

IDENTIFICATION OF THE LEVEL OF POSTTRAUMATIC STRESS DISORDER & ITS MANAGEMENT THROUGH YOGA & MEDITATION IN FORENSIC SCIENTISTS AND LAW OF JUDICIARY MEMBERS: A DESCRIPTIVE STUDY

Dr. Divyansh Jain

Ph.D., Department of Ashtang Yoga, Lakulish Yoga University Ahmedabad Gujarat
divyanshj20@gmail.com

Dr. Vivek Maheshwari

Professor and Vice Chancellor, Lakulish Yoga University Ahmedabad Gujarat.

Abstract

Forensic Scientist and the Law of the Judiciary is crucial in administering justice in criminal cases and investigating crime. They feel high levels of stress and, workloads, burnout due to the nature of work, such as high stakes, long hours, emotional impact and administrative burden. Yoga and Meditation technique act as stress management remedies. It is not only a set of posture, pranayama, and Dhyana but also mind-body medicine or alternative medicine towards life. During yoga, slow and deep breathing calms the mind, increases self-awareness and gives stability. Yoga and meditation help balance the autonomic nervous system, decrease sympathetic activity, and increase parasympathetic arousal, which relaxes the body and mind. So, it helps to decrease the level of stress and burnout. Overall, yoga and meditation help to reduce stress management and enhance the quality of life. The present paper is a descriptive survey study based on the role of yoga and meditation for stress management among forensic scientists and Law of judiciary members.

Keywords: Yoga, Meditation, Stress, Forensic Scientists, Law of Judiciary Members.

INTRODUCTION

Stress is a common phenomenon in each individual's life. Stress is seen in children to old age people. Stress is an unpredicted response that individuals have when challenged with crime investigation burdens. Stress may positively impact employees to the limited extent that an executive can manage it; even so, it frequently exceeds tolerable limits and adversely affects staff members (Daniel, 2019).

1.1 Forensic Scientist

Forensic scientists help in providing additional data to police detectives as well as authorities about the beginnings of traces left at the scene of the crime, such as fingerprint recognition, hair, and blood. Other than DNA, there is little empirical proof that forensic scientists' methodologies can connect scientific evidence to an origin with high levels of assurance and that forensic scientists taken by an individual are specialists in deciding on such matters (Towler et al., 2018). Forensic Scientists communicate complex scientific concepts to lawyers with limited or no science background (e.g., police, lawyers, judges, jurors, etc.) (Bali et al., 2020).

1.2 Law of Judiciary member

Judges, lawyers and police come under the Law of Judiciary members. Judges wield immense influence as the final decision-makers in legal disagreements. They also help investigate crime and make regional and nationwide decisions. Regardless of how attractive the title appears, the daily responsibilities of this role can be challenging and negatively impact any judge's well-being and state of health. Although others may argue that these difficulties are inherent in the

position, the judiciary, legal belonging, thus and the people at large would be negligent if they did not recognize the pressure that such obstacles impose (Yetter & Swenson, 2021).

1.3 Role of Yoga and Meditation

The word yoga is derived from the Sanskrit "Yuj". The meaning of yuj is union—the combination of body and soul (Ransing et al., 2020). Yoga is an ancient technique that helps overcome the hurdle in a stressful life. Yoga facilitates the resolution of all life's challenges. Physically, it helps relieve a broad spectrum of medical conditions (Nikhra, 2016). The yoga-based intervention also positively affected anxiety, mindfulness, attention, and memory (Jain, 2021). There are various types of meditation techniques. Cyclic Meditation (CM) is the best scientific technique for overcoming stress. Various studies documented the effect of cyclic meditation. As per (Srinivas & Kumari, 2015), in this study, the impact of Cyclic Meditation practice would help reduce job stress and enable the IT Professional to perform efficiently. (Levin et al., 2021), This study found that stress and trauma were elevated, and well-being and health may improve, particularly in professionals with direct field-based involvement with criminal activity, dealing with victims' family members, and testifying duties.

This research aimed to investigate the prevalence of PTSD and the structure of yoga and meditation for stress management that is best for forensic scientists and the Law of judiciary members.

1.4 Cyclic meditation (CM)

CM is a stimulation and relaxation-based technique with eight steps consisting of various postures, awareness and relaxation. The Opening prayer, Instant Relaxation Technique (IRT), Standing Postures, Quick Relaxation Technique (QRT), Sitting Postures, Deep Relaxation Technique (DRT), Resolve process & Closing prayer are the components of CM—the CM coined by Dr HR Nagendra, Chancellor of Swami Vivekananda Yoga Samsthana, Bengaluru.

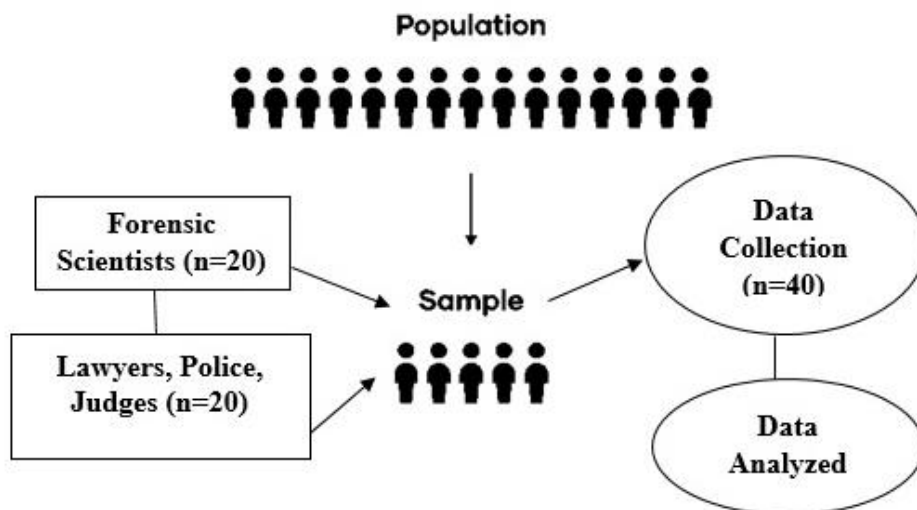
1.4.1 *The table shows the steps and duration of CM.*

S.no.	Activity	Duration (Min)	Remarks
1	Opening Prayer	1 min	
2	IRT (Instant Relaxation Technique)	1 min	Relaxation
3	Standing postures	5 min	Stimulation
4	QRT (Quick Relaxation Technique)	3 min	Relaxation
5	Sitting Postures	5 min	Stimulation
6	DRT (Deep Relaxation Technique)	15-20 min	Relaxation
7	Resolve	1 min	Silence
8	Closing prayer	1 min	
TOTAL		35 min	

METHODOLOGY

A descriptive study one-time assessment research design was used for the present study. Data was collected from Police stations, Forensic research Institutes, Law of Judiciary members, Advocates & Judges etc.

1.4.2 Research Design



1.4.3 Sample Size

Forty Samples were conveniently collected, and the sample size was calculated through G-power.

1.4.4 Assessment Tools

Posttraumatic Stress Disorder (PTSD-5) was used to survey the stress of Forensic Scientists and Law of Judiciary Members. This questionnaire was taken from the National Library of Medicine with a validity & reliability Test (The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5), 2022).

1.5 Data analyzed

Data were extracted in an Excel sheet and analyzed through Excel using a percentage formula.

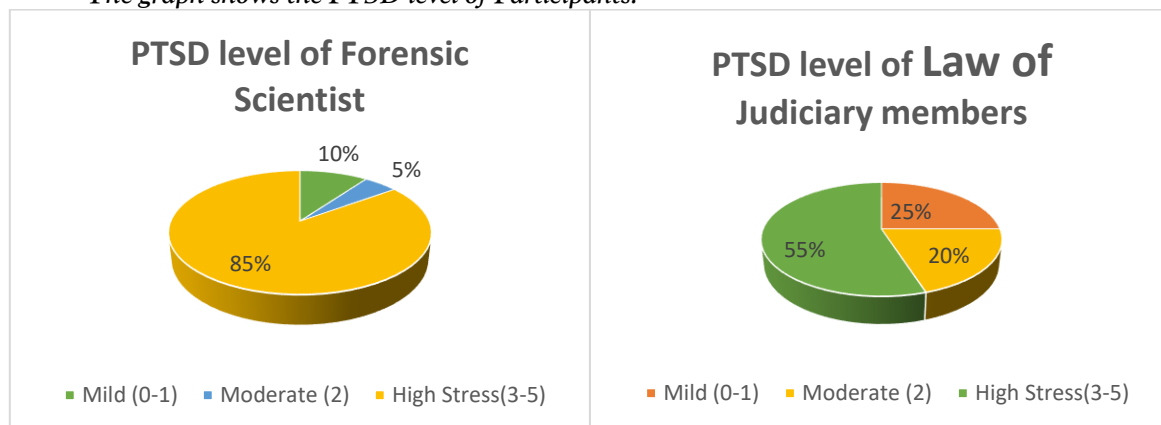
RESULTS

1.6 The table shows the PTSD level of Participants.

	Mild (0-1)	Moderate (2)	High (3-5)	Total (N=40)
Law of Judiciary	5 (25%)	4 (20%)	11 (55%)*	20
Forensic Scientists	2 (10%)	1 (5%)	17 (85%)*	20
Overall	7 (18%)	5 (12.5%)	28 (70%)*	40

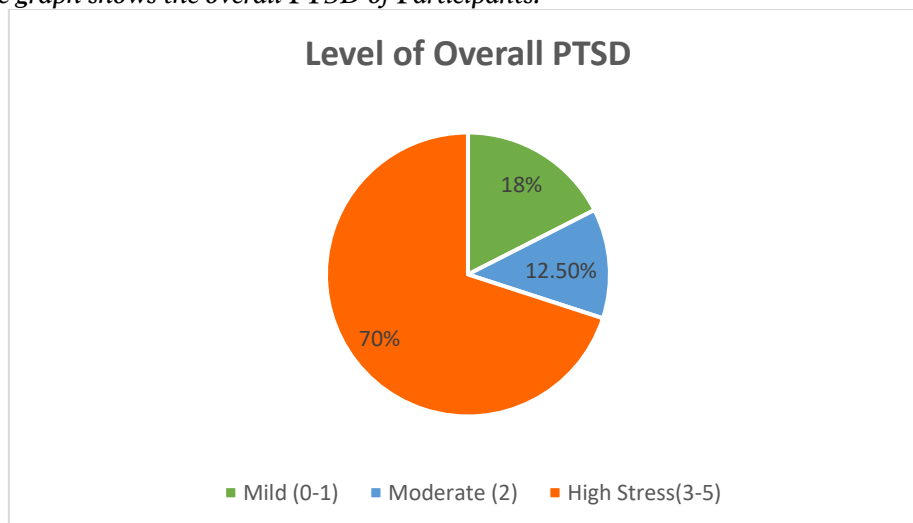
*(Note: The level of PTSD observed highly)

1.7 The graph shows the PTSD level of Participants.



1.8

The graph shows the overall PTSD of Participants.



DISCUSSION

The present study showed that the Posttraumatic Stress Disorder (PTSD-5) level was high among Participants. The percentage of PTSD in Law of Judiciary members was High (55%), Mild (25%) and Moderate (20%) and the Percentage of PTSD in forensic Scientists was High (85%), Mild (10%) and Moderate (5%). The overall percentage of PTSD was High (70%), Moderate (12.5%) and Mild (18%) among total participants, as compared to Law of Judiciary members, the PTSD level highly in Forensic Scientists.

The study (Nikhra, 2016) showed the link between "Yog-Pranic Healing-Twin Hearts Meditation" and stress. As per Master Choa Kok Sui, in Meditation flow of spiritual energy down to the professional fills him with divine light, love, and energy. As per (Koch et al., 2022), this study found that after six months of yoga exercises decreased perceived stress at ($p < 0.001$) level and improved blood pressure levels ($p = 0.007$) level among twenty young police officers. As a (Mejia, 2021), in this study found, excessive work, strict schedules, and highly competitive implications all add value to legal practitioners experiencing severe stress, anxiety, depression, and, in some cases, problems with substance abuse. Meditation in the practice of Law signifies a chance to enhance the health and well-being of legal experts. As per (Thiruvangadam & Mohanakrishnan, 2022), this study showed that the overall impact of yogic practice and interval training led to substantial progress in speed and stress between armed reserved police of Cuddalore district. (Kumari & Ghosh, 2015), this study found that after one month of Cyclic meditation practice, there was a significant effect on adolescents' quality of life and perceived stress scale. As per (Sharma et al., 2019), in this study, Cyclic Meditation showed a significant effect on RR, and BHT, at ($p < 0.001$) level, but the Pulse rate harmed health among hundred army soldiers. Hence, Literature suggests that the Yoga and meditation practice should be implemented within the Law of judiciary members and forensic Scientists; it may help to decrease psychological variables such as stress, anxiety, and depression and Physiological variables such as respiratory rate, breath holding time BMI and Cyclic meditation (CM) showed the highest positive impact on psychological variables and stress. CM may be a healing intervention for PTSD.

CONCLUSION

The present study showed that the high-stress levels seen in Law of Judiciary Members and forensic scientists, Yoga and meditation are tools for overcoming stress. Regular practising of yoga and meditation helps to overcome the PTSD and pandemic situation. Yoga and meditation are not only a set of postures, pranayama, and breathing awareness. It is an alternative medicine, alternative therapy, and mind-body medicine for overcoming traumatic stress disorder. For better outputs, Cyclic Meditation (CM) is a highly Recommended Intervention for overcoming stress. Further Intervention work should be conducted in various dimensions of law Judiciary to cope with the stressful situation and enhance the efficiency levels of Members.

ACKNOWLEDGEMENT

The author would like to thank the Head of the Police Station, Law of Judiciary members & Forensic Scientists, Lawyer, and Judges for their permission to take data collection & participate in this survey study.

REFERENCES

- Bali, A. S., Edmond, G., Ballantyne, K. N., Kemp, R. I., & Martire, K. A. (2020). Communicating forensic science opinion: An examination of expert reporting practices. *Science & Justice*, 60(3), 216–224. <https://doi.org/10.1016/j.scijus.2019.12.005>
- Daniel, C. (2019). Effects of job stress on employee's performance. *International Journal of Business Management and Social Research*, 6, 375–382. <https://doi.org/10.18801/ijbmsr.060219.40>
- Jain, D. (2021). Impact of yoga intervention on exam anxiety, mindfulness, attention & memory in school going children. *Delhi Business Review*, 22(2), 85–90. <https://www.indianjournals.com/ijor.aspx?target=ijor:dbr&volume=22&issue=2&article=009>
- Koch, S., Esch, T., & Werdecker, L. (2022). Effects of a Yoga-Based Stress Intervention Program on the Blood Pressure of Young Police Officers: A Randomized Controlled Trial. *Journal of Integrative and Complementary Medicine*, 28(3), 234–240. <https://doi.org/10.1089/jicm.2021.0294>
- Kumari, S., & Ghosh, S. (2015). Effect of cyclic meditation on quality of life and perceived stress in female adolescence. *International Journal of Educational and Psychological Researches*, 1(3), 238. <https://doi.org/10.4103/2395-2296.158348>
- Levin, A. P., Putney, H., Crimmins, D., & McGrath, J. G. (2021). Secondary traumatic stress, burnout, compassion satisfaction, and perceived organizational trauma readiness in forensic science professionals. *Journal of Forensic Sciences*, 66(5), 1758–1769. <https://doi.org/10.1111/1556-4029.14747>
- Mejia, D. (2021). *Mindfulness for Legal Professionals: An Appeal for Positive Change*. https://digitalcommons.lesley.edu/mindfulness_theses/44
- Nikhra, D. M. (2016). A Study on the Effect of Yoga & Pranik Healing on Psychological Disorder. *Open Access*, 2(1). https://web.archive.org/web/20180421002704id_/http://ijsc.net/docs/issue3/study_on_the_effect_of_yoga_pranik_healing_on_psychological_disorder.pdf
- Ransing, R., Pinto da Costa, M., Adiukwu, F., Grandinetti, P., Schuh Teixeira, A. L., Kilic, O., Soler-Vidal, J., & Ramalho, R. (2020). Yoga for COVID-19 and natural disaster-related mental health issues: Challenges and perspectives. *Asian Journal of Psychiatry*, 53, 102386. <https://doi.org/10.1016/j.ajp.2020.102386>
- Sharma, I., Singh, D. S., & Pradhan, D. B. (2019). Effect Of Cyclic Meditation On Autonomic Variables. *Think India Journal*, 22(10), Article 10. <https://thinkindiaquarterly.org/index.php/think-india/article/view/10751>
- Srinivas, P. S., & Kumari, S. (2015). *EFFECT OF CYCLIC MEDITATION ON JOB-RELATED STRESS IN IT PROFESSIONALS*. 3. http://voiceofresearch.org/Doc/Jun-2015/Jun-2015_12.pdf
- The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5). (2022). <https://www.ptsd.va.gov/professional/assessment/documents/pc-ptsd5-screen.pdf>
- Thiruvangadam, S., & Mohanakrishnan, R. (2022). Combined Effect Of Yogic Practice And Interval Training On Speed And Stress Among Armed Reserved Police Of Cuddalore District. *Journal of Positive School Psychology*, 6(10), 4379–4381. <https://journalppw.com/>
- Towler, A., White, D., Ballantyne, K., Searston, R. A., Martire, K. A., & Kemp, R. I. (2018). Are Forensic Scientists Experts? *Journal of Applied Research in Memory and Cognition*, 7(2), 199–208. <https://doi.org/10.1016/j.jarmac.2018.03.010>
- Yetter, K., & Swenson, D. X. (2021). *Judicial Stress and Resiliency Survey COVID-19 Update*. <https://digitalcommons.unl.edu/ajacourtreview>