatr Care. 2020;57(2):695-701. https://doi.org/10.1111/ppc.12597
2. Cheung T, Wong S, Wong K, Law L, Ng K, Tong M, et al. Depression, anxiety and symptoms of stress among baccalaureate nursing students in Hong Kong: A cross-sectional study. Int J Environ Res Public Health. 2016;13(8):779. https://doi.org/10.3390/ijerph13080779
3. Hassan O, Algamar E, Fadlalmola H. Stress among undergraduate nursing students at governmental nursing faculties in Sudan. Int J Nurs Educ. 2023;15(2):48-52. https://doi.org/10.37506/ijone.v15i2.19252
4. Al-Gamal E, Alhosain A, Alsunaye K. Stress and coping strategies among Saudi nursing students during clinical education. Perspect Psychiatr Care. 2017;54(2):198-205. https://doi.org/10.1111/ppc.12223
5. Pulido-Martos M, Landa J, López-Zafra E. Sources of stress in nursing students: A systematic review of quantitative studies. Int Nurs Rev. 2011;59(1):15-25. https://doi.org/10.1111/j.1466-7657.2011.00939.x
6. Lavoie-Tremblay M, Sanzone L, Aubé T, Paquet M. Sources of stress and coping strategies among undergraduate nursing students across all years. Can J Nurs Res. 2021;54(3):261-71. https://doi.org/10.1177/08445621211028076
7. Kupcewicz E, Grochans E, Kadučáková H, Mikla M, Jóźwik M. Analysis of the relationship between stress intensity, coping strategy, and quality of life of nursing students in Poland, Spain, and Slovakia. Int J Environ Res Public Health. 2020;17(12):4536. https://doi.org/10.3390/ijerph17124536
8. Zheng Y, Jiao J, Hao W. Stress levels of nursing students: A systematic review and meta-analysis. Medicine. 2022;101(36):e30547. https://doi.org/10.1097/md.0000000000030547
9. Zaki M, Wahab S, Kasim M, Bakar N, Hassan N, Latif R, et al. Factors associated with stress among nursing students at Sungai Petani College of Nursing during final examination. Int J Acad Res Bus Soc Sci. 2022;12(12). https://doi.org/10.6007/ijarbss/v12-i12/16058
10. Aljohani W, Banakhar M, Sharif L, Alsaggaf F, Felemban O, Wright R. Sources of stress among Saudi Arabian nursing students: A cross-sectional study. Int J Environ Res Public Health. 2021;18(22):11958. https://doi.org/10.3390/ijerph182211958
11. Vo N, Chiu H, Chuang Y, Huang H. Prevalence of stress and anxiety among nursing students.

 

Nurse Educ. 2022;48(3):E90-E95. https://doi.org/10.1097/nne.0000000000001343

12. Almarwani A, Alenezi A, Almutairi M, Alhowaymel F, Alzahrani N, Alharbi H, et al. Bullying behaviors and stress (acute and perceived) among undergraduate nursing and midwifery students: A cross-sectional correlation study. 2024. https://doi.org/10.21203/rs.3.rs-4155906/v1
13. Amanvermez Y, Rahmadiana M, Karyotaki E, Wit L, Ebert D, Kessler R, et al. Stress management interventions for college students: A systematic review and meta-analysis. Clin Psychol Sci Pract. 2023;30(4):423-44. https://doi.org/10.1111/cpsp.12342
14. Gregg S, Twibell K. Try-it-on. J Holist Nurs. 2016;34(3):300-8. https://doi.org/10.1177/0898010115611788
15. Zhao Y, Zhou Q, Li J, Luan J, Wang B, Zhao Y, et al. Influence of psychological stress and coping styles in the professional identity of undergraduate nursing students after the outbreak of COVID-19: A cross-sectional study in China. Nurs Open. 2021;8(6):3527-37. https://doi.org/10.1002/nop2.902
16. Bal B, Demirci C, Kilicli G. The effects of laughter yoga on happiness and stress in nursing students going into clinical practice for the first time. J Holist Nurs. 2024;43(2):159-69. https://doi.org/10.1177/08980101241237928
17. Eraydin C, Alpar Ş. The effect of laughter therapy on nursing students' anxiety, satisfaction with life, and psychological well-being during the COVID-19 pandemic: Randomized controlled study. Adv Integr Med. 2022;9(3):173-9. https://doi.org/10.1016/j.aimed.2022.06.006
18. Han J, Kang K, Joung J. Enhancing happiness for nursing students through positive psychology activities: A mixed methods study. Int J Environ Res Public Health. 2020;17(24):9274. https://doi.org/10.3390/ijerph17249274
19. Ford J. Yoga for health and well-being in nursing students: An integrative review. J Nurs Educ. 2024;63(1):17-23. https://doi.org/10.3928/01484834-20231112-02
20. Alan N, Uğur Ö, Bedez G, Oran N. Investigation of the effect of laughter yoga on stress-coping behaviors in nursing students starting university. Perspect Psychiatr Care. 2024:1-8. https://doi.org/10.1155/2024/8253626
21. Öztürk F, Tezel A. Effect of laughter yoga on mental symptoms and salivary cortisol levels in first-year nursing students: A randomized controlled trial. Int J Nurs Pract. 2021;27(2):e12924. https://doi.org/10.1111/ijn.12924
22. Kinchen E, Loerzel V, Portoghese T. Yoga and perceived stress, self-compassion, and quality of life in undergraduate nursing students. J Educ Health Promot. 2020;9(1):292. https://doi.org/10.4103/jehp.jehp_463_20
23. Andrabi M, Mumba M, Mathews J, Rattan J, Scheiner A. The effectiveness of a yoga program on psychological and cardiovascular outcomes of undergraduate nursing students. Holist Nurs Pract. 2023;37(5):E69-E74. https://doi.org/10.1097/hnp.0000000000000599
24. Martin B. Supporting mental health and physical wellbeing among nursing students through yoga: A mixed-methods study. Nurs Rep. 2025;15(8):305. https://doi.org/10.3390/nursrep15080305
25. Ali Y, Kazmi S. Daugiaperspektyvinė interpretacinė ir fenomenologinė slaugytojų streso ir minčių kontrolės analizė Jungtinėje Karalystėje, Jungtinėse Amerikos Valstijose ir Šveicarijoje. Reabilitacijos Mokslai: Slauga, Kineziterapija, Ergoterapija. 2023;2(29):34-49. https://doi.org/10.33607/rmske.v2i29.1423

 