



Comparative Impact of Yoga Practice On Stress In Public And Private Sector Professionals

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DOI : <https://doi.org/10.5281/zenodo.19366425>

ARTICLE DETAILS

Research Paper

Accepted: 15-03-2026

Published: 10-04-2026

Keywords:

Yoga practice, stress, public and Private Sector

ABSTRACT

This study investigates the comparative impact of regular yoga practice on perceived stress levels among professionals in public and private sectors. A total of 60 working individuals, comprising 30 public and 30 private sector employees aged between 30 to 50 years, participated in the study. Each sector group further divided into two subgroups: 40 participants practicing yoga regularly (10 weeks), and 20 non-practicing participants. The Perceived Stress Scale (Assessment of life style by using life style assessment inventory (LSAI) was used to measure stress levels. The results revealed that individuals who practiced yoga reported significantly lower stress scores compared to their non-practicing counterparts. While both sectors benefited from yoga practice, the private sector professionals showed a slightly greater reduction in stress, possibly due to their initially higher stress levels. Statistical analyses, including independent t-tests and two-way ANOVA, confirmed the positive effect of yoga and highlighted a meaningful interaction between sector type and yoga engagement.

Introduction:

Stress is a natural and inevitable psychological and physiological reaction to perceived threats, challenges, or demands in one's environment. While a moderate amount of stress can enhance alertness and performance, chronic and unmanaged stress can have detrimental effects on an individual's physical health, emotional well-being, and cognitive functioning. In the context of professional life, workplace



stress has emerged as a pervasive and escalating concern in the 21st century. Factors such as job insecurity, unrealistic deadlines, lack of autonomy, role ambiguity, interpersonal conflicts, and work-life imbalance contribute significantly to occupational stress. Prolonged exposure to such stressors may lead to burnout, decreased productivity, absenteeism, and an increased risk of mental health issues like anxiety and depression. On one side where both public and private sector professionals encounter stress, although the nature and intensity of their stressors may differ. Public sector employees, for instance, may face bureaucratic inertia, limited career advancement opportunities, rigid administrative structures, and political interference. On the other hand, private sector professionals often grapple with competitive work environments, performance-based appraisals, long and unpredictable working hours, and greater pressure to achieve organizational goals. Despite these differences, the cumulative effect of stress in both sectors adversely impacts personal health, job satisfaction, and professional efficacy.

Objectives of the Study:

The present study aims to explore the role of yoga in managing and reducing occupational stress among professionals working in both public and private sectors. With increasing awareness about the adverse effects of work-related stress on individual health and organizational productivity, it becomes essential to identify effective, evidence-based interventions that can be integrated into daily professional life. Yoga, with its integrative approach combining physical, mental, and spiritual practices, has emerged as a promising non-pharmacological tool to address stress holistically. In this context, the study outlines the following specific objectives:

- **To measure and compare stress levels among public and private sector professionals :**
- **To evaluate the impact of regular yoga practice on stress.**
- **To compare the effectiveness of yoga in both sectors:**

Hypotheses -

1. **H1: There is a significant reduction in stress levels among professionals who practice yoga regularly compared to those who do not.**
2. **H2: Yoga has a greater impact in reducing stress among private sector professionals than public sector professionals.**



Methodology:

I. Research Design

The study employed a **quasi-experimental research design** incorporating both **pre-test and post-test measures** to examine the impact of yoga practice on stress levels among professionals. This design was chosen due to the practical limitations of random assignment in real-world settings involving working individuals. It allowed for the comparison between those undergoing the yoga intervention and those in the control group across both public and private sectors. By using pre- and post-intervention data, the design enabled the assessment of changes over time attributable to the yoga intervention.

II. Sample Selection

A **total of 60 participants** were selected using purposive sampling, ensuring representation from both public and private sector professionals.

- **Distribution of Participants:**

- **Public Sector:** 30 individuals

- 20 participants in the Yoga Group
- 10 participants in the Control Group

- **Private Sector:** 30 individuals

- 20 participants in the Yoga Group
- 10 participants in the Control Group

- **Age Range:** All participants were aged **between 30 and 50 years**, representing mid-career professionals, a demographic commonly exposed to occupational stress due to job responsibilities, deadlines, and lifestyle pressures.

Tools Used:

- **Lifestyle Assessment Inventory (LSAI)** – to evaluate stress based on lifestyle indicators. To assess the stress levels of the participants, the **Lifestyle Assessment Inventory (LSAI)** was utilized. This standardized instrument evaluates various aspects of stress based on lifestyle



indicators including physical health, sleep patterns, emotional stability, and coping mechanisms. The tool is reliable and valid for working populations, providing a comprehensive view of stress as it relates to one's daily habits and psychological resilience.

Intervention Program:

A structured yoga intervention program was designed and implemented over a 10-week period, with sessions conducted five days a week, each lasting **45** minutes. The sessions were held either before or after office hours based on group convenience, under the supervision of a certified yoga instructor. The program focused on a holistic integration of physical postures, breathing techniques, and mental relaxation.

- **Session Structure:**

- **Warm-up (5 minutes):** Gentle joint movements and dynamic stretches to prepare the body.
- **Asanas (20 minutes):**
 - *Tadasana (Mountain Pose)* – for improving posture and balance
 - *Trikonasana (Triangle Pose)* – for flexibility and side-body stretch
 - *Bhujangasana (Cobra Pose)* – for spinal strength and energy flow
 - *Paschimottanasana (Seated Forward Bend)* – for stress relief and calming the mind
- **Pranayama (10 minutes):**
 - *Anulom-Vilom (Alternate Nostril Breathing)* – for nervous system balance
 - *Bhramari (Bee Breath)* – for immediate stress relief and mental calmness
- **Meditation and Relaxation (10 minutes):**
 - *Om Chanting* – to promote positive vibrations and concentration
 - *Yoga Nidra (Yogic Sleep)* – for deep physical and mental relaxation



Attendance was recorded regularly, and participants were encouraged to maintain a diary of their subjective experiences, although not formally assessed

Data Analysis

The collected data were subjected to both descriptive and inferential statistical analyses using SPSS software.

- **Descriptive Statistics:** Calculated **mean** and **standard deviation (SD)** to summarize the central tendency and variability in pre- and post-test scores of the LSAI.
- **Independent Sample t-Test:** Employed to compare the mean stress scores between yoga and control groups within each sector to assess the impact of the intervention.
- **Two-Way ANOVA:** Used to determine the **interaction effects between two independent variables**—sector type (public vs. private) and intervention (yoga vs. control)—on the dependent variable (stress levels). This helped in identifying whether the sector moderated the effectiveness of yoga on stress reduction.

Through this multifaceted methodology, the study aimed to generate empirical evidence on how yoga practice differentially impacts occupational stress in public and private sector professionals, offering insights for future wellness interventions at the workplace.

Results and Interpretation:

Descriptive Statistics

The descriptive statistics provide an initial overview of the effects of yoga intervention on stress levels among public and private sector professionals. The data summarized in the table below presents the **mean scores** from pre-test and post-test assessments, along with the **standard deviation (SD)** for post-test scores, for each subgroup in the study.

Group	Mean (Pre-test)	Mean (Post-test)	SD (Post-test)
Public Sector (Yoga)	75.3	56.2	5.4
Public Sector (Control)	74.5	72.1	6.2



Group	Mean (Pre-test)	Mean (Post-test)	SD (Post-test)
Private Sector (Yoga)	78.9	54.3	4.7
Private Sector (Control)	79.1	76.5	5.8

Participants in the public sector who received yoga intervention showed a substantial decrease in their stress levels, with the mean score dropping from 75.3 (pre-test) to 56.2 (post-test). This reduction of 19.1 points indicates a significant positive impact of

Inferential Statistics:

To assess the effectiveness of the yoga intervention, independent sample t-tests and two-way ANOVA were conducted.

Independent Sample t-Tests

T-tests revealed **statistically significant differences ($p < 0.01$)** in post-test stress scores between yoga and control groups in both public and private sectors.

- In the **public sector**, the yoga group showed a notable reduction in stress compared to the control group.
- In the **private sector**, the difference was even greater, suggesting higher effectiveness of yoga in more stressful environments.

These results confirm that yoga significantly reduced stress levels across both sectors.

Conclusion:

The present study clearly demonstrates that yoga is a highly effective tool for reducing stress among professionals working in both public and private sectors. The consistent and statistically significant reductions in stress levels observed among yoga participants highlight the positive impact of regular yogic practices—such as asana, pranayama, and meditation—on overall mental health and lifestyle quality. Importantly, the findings confirm that yoga serves as a low-cost, non-pharmacological, and accessible intervention for managing occupational stress. In both sectors, employees who participated in the 10-week yoga program experienced meaningful improvements in stress-related outcomes. The



slightly more pronounced effects in the private sector suggest that yoga may be particularly beneficial for individuals in high-pressure, performance-driven roles. Moreover, this study aligns with existing literature emphasizing the mental health benefits of yoga (e.g., Gupta et al., 2020; Raghuram et al., 2017), thereby reinforcing its relevance in modern workplace health strategies. Unlike conventional stress management approaches that often require specialized equipment, therapy, or medication, yoga offers a holistic and self-sustaining approach that integrates physical, emotional, and psychological well-being.

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