



A Perspective of Yoga on Occupational Stress, Musculoskeletal Disorder and Digital Eye Strain of Banking Sector Employees: A Review Study

Khushi Nirwan¹ and Sanjeet Kumar Mishra²

¹Independent Researcher, UGC-Net, M.Sc. in Human Consciousness and Yogic Science, Barkatullah University, Bhopal, India.

²PhD Research Scholar, Department of Naturopathy and Yoga, Hemvati Nandan Bahuguna Garhwal University (A Central University), Srinagar, Uttarakhand, India.

¹Corresponding Author Email: nirwankhushi2001@gmail.com

²Author Email: sanjeetkumar7747@gmail.com

ABSTRACT:

Banking sector employees are at a high risk of occupational stress, musculoskeletal disorders, and digital eye strain. This is because of long periods of sitting, longer computer screen exposure, and high-pressure work environments. Often, these employees work more than 6 hours a day on computers. They regularly maintain static postures and perform repetitive movements for too long, with poor task management and working style, which increases their stress due to their occupation. This raises the probability of musculoskeletal disorders, mainly lower back pain and neck pain. Digital eye strain is the principal driver of symptoms like eye discomfort, dryness, and blurred vision. In the banking field, these problems are common due to constant computer use, deadlines, and an intensive type of occupational task. This study aims to review the prevalence of these issues and examine how Yoga can serve as a tool to resolve them. This study uses an analytical and descriptive review of the literature from databases such as PubMed, Scopus, and Sage journals. Research shows that Yoga can help reduce psychological stress, improve posture, enhance spinal mobility, and relax eye and neck muscles. It also helps calm the nervous system. Thus, Yoga can be a groundbreaking tool to enhance and regulate these conditions by bringing harmony within oneself and their work culture.

Keywords: Yoga, Bank Employees, Occupational Stress, Musculoskeletal disorder, Lower back pain, and Digital Eye Strain (DES).

INTRODUCTION:

Over the past two decades, India has been going through a rapid rate of transformation, and the inclusion of technology in the workplace is changing the nature of work at a whirlwind speed. The digitalization of the banking sector has made people's lives easier, but it has raised many health concerns among bank employees, as studies show. Exposure to computer screens for long hours has raised digital eye strain by 74.7% (Ekemiri et al., 2024). In the 2023 Tear Film and Ocular Surface Society (TFOS) Lifestyles Report, digital eye strain (DES) is described as “the development or worsening of repeated eye symptoms and signs specifically tied to looking at digital device screens.” DES used to be called as computer vision syndrome (CVS), but the term is less popular because people now use a wide range of digital devices, like smartphone, smartwatch, and tablet, not just computer (Wolffsohn et al., 2023). Various studies have reported that bank employees spend an average of 6.9 to 9 hours per day on screens (Jhala, 2025; Patel et al., 2019). Among bank employees, Computer-related Ocular Syndrome is common, with the following prevalence rates: eye strain (67.30%), headaches (60.50%), redness (29.10%), watery eyes (27.7%), and blurred vision (25.0%) (Sahithya & Sandhya, 2024). Continued being sedentary (deskbound) and posture misalignment are directly related to the higher rate of musculoskeletal disorders (Jhala, 2025). Excessive screen time affects both ocular health and overall well-being. Which may turn to muscle and bone issues, like back pain from continuous sitting and poor posture, including tension headaches and stress (Ekemiri et al., 2024).

“Musculoskeletal disorders” encompass various inflammatory and degenerative conditions impacting muscles, tendons, ligaments, joints, peripheral nerves, and blood vessels. The most frequently affected areas are the lower back, neck, shoulder, forearm, and hand, though recent focus has shifted more towards the lower extremities (Punnett & Wegman, 2004).

The increased complexity of advanced tech is likely to shift employees' thinking patterns, which may lead to a certain level of tension; if left unaddressed, it can turn into stress. Today, workplace stress has become a major concern for both employees and organisations. Stress has become an unavoidable aspect of the modern workplace and employees' lives, both at home and outside of work (Gaikwad, 2023). The United States National Institute of Occupational Safety and Health defines workplace stress as the negative physical and emotional responses that happen when a job's demands surpass a worker's abilities, resources, or needs (*Stress at Work.*, 2025). Stress is a risk factor for chronic low back pain, headaches, fatigue, fibromyalgia, anxiety, depression, and reduces quality of life (Giorgi et al., 2017). A study conducted in India revealed that bank employees have a higher level of occupational stress, 75.5% (Kumar & Sundaram, 2014).

Although many studies have examined the psychosocial effects of new policies across sectors, the banking industry has not been studied extensively despite being heavily affected. Therefore, this research focuses on the unique challenges faced by bank employees related to occupational stress, musculoskeletal disorders, and digital eye strain. The aim of this review study is to identify the root causes of numerous issues and to provide a way to overcome them through Yoga for banking employees.

Yogic eye practices help to reduce eyestrain and improve eye muscles by soothing them. Yoga covers physical, mental, emotional, social, and spiritual health. Eye issues are often associated with mental well-being. Relaxing the mind reduces eye strain, whereas stress can intensify it (Natu et al., 2007). Yoga practices reduce stress and musculoskeletal disorders among bank workers, and other professionals (Biman et al., 2021a; Giri et al., 2021).

Review of Literature

Keywords used in the search were: Yoga, Bank Employees, Occupational Stress, Musculoskeletal disorder, Lower back pain, and Digital Eye Strain (DES). The quality of the selected research studies included in the final synthesis is empirical studies only.

Table: Table of Literature Review:

Author(s) & Year	Sample & Study Design	Variables, Prevalence & Intervention	Major Findings
Ganesh Kumar & Sundaram (2014)	(N=192 bank employees) Cross-sectional	Stress 75.5% Very high level of Stress	Most bank employees face high stress levels because of their workload and job demands (Kumar & Sundaram, 2014).
Vinod & Ambatipudi (2024)	(N=282 bank employees) Cross-sectional	Stress & Burnout 26.2% stress, 82.2% burnout	High prevalence is linked to long working hours and work-related stress (Vinod & Ambatipudi, 2024).
Patra et al. (2025)	(N=744 bank employees) Cross-sectional	MSD High prevalence of MSD, along with lower back pain, was reported 47.5 %.	MSD is connected with age, BMI, long working hours, and deskbound work (Patra et al., 2025).
Nawaz et al. (2024)	Bank employees Cross-sectional	70–79.5 % (high prevalence)	Many bank employees suffer from DES symptoms such as eye strain, dryness, headaches, and blurred vision caused by extended screen use (Nawaz et al., 2026).
Giri et al. (2021)	Bank employees descriptive	Stress, Yoga practice Self-reported Yoga habits	Employees practising Yoga reported feeling more relaxed and experiencing lower stress levels (Giri et al., 2021).
Rathi & Chaudhary (2023)	Individuals with DES Empirical	DES, visual fatigue Eye Yoga (Trataka, palming)	Notable decrease in eye strain and enhanced visual comfort (Rathi & Chaudhary, 2023).
Pravalika et al. (2023)	Participants N=90 RCT	Stress, MSD, sleep 8-week Yoga intervention	Notable decrease in MSD pain and stress; better sleep quality (Pravalika et al., 2023).
Biman et al. (2021)	Industrial employees Experimental	Stress, MSD, QoL Workplace Yoga program	Reduced stress, alleviated MSD symptoms, and enhanced quality of life (Biman et al., 2021).
Tilbrook et al. 2016	Participants N=313	Lower back pain 12- week yoga intervention	The results of the study showed a significant reduction in lower back pain (Tilbrook et al., 2016).

Methodology

This review uses a purely qualitative research method, and depends on secondary research data collected from diverse databases. This includes an analytical and descriptive review of the literature from research databases like PubMed, Scopus, and Sage journals.

DES and its management through Yoga:

As working professionals depend more on digital devices, and their screen exposure is rising particularly for remote workers in fields such as banking and other desk-jobs, DES is becoming an ever more common yet dangerous health issue. Signs of DES are dry eyes, irritation in eyes, fuzzy vision, headaches, bulging of eyes, fatigue, and even neck and shoulder pain. The key reasons are that their blink rate is poor and they don't maintain a correct distance from screens, because of this strain on eyes is rising. Spending hours, on screens can strain eyes is decreasing the efficiency of vision is and harming ocular health. (Pucker et al., 2024). The capacity to see in various directions, distances, relies on the coordination of eye muscles. Similar to other muscles, eye muscles can become chronically tense due to stress, leading to eyestrain and related issues. Relaxation is crucial and serves as the foundation of Yogic eye therapy practices. Dr. Bates notes in his book 'Better Eyesight Without Glasses' that "anything that rests the mind will benefit the eyes." Since mind control of senses is a key aspect of Yoga, it plays an important role in healing many conditions, including eye issues. 'Om Trataka', intermittent 'Jyoti Trataka', 'devotional prayers', cleansing practices like 'Kapalbhati' and 'Jala Neti', 'Asanas', preparatory eye practices, 'palming', 'Pranayama', 'Yoga Nidra', and 'meditation'. Consistent Yoga practices work as an effective preventive and therapeutic approach for CVS (Natu et al., 2007).

Occupational stress management by Yoga:

Occupational stress happens before work is done and hampers task performance. Stress influences both mental and physical aspects. Employees continuously work on electronics, and excessive screen exposure is the main reason of stress (S. D., 2012). The Indian banking sector is characterised by high-pressure settings involving long hours, strict targets, and public interactions. This "always-on" work culture leads to stress, burnout, and health problems such as musculoskeletal disorders and hypertension, (Vinod & Ambatipudi, 2024). Yoga Abhyas works as a complete stress management tool for working persons, by balancing the mind, body, and spirit. It encompasses practices like 'Asanas', 'Pranayama', and 'Dhyana', which collectively renew and restore overall well-being (S. D., 2012). Yoga regulates cortical activity and reduces limbic arousal, focuses on perceptual awareness and lessened emotional over-reactivity. It positively affects both the sympathetic and parasympathetic nervous systems and creates balance between them. Additionally, Yogic relaxation practices assist in stress management (Sankhala et al., 2026). Yoga has various techniques of relaxation and stress reduction. Breathing and stretching exercises, as well as meditation, are included. Yoga helps in reducing physical and mental stress through activating the parasympathetic nervous system, lowering cortisol levels, and calming the "fight-or-flight" response (S. D., 2012). Regular practice boosts emotional intelligence and resilience (Kushwaha et al., 2024).

Yoga for musculoskeletal disorders:

Yoga provides benefits through a variety of methods. It strengthens your core muscles, improves your posture and flexibility, and reduces stress by regulating the nervous system. In addition, it makes you more aware of your body. This makes Yoga a well-rounded, scientifically supported approach to addressing lower back pain and similar musculoskeletal and bone issues. A research study found that the 3-month Yoga program significantly decreased pain and anxiety and enhanced spinal flexibility, although no structural changes in the spine were detected (Telles et al., 2016). Similar research on Yoga exhibited that patients with long-term, lower back pain reported significant improvements in back function and lower levels of pain after a structured 12-week Yoga intervention, as compared to those who were receiving standard medical care (Tilbrook et al., 2016).

Pathway of Yoga for management of DES, Stress and MSD:

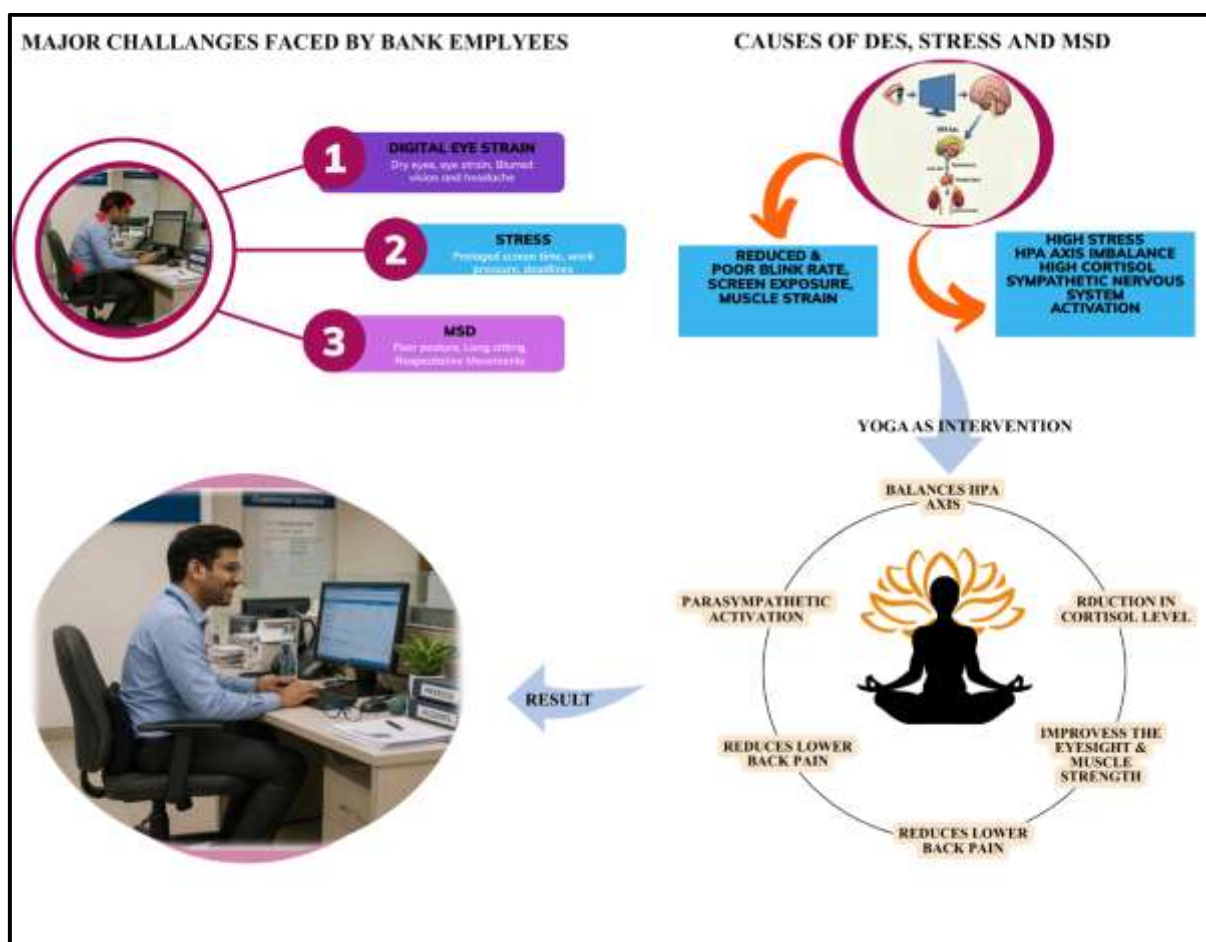


Fig.1

Discussion:

This review study found that yogic intervention reduces DES, stress, and musculoskeletal disorders in bank employees and other working professionals, mainly those, who are highly exposed to long screen time, deskbound jobs, and occupational stress. Findings of various research studies showed that Yoga practices lead to significant improvements in all three health concerns, highlighting the holistic and all-around benefits of Yoga for workplace health. The noticeable reduction was observed in the symptoms of DES. This may be due to specific exercises such as palming and Trataka. These exercises increase ocular blood flow. Additionally, relaxation techniques help in the stabilization of the tear film. These findings are similar to the results of the previous studies done by Rathi and Chaudhary in 2023 (Rathi & Chaudhary,

2023). They observed reduced visual fatigue and increased ocular comfort following yogic eye exercises. The reduced symptoms of DES may be due to reduced sympathetic overactivity and the blink rate. Both these parameters are reduced in individuals using digital devices for long periods.

Another significant observation was reduced stress levels among the participants. This was consistent with the majority of studies on Yoga. Yoga has been observed to affect the autonomic nervous system. Yoga has been shown to increase parasympathetic activity and decrease hypothalamic-pituitary-adrenal axis hyperactivity. Pranayama and meditation help reduce cortisol levels. These help in reducing occupational stress levels. These results were similar to the study by Della Valle et al. (Biman et al., 2021b; Singphow et al., 2022)

The fact that musculoskeletal issues are less of a problem, especially in the lower back, neck, and shoulders, suggests that yoga is good at tackling the physical stress that comes from sitting for too long and having bad posture. Yoga Asanas improve flexibility, strengthen muscles, and helps in alignment, which helps to ease long-term pain and stiffness. These results are matching with research by Pravalika et al. in 2023 and Biman et al. in 2021, result of these study showed significant reduction in MSD symptoms after following structured Yoga program at work place (Biman et al., 2021a).

Conclusion

This review study shows that integrating Yoga represents a holistic, non-invasive approach to mitigating DES, occupational stress, and MSD usually experienced by desk-bound professionals, such as banking personnel. Evidence suggests that regular practice of Yoga alleviates eye strain, reduces physical discomfort, and improves mental well-being. Given that Yoga works on both physical and psychological aspects of health, Yoga offers a complete solution for improving workplace health. The combination of Asana, Pranayama, meditation, and focused eye practices mitigates the underlying causes of DES, occupational stress, and MSD.

Recommendation and Future Study Suggestions:

With the rising prevalence of technology-based, deskbound, and target-driven work environments, combining Yoga wellness programs in the banking sector and similar fields is highly recommended. Future studies should include large samples, longitudinal interventions, and objective physiological measures to further generalise these results.

Implication:

Yoga sessions or one-hour Yoga practice is highly recommended for workplaces, particularly to the deskbound nature of workers. This may positively affect quality, work environment, and productivity. It will increase employee efficiency by promoting a soothing and harmonious environment in the workplace.

REFERENCES

- [1] Biman, S., Maharana, S., Metri, K. G., & Nagaratna, R. (2021a). Effects of yoga on stress, fatigue, musculoskeletal pain, and the quality of life among employees of diamond industry: A new approach

- in employee wellness. *WORK: A Journal of Prevention, Assessment & Rehabilitation*, 70(2), 521–529. <https://doi.org/10.3233/WOR-213589>
- [2] Biman, S., Maharana, S., Metri, K. G., & Nagaratna, R. (2021b). Effects of yoga on stress, fatigue, musculoskeletal pain, and the quality of life among employees of diamond industry: A new approach in employee wellness. *WORK: A Journal of Prevention, Assessment & Rehabilitation*, 70(2), 521–529. <https://doi.org/10.3233/WOR-213589>
- [3] Ekemiri, K., McKnight, D., Ekemiri, C., Ezinne, N., Ashang, H., Victor, V., Okonedo, O., Shuaibu, A. O., & Seemongal-Dass, R. (2024). Computer vision syndrome and associated factors among urban and rural bankers in Trinidad and Tobago. *PeerJ*, 12, e18584. <https://doi.org/10.7717/peerj.18584>
- [4] Gaikwad, A. P. (2023). “An overview of Stress Management of Banking Sector employees in India”. 10(9).
- [5] Giorgi, G., Arcangeli, G., Perminiene, M., Lorini, C., Ariza-Montes, A., Fiz-Perez, J., Di Fabio, A., & Mucci, N. (2017). Work-Related Stress in the Banking Sector: A Review of Incidence, Correlated Factors, and Major Consequences. *Frontiers in Psychology*, 8, 2166. <https://doi.org/10.3389/fpsyg.2017.02166>
- [6] Giri, S. S., Dhungana, B. R., Sah, S. K., Khanal, L., Giri, R., Yadav, B. K., & Sharma, L. K. (2021). Yoga Practices and its Correlates among Bank Employees at Janakpurdham, Nepal: A Descriptive Study. *MedS Alliance Journal of Medicine and Medical Sciences*, 1(2), 82–86. <https://doi.org/10.3126/mjmms.v1i2.46509>
- [7] Jhala, D. R. (2025). *Prevalence Of Work-Related Musculoskeletal Disorders Among Banking Sector Employees -A Cross-Sectional Study*. 4(1).
- [8] Kumar, Sg., & Sundaram, Nd. (2014). Prevalence of stress level among Bank employees in urban Puducherry, India. *Industrial Psychiatry Journal*, 23(1), 15. <https://doi.org/10.4103/0972-6748.144938>
- [9] Kushwaha, J., Thapliyal, V., Sharma, S. K., & Thakur, G. S. (2024). Effect of Pranayama and Meditation on Emotional Intelligence among Undergraduate Students: A Randomized Controlled Study. *International Journal of Ayurvedic Medicine*, 15(2), 391–398. <https://doi.org/10.47552/ijam.v15i2.4476>
- [10] Natu, D. U., Joshi, M. S., Bhide, M. S., Kunte, M. V., Bhave, M. A., & Bapat, M. R. (2007). *Computer Vision Syndrome (CVS) and the Effects of Yoga Practice: A Study*. <http://www.yogamag.net/archives/2000s/2007/0705/0705cvs.html>
- [11] Nawaz, H., Irshad, Y., Riaz, M., Ashraf, W., Afzal, M., & Rajput, R. (2026). Prevalence of Digital Eye Strain and Its Associated Factors Among Bankers. *The Healer Journal of Physiotherapy and Rehabilitation Sciences*, 6(1), 57–64. <https://doi.org/10.55735/a9nm9615>

- [12] Patel, S., Nair, A. R., Kushwah, S., Verma, S., & Sawlani, H. (2019). A Study of Musculo Skeletal Disorders among Bank Workers Employed in and Around Arera Hills Bhopal. *International Journal of Contemporary Medical Research [IJCMR]*, 6(6). <https://doi.org/10.21276/ijcmr.2019.6.6.59>
- [13] Patra, R. C., Yashudas, A., Kaur, J., & Negi, B. (2025). Prevalence of musculoskeletal disorders and their impact on health-related quality of life among Punjabi bank employees: A cross-sectional study. *Journal of Orthopaedic Reports*, 5(1), 100701. <https://doi.org/10.1016/j.jorep.2025.100701>
- [14] Pravalika, B., Yamuna, U., & Saoji, A. A. (2023). Yoga for musculoskeletal pain, discomfort, perceived stress, and quality of sleep in industry workers: A randomized controlled trial. *International Archives of Occupational and Environmental Health*, 96(10), 1349–1360. <https://doi.org/10.1007/s00420-023-02013-3>
- [15] Pucker, A., Kerr, A., Sanderson, J., & Lievens, C. (2024). Digital Eye Strain: Updated Perspectives. *Clinical Optometry, Volume 16*, 233–246. <https://doi.org/10.2147/OPTO.S412382>
- [16] Punnett, L., & Wegman, D. H. (2004). Work-related musculoskeletal disorders: The epidemiologic evidence and the debate. *Journal of Electromyography and Kinesiology*, 14(1), 13–23. <https://doi.org/10.1016/j.jelekin.2003.09.015>
- [17] Rathi, S., & Chaudhary, V. (2023). Effect of Eye Yoga and Mindful Relaxation Practices on Management of Digital Eye Strain in a Tertiary Care Hospital: A Comparative Interventional Study. *Journal for ReAttach Therapy and Developmental Diversities*, 6(8s), 40–44.
- [18] S. D., S. (2012). Stress management through ‘yoga practices’ in the corporate sector. *AFRICAN JOURNAL OF BUSINESS MANAGEMENT*, 6(37). <https://doi.org/10.5897/AJBM11.314>
- [19] Sahithya, D. N. R., & Sandhya, D. (2024). *Prevalence and Risk Factors of Dry Eye Syndrome Among Urban Office Workers Using Digital Screens*.
- [20] Sankhala, M. N., Rathore, D. B. S., & Kesari, D. K. (2026). An Integrated Psychoneuroimmunology Model of Yoga-Naturopathy for Workplace Stress: A Theoretical Framework and Research Agenda for Sedentary Service Sectors. *International Journal of Research and Innovation in Applied Science*, 11(2), 1480–1487. <https://doi.org/10.51584/IJRIAS.2026.110200137>
- [21] Singphow, C., Purohit, S., Tekur, P., Bista, S., Panigrahy, S. N., Raghuram, N., & Nagendra, H. R. (2022). Effect of Yoga on Stress, Anxiety, Depression, and Spinal Mobility in Computer Users with Chronic Low Back Pain. *International Journal of Yoga*, 15(2), 114–121. https://doi.org/10.4103/ijoy.ijoy_9_22
- [22] *Stress at work*. (2025). <https://doi.org/10.26616/NIOSH PUB99101>
- [23] Telles, S., Bhardwaj, A. K., Gupta, R. K., Sharma, S. K., Monro, R., & Balkrishna, A. (2016). A Randomized Controlled Trial to Assess Pain and Magnetic Resonance Imaging-Based (MRI-Based) Structural Spine Changes in Low Back Pain Patients After Yoga Practice. *Medical Science Monitor*, 22, 3228–3247. <https://doi.org/10.12659/MSM.896599>
- [24] Tilbrook, H. E., Cox, H., Hewitt, C. E., Kang’ombe, A. R., Chuang, L.-H., Jayakody, S., Aplin, J. D., Semlyen, A., Trehwela, A., & Watt, I. (2016). *Yoga for Chronic Low Back Pain*.

- [25] Vinod, G., & Ambatipudi, S. (2024). Burnout, stress, and their correlates among bank employees of South India: A cross-sectional study. *Ann Occup Environ Med*, 36, e22. <https://doi.org/10.35371/aoem.2024.36.e22>
- [26] Wolffsohn, J. S., Lingham, G., Downie, L. E., Huntjens, B., Inomata, T., Jivraj, S., Kobia-Acquah, E., Muntz, A., Mohamed-Noriega, K., Plainis, S., Read, M., Sayegh, R. R., Singh, S., Utheim, T. P., & Craig, J. P. (2023). TFOS Lifestyle: Impact of the digital environment on the ocular surface. *The Ocular Surface*, 28, 213–252. <https://doi.org/10.1016/j.jtos.2023.04.004>

Cite this Article:

Khushi Nirwan and Sanjeet Kumar Mishra," A Perspective of Yoga on Occupational Stress, Musculoskeletal Disorder and Digital Eye Strain of Banking Sector Employees: A Review Study", Naveen International Journal of Multidisciplinary Sciences (NIJMS), ISSN: 3048-9423 (Online), Volume 2, Issue 4, pp. 51-59, February-March 2026.

Journal URL: <https://nijms.com/>

DOI: <https://doi.org/10.71126/nijms.v2i4.122>

