

“Enhancing Higher Education: Exploring the Profound Benefits of Yoga and Meditation in Student Life”

Abstract

In an increasingly competitive and stressful higher education landscape, this paper delves into the transformative potential of yoga and meditation as powerful tools for enhancing the overall well-being and academic success of students. Grounded in a growing body of research, this study investigates the profound benefits that the integration of yoga and meditation practices can bring to student life.

By exploring the physiological, psychological, and academic dimensions of incorporating these ancient practices into the modern educational framework, we unveil the potential to reduce stress, improve mental health, and enhance cognitive functioning among students. This research examines the effectiveness of yoga and meditation in cultivating mindfulness, emotional regulation, and a deeper sense of self-awareness, all of which are vital for academic performance and personal growth.

Through a comprehensive review of the literature and empirical evidence, this paper presents a compelling case for the adoption of yoga and meditation programs in higher education institutions. We discuss the practical implications, potential challenges, and strategies for successful implementation, considering the unique needs of diverse student populations.

In conclusion, this paper not only emphasizes the transformative potential of yoga and meditation in higher education but also underscores the critical role of universities and colleges in promoting holistic well-being and academic achievement. By exploring the profound benefits of these practices, we pave the way for a more balanced, resilient, and successful student body in the pursuit of higher education.

Our findings are based on a survey among the students of higher education of Lucknow district of Uttar Pradesh.

We simply find out the various benefits of yoga and meditation that students feel and observe in their life .and with the help of crosstabulation also find out the relationship of habit of yoga and meditation with the demographic variables.

Keywords: Higher Education, Yoga, Meditation, Student Well-being, Mindfulness, Student Mental Health, Psychological Benefits

Introduction:

Yoga and meditation are time-honoured practices that have seen a surge in global recognition due to their ability to promote both physical and mental well-being. This abstract highlight the diverse benefits of these practices, supported by an expanding base of scientific studies.

Rooted in the ancient traditions of India, yoga integrates physical postures, breath control, meditation, and mindfulness to create a holistic approach to health. Meditation encompasses a range of techniques designed to enhance focus, relaxation, and self-awareness.

Scientific research has consistently demonstrated the positive effects of yoga and meditation across multiple dimensions of health. Physically, these practices improve flexibility, strength, and balance. On a mental level, they help alleviate stress, anxiety, and depression while fostering cognitive improvements in memory, focus, and decision-making. Emotionally, they build resilience and encourage greater self-awareness.

In addition to these benefits, yoga and meditation have proven effective in managing chronic health conditions such as high blood pressure, cardiovascular issues, and persistent pain. They act as valuable adjuncts to conventional treatments, enhancing overall health outcomes.

Within academic and professional environments, yoga and meditation are recognized for their potential to boost concentration, creativity, and productivity. These practices equip individuals to better navigate the pressures of education and work by fostering a calm and balanced mindset.

In summary, yoga and meditation are highly adaptable practices offering extensive physical, mental, and emotional advantages. With substantial scientific backing, they are increasingly regarded as effective tools for improving quality of life. As their popularity continues to grow, further investigation is needed to uncover their underlying mechanisms and refine their applications to suit the varied needs of individuals in diverse settings.

Literature Review:

Female medical students suffer from a higher level of stress than male medical students. For the improvement of physical and mental health, meditation, pranayama, and yoga are some of the ancient techniques. Meditation is a technique of focusing the mind on a target like an object, activity, or any thought. Pranayama is an ancient yogic practice focusing on the breath. Yoga is a combination of physical, mental, and spiritual dimensions that has the potential to improve mental and physical health. meditation was found to increase a sense of well-being to the highest level compared to pranayama and yoga. The practice of any one among the three can reduce anxiety, depression, and anger, and promote a sense of well-being, Sunita et al. (2022).

yoga is effective in the prevention and management of musculoskeletal and psychological issues. In addition to an improvement in physical problems and in quality of sleep, both stress levels and burnout are consistently reduced in subjects who practice yoga techniques and mind-body meditation, Cocchiara et al. (2019).

yoga be used as a complementary therapy to medication so that doses can be lowered or eliminated. yoga can be further explored to analyse the benefits it has in reducing stress and improving focus and concentration in a remote learning and working environment, Gunaseelan et al. (2021).

Objective:

- To find out the benefits of Yoga and meditation for student of higher Education and its representation using NVivo software
- To find out association between different demographic variables and satisfaction level and habit of yoga and meditation.

Methodology:

A survey was conducted among students aged 18-35 years in Uttar Pradesh, India, using Google Forms with a snowball sampling technique (a non-probability sampling method). The questionnaire consisted of 11 questions, covering both sociodemographic variables and topics related to yoga and meditation.

Questionnaire Structure:

- **Sociodemographic Variables:**

Age, educational qualification, gender, district, and native area.

- **Yoga and Meditation:**

Four close-ended questions related to yoga and meditation.

One Likert scale question (1-5) assessing satisfaction levels.

One open-ended question exploring the perceived benefits of yoga and meditation.

Reliability of questionnaire

0.7–0.8: Acceptable reliability

Cronbach's Alpha
0.76

Survey and Analysis Details:

A total of 203 responses were collected, out of which 74 responses were selected for analysis.

We have used the following software-

SPSS (Version 27), Excel, NVivo software

The data analysis focused on frequency distribution and cross-tabulation.

Geographic Scope:

Responses were collected from multiple districts across Uttar Pradesh, including:

Agra, Allahabad, Ambedkar Nagar, Amethi, Ballia, Banda, Barabanki, Basti, Bijnor, Bulandshahr, Deoria, Ghazipur, Gonda, Gorakhpur, Hamirpur, Hardoi, Jhansi, Kanpur, Kushinagar, Lakhimpur-Kheri, Lucknow, Maharajganj, Mathura, Muzaffarnagar, Pratapgarh, Rae Bareilly, Shahjahanpur, Siddharth Nagar, Sitapur, Unnao, and Varanasi.

Maximum responses were collected from Lucknow district, indicating a higher level of participation or accessibility in this region.

Key Context:

The study focuses on understanding the adoption and impact of yoga and meditation practices among students in Uttar Pradesh, particularly during the Covid-19 pandemic, with the goal of

identifying behavioural patterns and benefits across different demographic and geographic segments.

Results:

Table 1

Age * start yoga and meditation					
			Start yoga and meditation		Total
			Before Covid-19	During Covid-19	
Age	18 - 24	Count	21	18	39
		Expected Count	23.7	15.3	39.0
		% within Age	53.8%	46.2%	100.0%
		% within When did you start yoga and meditation?	46.7%	62.1%	52.7%
		Adjusted Residual	-1.3	1.3	
	24 - 30	Count	21	9	30
		Expected Count	18.2	11.8	30.0
		% within Age	70.0%	30.0%	100.0%
		% within When did you start yoga and meditation?	46.7%	31.0%	40.5%
		Adjusted Residual	1.3	-1.3	
	30 - 35	Count	3	2	5
		Expected Count	3.0	2.0	5.0
		% within Age	60.0%	40.0%	100.0%
		% within When did you start yoga and meditation?	6.7%	6.9%	6.8%
		Adjusted Residual	0.0	0.0	
	Total	Count	45	29	74
		Expected Count	45.0	29.0	74.0
		% within Age	60.8%	39.2%	100.0%
		% within When did you start yoga and meditation?	100.0%	100.0%	100.0%

Age Group Insights

18-24 Age Group:

During Covid-19: 46% of respondents in this group started yoga and meditation during the pandemic. This shows a significant shift in behaviour, likely driven by increased stress or awareness during Covid-19.

This age group was most active in adopting yoga and meditation during the pandemic, with 62.1% of all individuals starting during this time belonging to this group.

30-35 Age Group:

During Covid-19: 40% of respondents in this group started yoga and meditation. While still noteworthy, this age group contributes much less overall, reflecting a smaller behavioural change during the pandemic compared to younger individuals.

Behavioural Changes During the Pandemic

Approximately 40% of all students experienced behavioural changes during the pandemic, as seen in the increased uptake of yoga and meditation practices during this time. These changes may be attributed to heightened mental health awareness and the adoption of healthier coping mechanisms during the pandemic.

Urban vs. Rural Insights

Urban Areas:

23% of students who started yoga and meditation during the pandemic were from urban areas. This shows a moderate interest in urban areas to adopt these practices during Covid-19.

Rural Areas:

21% of students who started yoga and meditation during the pandemic were from rural areas.

However, 78% of rural students had already started yoga and meditation before Covid-19, suggesting a higher baseline awareness or cultural inclination toward these practices in rural areas.

Overall Trends

Before Covid-19: A majority of students (60.8%) started yoga and meditation before the pandemic. Rural students dominated this group, comprising 78% of the total.

During Covid-19: 39.2% of students started yoga and meditation during the pandemic. The 18-24 age group was the largest contributor, representing 46% of respondents in this time frame.

The data highlights a noticeable shift in behavior during Covid-19, particularly among younger individuals (18-24) and students. Rural areas had a stronger pre-existing culture of yoga and meditation, while urban areas and younger individuals displayed increased interest during the pandemic, possibly due to mental health challenges or increased accessibility of online resources.

Table 2

Gender * start yoga and meditation					
			start yoga and meditation		Total
			Before Covid-19	During Covid-19	
Gender	Female	Count	28	18	46
		% within Gender	60.9%	39.1%	100.0%

		% within When did you start yoga and meditation?	62.2%	62.1%	62.2%
		% of Total	37.8%	24.3%	62.2%
	Male	Count	17	11	28
		% within Gender	60.7%	39.3%	100.0%
		% within When did you start yoga and meditation?	37.8%	37.9%	37.8%
		% of Total	23.0%	14.9%	37.8%
Total		Count	45	29	74
		% within Gender	60.8%	39.2%	100.0%
		% within When did you start yoga and meditation?	100.0%	100.0%	100.0%
		% of Total	60.8%	39.2%	100.0%

Gender-Specific Insights

Females:

Before Covid-19: 60.9% of females started yoga and meditation.

During Covid-19: 39.1% of females began these practices. This shows that 39% of females exhibited a change in behavior, likely influenced by the pandemic.

Males:

Before Covid-19: 60.7% of males started yoga and meditation.

During Covid-19: 39.3% of males adopted these practices. This indicates that 39% of males experienced a similar behavioral change during the pandemic.

Combined Insight:

The data shows that both males and females experienced similar behavioral changes during Covid-19, with approximately 39% of each group starting yoga and meditation practices as a response to the pandemic.

Table 3

Education qualification * start yoga and meditation					
		start yoga and meditation		Total	
		Before Covid-19	During Covid-19		
Education qualification	Higher than postgraduate	Count	5	3	8
		Expected Count	4.9	3.1	8.0
		% within Education qualification	62.5%	37.5%	100.0%

		% within When did you start yoga and meditation?	11.1%	10.3%	10.8%
		Adjusted Residual	0.1	-0.1	
	Intermediate	Count	2	5	7
		Expected Count	4.3	2.7	7.0
		% within Education qualification	28.6%	71.4%	100.0%
		% within When did you start yoga and meditation?	4.4%	17.2%	9.5%
		Adjusted Residual	-1.8	1.8	
	Other	Count	1	1	2
		Expected Count	1.2	0.8	2.0
		% within Education qualification	50.0%	50.0%	100.0%
		% within When did you start yoga and meditation?	2.2%	3.4%	2.7%
		Adjusted Residual	-0.3	0.3	
	Postgraduate	Count	20	13	33
		Expected Count	20.1	12.9	33.0
		% within Education qualification	60.6%	39.4%	100.0%
		% within When did you start yoga and meditation?	44.4%	44.8%	44.6%
		Adjusted Residual	0.0	0.0	
	Undergraduate	Count	17	7	24
		Expected Count	14.6	9.4	24.0
		% within Education qualification	70.8%	29.2%	100.0%
		% within When did you start yoga and meditation?	37.8%	24.1%	32.4%
		Adjusted Residual	1.2	-1.2	
Total		Count	45	29	74
		Expected Count	45.0	29.0	74.0
		% within Education qualification	60.8%	39.2%	100.0%
		% within When did you start yoga and meditation?	100.0%	100.0%	100.0%

Education Level Insights

Postgraduate Students:

Out of 33 postgraduate students, 39% started yoga and meditation during Covid-19. This indicates that postgraduate students were more likely to adopt these practices during the pandemic, possibly due to increased awareness or stress management needs.

Undergraduate Students:

Out of 24 undergraduate students, 29% started yoga and meditation during Covid-19. This lower percentage suggests that undergraduate students were less likely to adopt these practices compared to postgraduates.

Combined Insight:

The data indicates that postgraduate students were more inclined to begin yoga and meditation during Covid-19 than undergraduate students, with 39% of postgraduates adopting the practice compared to 29% of undergraduates. This could reflect differences in life stages, stress levels, or access to resources.

Table 4

1=Very dissatisfied, 2=Moderately dissatisfied, 3=Neither satisfied nor dissatisfied, 4=Moderately satisfied, 5=Very satisfied.

start yoga and meditation * satisfied								
			satisfied that yoga and meditation is helpful to your mental health well-being					Total
			1	2	3	4	5	
start yoga and meditation	Before Covid-19	Count	1	0	2	18	24	45
		Expected Count	1.2	0.6	2.4	15.8	24.9	45.0
		% within When did you start yoga and meditation?	2.2%	0.0%	4.4%	40.0%	53.3%	100.0%
		% within How satisfied you are that yoga and meditation is helpful to your mental health well-being?	50.0%	0.0%	50.0%	69.2%	58.5%	60.8%
		Adjusted Residual	-0.3	-1.3	-0.5	1.1	-0.4	
	During Covid-19	Count	1	1	2	8	17	29
		Expected Count	0.8	0.4	1.6	10.2	16.1	29.0
		% within When did you start yoga and meditation?	3.4%	3.4%	6.9%	27.6%	58.6%	100.0%

		% within How satisfied you are that yoga and meditation is helpful to your mental health well-being?	50.0%	100.0%	50.0%	30.8%	41.5%	39.2%
		Adjusted Residual	0.3	1.3	0.5	-1.1	0.4	
Total		Count	2	1	4	26	41	74
		Expected Count	2.0	1.0	4.0	26.0	41.0	74.0
		% within When did you start yoga and meditation?	2.7%	1.4%	5.4%	35.1%	55.4%	100.0%
		% within How satisfied you are that yoga and meditation is helpful to your mental health well-being?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Satisfaction Level Insights

Out of the very satisfied students, 58.5% started yoga and meditation before Covid-19, while 41.5% began these practices during the pandemic.

This indicates that a significant portion of very satisfied students (41.5%) adopted yoga and meditation during Covid-19, reflecting a possible behavioral shift toward maintaining or enhancing well-being during challenging times.

Combined Insight:

The data shows that while most very satisfied students (58.5%) had already incorporated yoga and meditation into their lives before Covid-19, a substantial proportion (41.5%) started during the pandemic, highlighting the impact of Covid-19 on increasing awareness and adoption of well-being practices.

Word cloud

Benefits of Yoga and Meditation

Fig. 1



Table 5- The benefits of each asana

Characteristic	Asana/Posture	Benefits
Concentration	The Eagle	Balances posture, develops concentration and focus, nurtures determination and inner conviction, improves attention span, calms the mind, improves the eye muscles
	The Frog	Gives a quick boost of energy, helps “let off some steam”
	The Child’s Pose	Settles the learner when feeling hyperactive or overtired, restores energy, calms the mind, and can help induce sleep
	Tree Pose	Standing poses where concentration is needed to stand completely
	The Scorpion	Aids concentration and balance, boosts confidence
Aggression	The Fish	Improves posture and chases away negative feelings
	The Crocodile	Strengthens the back and gives energy, helps to release anger and aggression
	The Blue Whale	Provides a little “lift”, calms one down
	The Pigeon	Helps to calm an agitated mind
Anxiety	The Tortoise	Helps one imagine being protected by a strong shell, helps one feel safe and quiet
	The Dragonfly	Helps to develop patience and emotional stability, induces feelings of emotional calm and quiet before going to bed
	The Corpse Pose	A deep relaxation exercise that can keep the learner relaxed and centred
Self-Esteem	The Camel	Helps to correct poor or lazy posture, helps all learners to stand tall and feel proud of who they are
	The lion	Energizes the body and mind, builds self-confidence and improve communication skills, helps with anxiety
	The Cobra	Keeps the spine supple and healthy, tones the nerves to improve communication between the brain and body, helps the learner feel strong and powerful

Source- Gunaseelan, L., Vanama, M. S., Abdi, F., Qureshi, A., Siddiqua, A., & Hamid, M. A. (2021). Table2, Yoga for the Management of Attention-Deficit/Hyperactivity Disorder

Conclusion:

The analysis provides valuable insights into behavioral changes related to yoga and meditation during the Covid-19 pandemic, highlighting key trends across age groups, genders, geographic regions, education levels, and satisfaction levels:

- **Age-Related Behavioral Shifts:**

Younger individuals, particularly those aged 18-24, demonstrated the most significant behavioral change during the pandemic, with 46% adopting yoga and meditation practices.

In contrast, the 30-35 age group showed less change, with 40% beginning these practices during Covid-19.

- **Overall Pandemic-Induced Change:**

Approximately 40% of students experienced behavioral changes during Covid-19, reflected in their increased adoption of yoga and meditation practices. This emphasizes the role of the pandemic in driving mental health awareness and the need for stress management.

- **Urban vs. Rural Disparities:**

Rural areas showed a stronger pre-existing culture of yoga and meditation, with 78% of rural students starting before the pandemic.

Urban areas demonstrated moderate adoption during the pandemic, contributing 23% of new practitioners during this time. This indicates the pandemic's influence was more pronounced in urban regions compared to rural ones.

- **Gender Parity in Behavioral Changes:**

Both males and females exhibited similar behavioral changes, with 39% of each group adopting yoga and meditation practices during Covid-19. This reflects a consistent impact of the pandemic across genders.

- **Educational Level Influence:**

Postgraduate students were more likely to adopt yoga and meditation during the pandemic (39%) compared to undergraduate students (29%). This could be due to higher stress levels, life stage differences, or greater access to resources among postgraduates.

- **Impact on Very Satisfied Students:**

- A significant proportion (41.5%) of very satisfied students started yoga and meditation during the pandemic, suggesting that even those with a high level of satisfaction sought additional ways to maintain or enhance well-being during challenging times.

265 • **Key Takeaways:**

266 The pandemic served as a catalyst for behavioral changes, with 40% of students and
267 39% of both males and females adopting yoga and meditation during this time.

268 Younger individuals age (18-24) and postgraduate students were the most influenced
269 groups, likely due to increased mental health awareness and stress.

270 Urban regions and individuals with no prior engagement in yoga and meditation
271 benefited the most from the pandemic's influence, highlighting the potential for
272 targeted wellness interventions in such demographics.

273 The results underscore the importance of continued support for mental and physical
274 well-being, leveraging the momentum gained during the pandemic to promote long-
275 term healthy behaviors.

276 Regular habit of yoga and meditation provides more satisfaction level between them.
277 Also, we have observed different benefits of yoga and meditation, they are good mind
278 health, feels calm, Concentration, fit life, peace relax power. There are many asana /
279 postures which are very helpful to maintain our health and well-being.

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282 **Reference:**

283
284 Alexander, G. K., Rollins, K., Walker, D., Wong, L., & Pennings, J. (2015). Yoga for
285 self-care and burnout prevention among nurses. *Workplace Health & Safety*, 63, 462–
286 470. <https://doi.org/10.1177/2165079915596102>

287 Bond, A. R., Mason, H. F., Lemaster, C. M., Shaw, S. E., Mullin, C. S., Hplick, E. A.,
288 & Saper, R. B. (2013). Embodied health: The effects of a mind-body course for
289 medical students. *Medical Education Online*, 18, 1–8.
290 <https://doi.org/10.3402/meo.v18i0.20699>

291 Cocchiara, R., Peruzzo, M., Mannocci, A., Ottolenghi, L., Villari, P., Polimeni, A.,
292 Guerra, F., et al. (2019). The use of yoga to manage stress and burnout in healthcare
293 workers: A systematic review. *Journal of Clinical Medicine*, 8(3), 284.
294 <https://doi.org/10.3390/jcm8030284>

295 Gunaseelan, L., Vanama, M. S., Abdi, F., Qureshi, A., Siddiqua, A., & Hamid, M. A.
296 (2021). Yoga for the management of attention-deficit/hyperactivity disorder. *Cureus*,
297 13(12), e20466. <https://doi.org/10.7759/cureus.20466>

298 Perez, G. K., Haime, V., Jackson, V., Chittenden, E., Mehta, D. H., & Park, E. R.
299 (2015). Promoting resiliency among palliative care clinicians: Stressors, coping
300 strategies, and training needs. *Journal of Palliative Medicine*, 18, 332–337.
301 <https://doi.org/10.1089/jpm.2014.0221>

302 Satpathy, P., Siddiqui, N., Parida, D., & Sutar, R. (2021). Prevalence of stress,
303 stressors, and coping strategies among medical undergraduate students in a medical
304 college of Mumbai. *Journal of Education and Health Promotion*, 10, 318. Retrieved
305 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8459850/>

Shirey, M. R. (2007). An evidence-based solution for minimizing stress and anger in nursing students. *Journal of Nursing Education*, 46, 568–571.

Sunita, L. M., Mondal, H., Kumar, M., Kapoor, R., & Gandhi, A. (2022). Effect of practicing meditation, pranayama, and yoga on the mental health of female undergraduate medical students: An interventional study. *Cureus*, 14(9), e28915. <https://doi.org/10.7759/cureus.28915>

Wiederhold, B. K., Cipresso, P., Pizzioli, D., Wiederhold, M., & Riva, G. (2018). Intervention for physician burnout: A systematic review. *Open Medicine*, 13, 253–263. <https://doi.org/10.1515/med-2018-0039>

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