EFFECTS OF YOGA ON STRESS FACTORS AMONG COLLEGE STUDENTS

P.SUDHAN[1], S. JAHIRA PARVEEN[2]

Research Scholar, Department of Management, SRMIST, India

Asst. Professor, Department of Management, SRMIST,India

Abstract:

Background : The purpose of this study was to conduct a descriptive analysis of recognised sources of stress among collegestudents. The sources of stress and the main source of stress among students at SRM IST College in Kattankullathur, Tamilnadu, were researched.

Objectivities To determine how stress sources are received by College students. To determine what stresses College students the most. To determine the way to deal with stress through yoga.

Materials and Methods: The students were given a Perceived Stress Scale (PSS) questionnaire. The 10 objects were rated on a 5-point scale, with 0 being the least stressful and 4 being the most stressful. The study included 30 students who were chosen at random.

Result & Discussion

The results of this study show that students who participated in the yoga module performed better in their overall academics as well as their individual subjects than students who did not participate in the yoga module

Summary and Conclusions

According to our data, the yoga practise group benefited more than the control group. The experimental group was significantly less stressed. On the other hand, the control group showed a modest increase but no improvement. This notion is supported by our data. Improved mindfulness, which includes specific components for processing experience, being less self-critical and empathetic to themselves, and not over-identifying with stress, was connected to greater impact in the Yoga practise group.

Keywords: Stress Management, Yoga , PSS Scale, Emotional Distress

I. Introduction

Academic stress is a mental suffering caused by an anticipated frustration connected with academic failure, apprehension of such failure, or even consciousness of such failure. Situation at the moment

Many students have dealt with varying degrees of anxiety. Stress is generally recognised as a lifestyle dilemma that affects people of all ages and stages of development[1] . According to figures given by the National Crime Records Bureau, one student commits suicide every hour. 1.8 percent of students committed suicide as a result of failing exams, according to the bureau, with an 80 percent increase in suicide rates over a one-year period[2] .Three Science and Technology students committed suicide themselves on campus for personal reasons during the Chennai 2019. Anupriya, a 23-year-old biomedical engineering student, jumped from the 10th floor of her university hostel in the incident on May 26. However, a police officer reported that she expressed her discontent with her parents' prohibitions on her committing suicide due to tremendous stress. The next day, another first-year student from Jharkhand, Aneesh Chowdary (19), who was staying in the college dormitory, allegedly leapt from the fifth floor. The most recent occurrence occurred on July 15, when S Raghavan, a final-year IT student, allegedly jumped from the second-floor balcony. It is believed that the victim had many exam arrears and was stressed out[3]. Arjun Bharadwaj, a 24-year- management student, committed himself by jumping from a 19th-floor hotel room in Mumbai on April 3, 2017. According to media reports, he was sad as a result of his exam failures and frequently discussed suicide on social media[4]. COVID-19 causes stress in students for a variety of reasons, including a fear of poor performance and a delay in finishing their studies. Many recent studies on university students'

mental health during COVID-19, such as this one, indicated that COVID-19 had a negative influence on university students' mental health and welfare. According to the findings of this study, COVID-19-induced online learning had a considerable impact on university learning. 96.9% of participants rated their mental health as moderate to high in terms of perceived stress[5,to 9].

1.2 **Impact of stress level**:

India has the highest rate of student suicides in the world. Between 2011 and 2015, 40000 students committed suicide. The number of student suicides in 2015 was 8,934. 39,775 students committed suicide in the five years preceding up to 2015. The number of attempted suicides is likely to be far higher, with many going undetected[10] .

1.3 Signs and Symptoms of stress among students

In addition to our physiological response, stress impacts our emotions, behaviour, and cognition. Everyone is pressured in different ways and by different things. Depending on the individual and the source of stress, the number of symptoms in each category may vary.

2.Literature Review

Osenweugwor Ngozi Aihie (2019) investigated undergraduate students' perceptions of academic stress in a Nigeria university. 427 undergraduate students from three faculties were selected using simple random sampling. Students in their last year of study also reported higher levels of academic stress than students in their first and second years of study. Undergraduate students' perceptions of academic stress are influenced by a variety of factors. The Perceived Academic Stress Scale (PASS) was developed for undergraduate students. The implications for student counselling were debated.Shohani, Masoumeh (2021) Yoga's Impact on Women's Stress, Anxiety, and Depression There were 52 women in the study. A quasi-experimental approach with a pre-post test is used in this investigation. Data was collected using the DASS21 (Depression Anxiety Stress Scale 21) questionnaire. The goal of this study was to evaluate how yoga affected women in Ilam, Iran, in terms of stress, anxiety, and depression. Yoga has been demonstrated to be effective in reducing stress, anxiety, and depression, as well as being a viable alternative therapy for lowering medical costs by reducing pharmaceutical use.Reddy k.jayasankara(2018) Academic Stress among University Students

and its Causes There were 336 people in attendance. Participants were screened from four streams: commerce, management, humanities, and basic sciences, using a quantitative research technique. This study was also conducted to examine if there were any gender or stream-related differences in academic stress reported by participants. There were significant differences in stress levels among the streams. As a result, illness management at all levels, including personal, societal, and institutional Academic Stress and its Sources among University Students stress, as measured by the Academic Stress Scale, becomes crucial. Participants were assessed using a quantitative research technique for personal inadequacy, fear of failure, interpersonal difficulties with teachers, teacher-pupil interactions, and other factors. N.Anitha (2021) Predicting The Cognitive Effects Of Yoga And Meditation On Students' Psycho-Physiological Health A total of 100 healthy students aged 17 to 23 are considered. They are taught yoga for 12 weeks and their attention, focus, and memory are assessed before and after the intervention. The psychological characteristics evaluated were anxiety, stress, and depression. Yoga and meditation can help patients overcome other disease-related co-morbidities and enhance their quality of life when utilised to manage and relieve both acute and chronic stress. Students between the ages of 17 and 23 are regarded to be healthy. Students are randomly allocated to one of three experimental groups, each of which promotes physical, mental, and spiritual well-being. This method assists in natural modification[11-17].

III. Method and Materials

This chapter covers the following topics: subject selection, variables, experimental design, data collecting, data reliability, training programme, test administration, and statistical approaches for data analysis. How to compare the psychological characteristics of 18–30-year-old Academic students from various groups has been explained. Methods used to investigate the effects of various yoga practises on students' psychological characteristics. Instead of essential theoretical reviews, concentrate on practical processes. The experiment is conducted in a controlled setting with a pre- and post-test experimental design. The students are split into two groups, one of which will receive yoga practice and the other would not receive yoga practice. The control group is the second of the groups. Before and after a three-month interval, data was obtained from respondents.According to the schedule, experimental group-1 received the following yoga module [18-21].

Table-1 Yoga Module

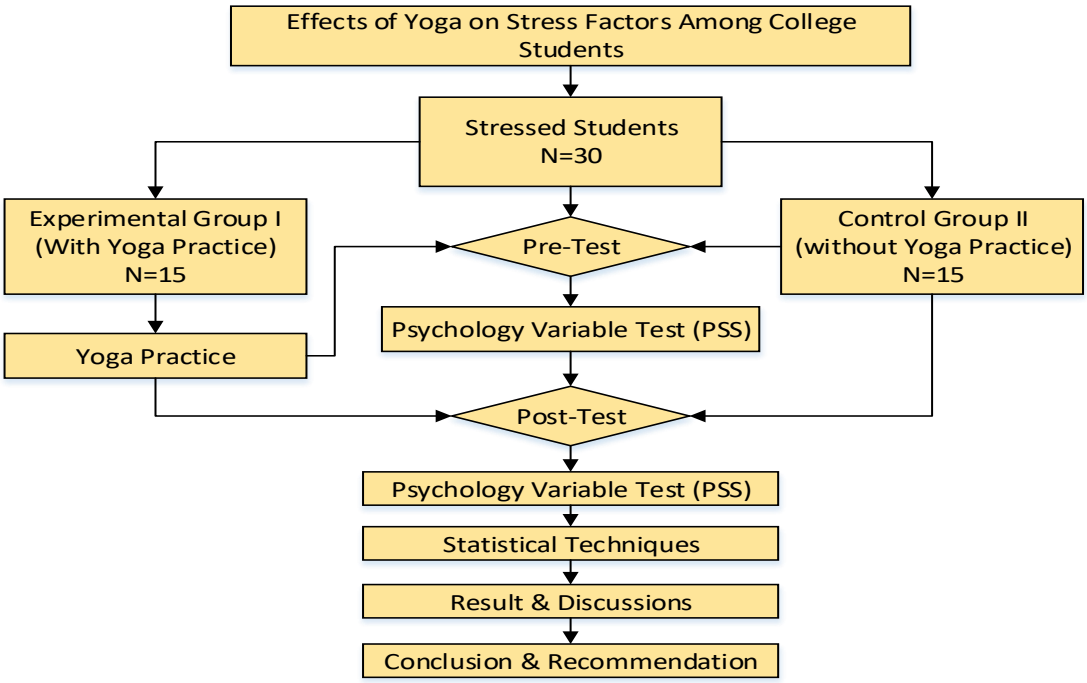
Step 1: suryanamaskara (20 min/10 cycles)	**Step 2: shavasana (5 min)**	**Step 3: yoga nidra (35 min/1 cycle)**
(Postures and breathing exercise) ▪ 12 Asanas steps practice	(relaxation)	(Meditation and relaxation)

III.1. Perceived Stress Scale (PSS-10)

The PSS is a ten-item questionnaire designed to measure self-reported stress levels. Each item is assessed on a scale of 0 (never) to 4 (Almost always), with a total possible score of 0 to 40. A higher score indicates a higher level of felt stress. Each item is graded on a 5-point scale, with zero being the Never and five almost always (4). Positively worded items are reverse-scored, and the ratings are added together, with greater scores indicating higher levels of perceived stress. PSS-10 scores are calculated by reversing the scores on the four positive items (e.g., 0=4, 1=3, 2=2, etc.) and then adding the results over all ten items. The positively expressed

items are 4, 5, 7, and 8 Individual PSS scores can vary from 0 to 40, with higher scores indicating more stress ('low stress = 0–13, moderate stress = 14–26, and high stress = 27–40').

III.2 Flow chart of Methodology



The random sample strategy was used in this investigation. Thirty (30) students from the SRM Institute of Science and Technology in Kattankulathurwere chosen at random. These students participated in a 12-week yoga training programme under the direction of the yoga instructor. However, Thirty (30) individuals are chosen from over 60 students studying at college . The participants were between the ages of 18 and 30. These 30 students are divided into two groups, each with fifteen (15) members.

IV. Result & Discussion

The results of this study show that students who participated in the yoga module performed better in their overall academics as well as their individual subjects than students who did not participate in the yoga module. The findings are consistent with previous research, which revealed that long-term meditation causes significant changes in perception, attention, and cognition. Another study found that yoga methods can aid with anxiety control and focus improvement. yoga according to other studies, boosts scholastic achievement and problem-solving skills.

ANOVA

Table .2 Pre-Test and post Test for PSS with YOGA Practice

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	206.767	8	25.846	18.989	.001
Within Groups	8.167	6	1.361		
Total	214.933	14			

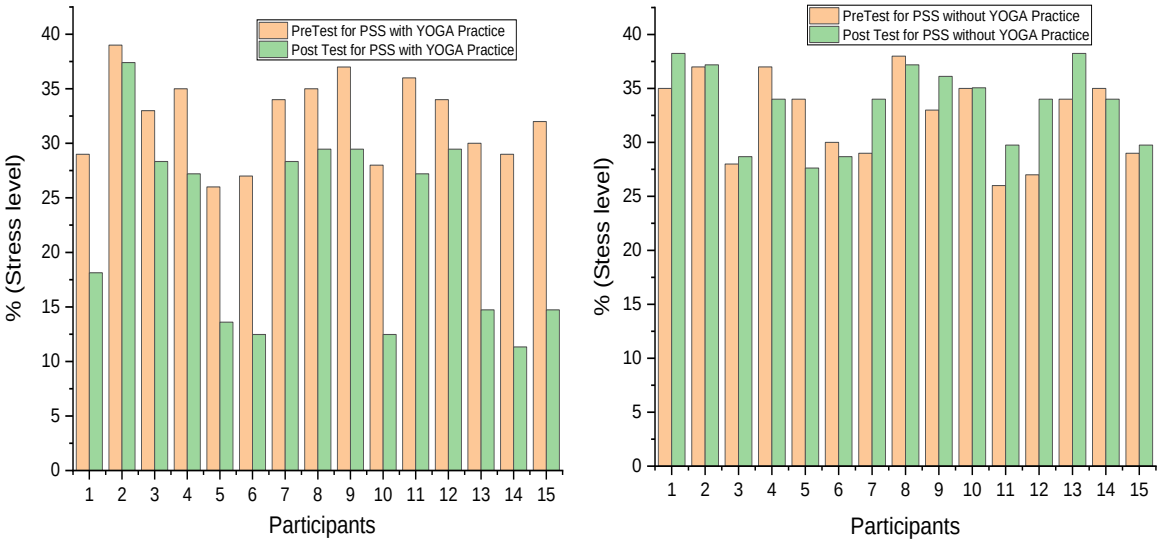
ANOVA

Table .3 Pre-Test and pros Test for PSS without YOGA Practice

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	142.233	7	20.319	1.884	.211
Within Groups	75.500	7	10.786		
Total	217.733	14			

Analysis of variance (ANOVA) is an analysis tool used on yoga practice group (experimental group) and control group was analysed and are presented in table-2 and table-3. Table -2: yoga practice group analysed to Significant at 0.01 level of confidence (Table F ratio at 18.989 level of confidence for total df 14 and total sum of squares = 214.933).Table -3 : Control group analysed to no Significant at .211 level of confidence (Table F ratio at 1.884 level of confidence for total df 14 and total sum of squares = 217.733).It means that the yoga practises group's pre-test and post-test have significantly different from the control groups.Tables 2 and 3 show the difference in gain scores of the combined PSS Scale performance between the experimental (yoga) and control groups. Table-2 is significant at the 0.01 level of confidence, indicating that students in the experimental and control groups vary in their Stress levels.According to graph-1 yoga practice group (experimental group) and control group was analysed and are presented in graph-1 and graph-2. graph -1: yoga practice group analysed to Significant at 0.01 level of confidenceYoga practitioners in the experimental group showed a significant reduction in stress levels. Higher stress levels become moderate, while moderate stress levels become low.The control group, which did not include Yoga practitioners, showed no significant reduction in stress levels. Higher stress levels increase, whereas moderate stress levels remain the
unchanged[22-23].

Graph-1 Pre-Test and post Test for PSS with YOGA Practice**Graph-2**Pre-Test and post Test for PSS without YOGA Practice



V.Conclusion AND Recommendation

According to our Conclusion, yoga practice group benefited more than the control group. Stress levels were significantly lower in the experimental group. While the control group showed a modest increase but no improvement. Greater impact in the Yoga practise group was associated with enhanced mindfulness, which included particular components for processing experience being less self-critical and more compassionate to themselves, and over-identifying with less stress. Academic failure is a challenge for students. All of this has a negative impact on

their mental health. Academic, environmental, social, and health factors all have a role in stress development. The most major stressors are academicvariables, prompting the development of specific and targeted treatments to dramatically lower the stress burden on students. Students' needs should be addressed through teaching methods and college surroundings. According to the findings of the study, students' stress levels are pretty high, and they are increasing as years progress. Yoga and other coping methods are also being used by students. Yoga is a great tool for stressed academic students.This systematic review and analysis's objective was to determine the impact of stress management strategies on college students' levels of stress, anxiety, and depression. two different group analyses of controlled trials were performed. Overall, the college students in group 1 reported that the yoga intervention had positive effects on stress.

Reference

1**.** Banerjee, N., & Chatterjee, I. (2016). Academic stress, suicidal ideation & mental well-being among 1st semester & 3rd semester medical, engineering & general stream students. *Researchers World*, *7*(3), 73.

2. Saha, D.(2017). Every hour, one student commits suicide in India. *Hindustan Times.*

3.http:WWW.Hindutantimes.com/health-and-fitness/every-hour-one-student-commitssuicide.

4.https://www.firstpost.com/india/arjun-bhardwajs-suicide-day-before-killing-self-mumbai-students- dad-found-him-disturbed-and-depressed.

5. Martin, C. G., Kim, H., Yun, S., Livingston, W., Fetta, J., Mysliwiec, V., ... & Gill, J. M. (2017). Circulating miRNA associated with posttraumatic stress disorder in a cohort of military combat veterans. Psychiatry research, 251, 261-265.

6. Marelli, S., Castelnuovo, A., Somma, A., Castronovo, V., Mombelli, S., Bottoni, D., ... &Ferini-Strambi, L. (2021). Impact of COVID-19 lockdown on sleep quality in university students and administration staff. *Journal of neurology*, *268*(1), 8-15.

7. Sahu, P. K. (2020). Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact on Education and Mental Health of Students and Academic Staff.

8. George, G., & Thomas, M. R. (2020). Quarantined effects and strategies of college students–COVID-19. *Asian Education and Development Studies*.

9.Liang, L., Ren, H., Cao, R., Hu, Y., Qin, Z., Li, C., & Mei, S. (2020). The effect of COVID-19 on youth mental health. *Psychiatric quarterly*, *91*(3), 841-852.

10. https://www.zedua.com/blog/indian-students-stressed.

11.Aihie, O. N., &Ohanaka, B. I. (2019). Perceived academic stress among undergraduate students in a Nigerian University. *Journal of Educational and Social Research*, *9*(2), 56-56.

12. Chhetri, B., Goyal, L. M., Mittal, M., &Battineni, G. (2021). Estimating the prevalence of stress among Indian students during the COVID-19 pandemic: a cross-sectional study from India. *Journal of Taibah University Medical Sciences*, *16*(2), 260-267.

13. Reddy, K. J., Menon, K. R., &Thattil, A. (2018). Academic stress and its sources among university students. *Biomedical and Pharmacology Journal*, *11*(1), 531-537.

14.N.Anitha (2021) .Prediction Of Cognitive Impact Of Yoga And Meditation On Psycho-Physiological Health For Students .international journal of scientific & technology research volume 9, issue 01, January 2020 ISSN 2277-8616.

15.Busari, A. O. (2012). Evaluating the relationship between gender, age, depression and academic performance among adolescents. *Scholarly Journal of Education*, *1*(1), 6-12.

16.Deb, S., Strodl, E., & Sun, H. (2015). Academic stress, parental pressure, anxiety and mental health among Indian high school students. International Journal of Psychology and Behavioral Science, 5(1), 26-34.

17.Chernomas, W. M., & Shapiro, C. (2013). Stress, depression, and anxiety among undergraduate nursing students. International journal of nursing education scholarship, 10(1), 255-266.

18.Jain, V., & Sharma J. (2017), Effect of YogicIntervention: Pranayama on Anxiety & Depression,International Journal of Indian Psychology,4 (3),124-136.

19. Pael, K. B.(2018). An Effect of Yoga and Pranayama on Academic Performance of College Students. International Research Journal of Engineering andTechnology. 5(1), 1633-1635.

20.Kauts, A., & Sharma, N. (2009). Effect of yoga on academic performance in relation to stress. International journal of yoga, 2(1), 39.

21. Kirkwood, G., Rampes, H., Tuffrey, V., Richardson, J., & Pilkington, K. (2005). Yoga for anxiety: a systematic review of the research evidence. British journal of sports medicine, 39(12), 884-891.

22. Maric, M., de Haan, E., Hogendoorn, S. M., Wolters, L. H., & Huizenga, H. M. (2015). Evaluating statistical and clinical significance of intervention effects in single-case experimentaldesigns: An SPSS method to analyse univariate data. Behaviour Therapy, 46(2), 230-241.

23. Pallant, J. (2020). SPSS survival manual: A step by step guide to data analysis using IBM SPSS.Routledge.

24. Sundharavadivel, G., and B. Zipporah Matilda. "A Study On Occupational Stress Among Working Womens." *International Journal Of Human Resource Management And Research (Ijhrmr)* 8.6 (2018): 113-120.

25. Kabulov, B. O. L. A. T., et al. "Effect of mechanical processing of minced meat on the change of yield stress." *International Journal of Mechanical and Production Engineering Research and Development* 9.5 (2019): 333-42.

26. Bakieva, A. N. A. R., et al. "Developing new type of disk plate for meat chopper and its effect to water-binding capacity and yield stress of minced meat." *International Journal of Mechanical and Production Engineering Research and Development* 9.6 (2019): 377-390.

27. Yaseen, Noor Dhia, Jumaa S. Chiad, and Firas Mohammed Abdul Ghani. "The study and analysis of stress distribution subjected on the replacement knee joint components using photo-elasticity and numerical methods." *International Journal of Mechanical and Production Engineering Research and Development* 8.6 (2018): 449-464.

28. Suresh, Suja, S. Aruna, and G. Valli. "Prevalence and Health Seeking Behavior among Specific Women Group on Reproductive Tract Infection in Rural Community Area of Kancheepuram District, Tamil Nadu: A Cross Sectional Study Report." *International Journal of Medicine and Pharmaceutical Sciences (IJMPS)* 7.4 (2017): 1-6.

29. Mandaviya, M. E. E. T. A. "The job burnout and turnover intensions among social workers: A cross sectional study." *International Journal of Human Resource Management and Research (IJHRMR)* 9.4 (2019): 135-148.