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Effect of the yogic program on mental stress of university students

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Abstract

Objective: The purpose of this study was to check how a six-week yoga intervention affected college students' stress perception.

Methods: College students took part in a six-week trial programme that included a 45-minute yoga lesson taught by LNIPE students four days a week. Students completed a pre- and post-intervention questionnaire to assess stress levels. The study's design was based on before and post- tests, and data was gathered using SS-LVNS.

Results: The research included twenty students ranging in age from twenty to thirty years. Thirteen of the participants were female, while six were male. 20 BPED students from LNIPE University, Gwalior, were chosen randomly as subjects for the study. Students' stress levels dropped dramatically. There were substantial changes in data from pre- to post-intervention on SS-LVNS questionnaire, with no students reporting "high" stress on the post-intervention questionnaire.

Conclusion: After completing a six-week yoga programme, students reported lower stress levels. According to the findings, as little as four times a week of yoga practise may lower stress in college students. Administrators should explore including yoga as nonpharmacologic stress reduction approaches and also into the curriculum to encourage student self-care.

Keywords: Yoga and students; stress; student; yoga

Introduction

Stress

The word "stress" is often used in a number of social, intellectual, and professional contexts. To perform at their very best, everyone requires a certain level of pressure. However, Stress, on the other hand, occurs when a person's capacity to handle the pressure is exceeded. Additionally, stress can create a vicious cycle of anxiety and compromise coping skills even in routine circumstances

The country gains significantly from investments that promote the health and well-being of young people (Patton *et al.*, 2016) ^[7]. Specifically, Stress is regarded as one of the most significant indicators of mental health and, if left untreated, can negatively affect people. (Teh *et al.*, 2015) ^[17]. Students today experience greater stress than ever due to peer, teacher, and family pressure, as well as the intense competition in the educational environment (Sreeramareddy *et al.*, 2007) ^[13]. Stress, anxiety, and depression can induce psychological distress in college students and have an adverse effect on their academic performance (Tosevski *et al.*, 2010) ^[19] resulting in having detrimental effects on one's intellectual, emotional, and physical well-being.

Students deal with a variety of pressures, including academic overload, continual peer pressure, the need to succeed, financial burden, and anxieties about the future (Vaez *et al.*, 2006) ^[21]. Additionally, young teenager's substance use and mental health symptoms are linked to typical stressful life events (Low *et al.*, 2012) ^[5]. Furthermore, Substance abuse is linked to acute health issues like injuries, interpersonal aggression, and academic difficulties (Hingson *et al.*, 2009) ^[4], depression, and mental disorders (Squeglia *et al.*, 2012) ^[12].

Those who exercise experience less psychological distress (Stults-Kolehmainen & Sinha, 2014) ^[14]. According to a World Health Organization (WHO) report from 2020, increasing physical activity can enhance both mental and physical health (Shi *et al.*, 2021) ^[21].

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Students in college typically spend the majority of their time engaging in sedentary activities like playing video games, watching movies, and shopping online (Rouse & Biddle, 2010) [8]. Students in colleges were found to spend a lot of time sitting down and doing nothing. According to the global study, between 21.9 and 80.6% of college students were physically inactive.

Regular physical activity is one of the key components to sustaining good health in modern society. The prevalence of physical inactivity among college students need quick intervention due to the fact that sedentary lifestyles cause numerous health-related difficulties (Cruz *et al.*, 2013) [1].

Yoga is one form of physical activity that is important for promoting good health. Yoga is primarily an art and science of holistic living; it is a powerful way to prevent and treat disease as well as to improve health (Gopal *et al.*, 2011) [3]. Yoga offers beneficial psychophysiological effects that lower stress levels in college students (Tripathi *et al.*, 2018) [20]. Numerous studies demonstrate how yoga can help students feel better and reduce stress (Saoji, 2016) [9], (Waechter *et al.*, 2021) [22]. Students' cognitive skills are reported to be improved by yoga practice (Saoji *et al.*, 2018) [10]. Even sometimes yoga is thought to be a superior intervention than fitness activities for aiding college students in managing their stress. (Tong *et al.*, 2021) [18].

Despite of the mounting evidence that yoga has positive impacts on those who are stressed, only a few researches have particularly looked at how yoga affects stress in college students. This is a significant gap in the literature since college students are a special population who may experience

particular difficulties in living a healthy and stress-free life. So, the purpose of this study is to look into how a yoga program affects college students' stress levels. Therefore, the aim of this study is to investigate the effect of a yogic program on the stress of college students. The study will evaluate how an eight-week yoga intervention affected college students' stress levels. The study will also look into yoga's possible psychological advantages, such better mood and quality of life.

Methodology

20 students of BPED Student of LNIPE, Gwalior were randomly selected as subject for the study. The age of subject was 20-30 years. The requirement of the study was explained to all the subjects. All the subjects were readily agreed to undergo the testing and training programs. The subjects were thoroughly acquainted with the testing procedure as well as exercise schedule so that there was no ambiguity regarding the effort that was required on their part and hardships they might endure. A 6 weeks yoga intervention was given in which the subjects participated in yoga program of four days per week for 45 minutes along with their regular education program. The Independent variable was Yoga and the Dependent variable was Stress in the study. The design of the study was based on pre- test and post- test and the data was collected using SS-LVNS. Statistical technique to determine the significant differences in mean in stress of BPED students, paired t-test was used. The level of significance was set at 0.05. The software which is used for the data calculation was SPSS 20.

Table 1: Training program
1-2 week

Asanas	Timing (min)
Starting prayer	1
Warm up/ loosening exercise	5-10
Standing Asanas	9-12
Vrikshasana	
Warrior pose 2	
Extended triangle pose	
Garudasana	
Sitting Asanas	12-15
Vakrasana	
Ushtrasana	
Shashankasana	
Gomukhasana	
Janusirshasan	
Prone Asanas	2-3
Bhujangasana	
Lying Asanas	2-3
Pawanmuktasana	
Shavasana	

3-4 week

Asanas	Timing (min)
Starting prayer	1
Warm up/ Surya namaskar	10-15
Standing asanas	9-12
Tadasana	
Trikonasana	
Parivartkonasana	
Padhastasana	
Sitting Asanas	9-12
Janusirshasan	
Purvottanasana	
Ushtrasana	

Shashankasana	
Prone Asanas	2-4
Bhujangasana	
Shalabhasan	
Lying Asanas	2-4
Halasan	
Markatasana	
Shavasana	

5-6 week

Asanas	Timing (min)
Starting prayer	1
Warm up/ Surya namaskar	10-15
Standing Asanas	6-8
Vrikshasan	
Ardhachakrasan	
Padhastasana	
Sitting Asanas	7-9
Purvottanasana	
Paschimottanasan	
Vakrasan	
Shashankasana	
Prone Asanas	7-9
Sarpasana	
Shalabhasan	
Navasana	
Lying Asanas	10-12
Sarvangasan	
Halasan	
Setubandhasana	
Markatasana	
Happy baby pose	
Shavasana	

Treatment	Mean	SD	“t” value	Significance level
Pre- test	12.65	5.92	2.768	.01
Post- test	9.10	4.21		

Result and Discussion

The statistical data of Stress was collected from 20 male BPED students at Lakshmibai National institute of physical education, Gwalior. The statistical analysis of the data was obtained to check the effect of the Yogic program on BPED students. The data was examined by applying paired t-test. The level of significance was 0.05.

Table: showing the Stress of subjects

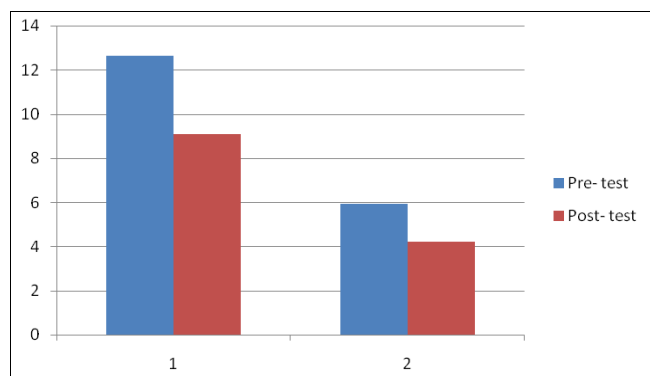


Fig 1: Means of Pre- test and Post- Test for Yoga Training

The result of the table shows that mental stress pre mean value 12.65 and post mean value 9.10 of BPED student and the ‘t’(19) value is 2.76 There is a significance improvement at p .012 level in the stress of BPED student. There is a significant improvement has been observed at the mental

stress level of the BPED students in this study. In this manner, various researches show that the practice of Yoga can be successfully administered to manage various psychological disorders. As the previous studies shows that practice of Yoga, Meditation and Relaxation significantly lowers all the psychological problems and improves mental health. The present study evaluated the effect of 6 weeks selected Yoga Training on Stress on BPED Student. The findings of this study demonstrate that six-week yoga training have significant effect on Stress.

References

1. Cruz SY, Fabián C, Pagán I, Ríos JL, González AM, Betancourt J, *et al.* Physical activity and its associations with sociodemographic characteristics, dietary patterns, and perceived academic stress in students attending college in Puerto Rico. *Puerto Rico Health Sciences Journal.* 2013;32(1):44-50.
2. Dahlin M, Joneborg N, Runeson B. Stress and depression among medical students: A cross-sectional study. *Medical Education.* 2005;39(6):594-604. <https://doi.org/10.1111/j.1365-2929.2005.02176.x>
3. Gopal A, Mondal S, Gandhi A, Arora S, Bhattacharjee J. Effect of integrated yoga practices on immune responses in examination stress-A preliminary study. *International Journal of Yoga.* 2011;4(1):26-32. <https://doi.org/10.4103/0973-6131.78178>
4. Hingson RW, Zha W, Weitzman ER. Magnitude of and

- trends in alcohol-related mortality and morbidity among U.S. college students ages 18-24, 1998-2005. *Journal of Studies on Alcohol and Drugs. Supplement.* 2009;16:12-20. <https://doi.org/10.15288/jsads.2009.s16.12>
5. Low NC, Dugas E, O'Loughlin E, Rodriguez D, Contreras G, Chaiton M, *et al.* Common stressful life events and difficulties are associated with mental health symptoms and substance use in young adolescents. *BMC Psychiatry.* 2012;12:116. <https://doi.org/10.1186/1471-244X-12-116>
 6. Oyeyemi AL, Muhammed S, Oyeyemi AY, Adegoke BOA. Patterns of objectively assessed physical activity and sedentary time: Are Nigerian health professional students complying with public health guidelines? *PLoS One.* 2017;12(12):e0190124. <https://doi.org/10.1371/journal.pone.0190124>
 7. Patton GC, Sawyer SM, Santelli JS, Ross DA, Afifi R, Allen NB, *et al.* Our future: A Lancet commission on adolescent health and wellbeing. *Lancet (London, England).* 2016;387(10036):2423-2478. [https://doi.org/10.1016/S0140-6736\(16\)00579-1](https://doi.org/10.1016/S0140-6736(16)00579-1)
 8. Rouse PC, Biddle SJH. An ecological momentary assessment of the physical activity and sedentary behaviour patterns of university students. *Health Education Journal.* 2010;69(1):116-125. <https://doi.org/10.1177/0017896910363145>
 9. Saoji AA. Yoga: A Strategy to Cope up Stress and Enhance Wellbeing among Medical Students. *North American Journal of Medical Sciences.* 2016;8(4):200-202. <https://doi.org/10.4103/1947-2714.179962>
 10. Saoji AA, Raghavendra B, Rajesh S, Manjunath N. Immediate Effects of Yoga Breathing with Intermittent Breath Holding on Response Inhibition among Healthy Volunteers. *International Journal of Yoga.* 2018;11(2):99-104. https://doi.org/10.4103/ijoy.IJOY_65_16
 11. Shi M, Zhai X, Li S, Shi Y, Fan X. The Relationship between Physical Activity, Mobile Phone Addiction, and Irrational Procrastination in Chinese College Students. *International Journal of Environmental Research and Public Health.* 2021;18(10). <https://doi.org/10.3390/ijerph18105325>
 12. Squeglia LM, Pulido C, Wetherill RR, Jacobus J, Brown GG, Tapert SF. Brain response to working memory over three years of adolescence: Influence of initiating heavy drinking. *Journal of Studies on Alcohol and Drugs.* 2012;73(5):749-760. <https://doi.org/10.15288/jsad.2012.73.749>
 13. Sreeramareddy CT, Shankar PR, Binu VS, Mukhopadhyay C, Ray B, Menezes RG. Psychological morbidity, sources of stress and coping strategies among undergraduate medical students of Nepal. *BMC Medical Education.* 2007;7:26. <https://doi.org/10.1186/1472-6920-7-26>
 14. Stults-Kolehmainen MA, Sinha R. The Effects of Stress on Physical Activity and Exercise. *Sports Medicine (Auckland, N.Z.).* 2014;44(1):81-121. <https://doi.org/10.1007/s40279-013-0090-5>
 15. Supa Pengpid, Karl Peltzer, Hemant Kumar Kasseean. Physical inactivity and associated factors among university students in 23 low-, middle- and high-income countries—PubMed; c2015. <https://pubmed.ncbi.nlm.nih.gov/25926342/>
 16. Tavolacci MP, Ladner J, Grigioni S, Richard L, Villet H, Dechelotte P. Prevalence and association of perceived stress, substance use and behavioral addictions: A cross-sectional study among university students in France, 2009-2011. *BMC Public Health.* 2013;13:724. <https://doi.org/10.1186/1471-2458-13-724>
 17. Teh CK, Ngo CW, Zulkifli RA, Binti, Vellasamy R, Suresh K. Depression, Anxiety and Stress among Undergraduate Students: A Cross Sectional Study. *Open Journal of Epidemiology* 05(04), Article 04; c2015. <https://doi.org/10.4236/ojepi.2015.54030>
 18. Tong J, Qi X, He Z, Chen S, Pedersen SJ, Cooley PD, *et al.* The immediate and durable effects of yoga and physical fitness exercises on stress. *Journal of American College Health: J of ACH.* 2021;69(6):675-683. <https://doi.org/10.1080/07448481.2019.1705840>
 19. Tosevski DL, Milovancevic MP, Gajic SD. Personality and psychopathology of university students. *Current Opinion in Psychiatry.* 2010;23(1):48-52. <https://doi.org/10.1097/YCO.0b013e328333d625>
 20. Tripathi MN, Kumari S, Ganpat TS. Psychophysiological effects of yoga on stress in college students. *Journal of Education and Health Promotion.* 2018;7:43. https://doi.org/10.4103/jehp.jehp_74_17
 21. Vaez M, Ponce de Leon A, Laflamme L. Health-related determinants of perceived quality of life: A comparison between first-year university students and their working peers. *Work (Reading, Mass.).* 2006;26(2):167-177.
 22. Waechter R, Stahl G, Rabie S, Colak B, Johnson-Rais D, Landon B, *et al.* Mitigating medical student stress and anxiety: Should schools mandate participation in wellness intervention programs? *Medical Teacher.* 2021;43(8):945-955. <https://doi.org/10.1080/0142159X.2021.1902966>
 23. Bhattacharya PB. Surya Namaskara. Sri Aurobindo Ashram Trust, Pondicherry; c2007. p. 9.
 24. Calderon R Jr, Schneider RH, Alexander CN, Myers HF, Nidich SI, Haney C. Stress, stress reduction and hypercholesterolemia in African Americans: A review. *Ethn Dis.* 1999;9:451-462.
 25. Gharote ML. Guidelines for Yogic Practices. Lonavla Yoga Institute, Lonavla; c1982. p. 106.
 26. Gharote ML, Ganguly SK. Teaching Methods for Yogic Practices. Yoga Mimamsa Mudranalaya Lonavla; c2006. p. 120.
 27. Saraswati, Swami S. Asana Pranayama Mudra Bandha. Yoga Publication Trust; c2002. p. 159-172.
 28. Sharma, Acharya PanditSriram. Pragma yoga for happy and healthy life. (Sri Vedmata Gayatri Trust, Shantikunj, Hardwar, India); c2007. p. 24-30.