

Workplace Stress: Investigating Its Influence on Sleep Patterns, Psychological Health, and Cognitive Performance Among Employees

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(IIHMR-U/01/2023-2025/1723)

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INTRODUCTION

- Workplace stress arises when job demands exceed an individual's resources or capabilities, negatively impacting cognitive function and mental well-being. Women report higher stress levels than men, and key stressors include job insecurity, poor leadership, excessive workload, irregular hours, and lack of autonomy.
- **Types of Stress:**
- *Eustress*: Positive, motivating stress that enhances performance.
- *Distress*: Harmful, chronic stress leading to health and psychological issues.
- **Impact on Sleep & Health:**
Occupational stress is strongly associated with poor sleep quality, affecting mood, memory, attention, and increasing the risk of obesity, cardiovascular issues, and depression. Poor sleep, in turn, impairs daily functioning and performance at work.
- **Mental Health & Performance Link:**
Persistent stress may lead to anxiety, depression, and emotional exhaustion, reducing focus and productivity. Mental health mediates the relationship between job stress and performance, affecting job satisfaction and output.
- **Gender & Sectoral Variation:**
- Women often face greater emotional exhaustion due to role expectations and lower autonomy.
- Private sector employees report higher stress levels than public sector employees due to intense competition, deadlines, and job insecurity.
- To examine how sleep quality and duration affect mental health and cognitive function among working individuals and assess the influence of demographic variables such as age, gender, and employment type.

Research Questions

- ▶ How does workplace stress influence employee sleep patterns, psychological health, and cognitive performance?
- ▶ Is there a difference in the impact of workplace stress on sleep quality between employees in the public and private sectors?

Objectives

- ▶ To identify the most common sleep disturbances associated with workplace stress.
- ▶ To explore emotional and psychological symptoms (e.g., anxiety, irritability, burnout) experienced by stressed employees.
- ▶ To evaluate how workplace stress affects cognitive functions such as attention, memory, and decision-making.

METHODOLOGY

STUDY DESIGN:

- ▶ Cross-Sectional Study

STUDY SETTING:

- ▶ Employees from the Private, Government , NGO, and corporate sectors

STUDY POPULATION:

- ▶ Inclusion Criteria: Age ≥ 18 , employed full-time, consented, and able to respond.
- ▶ Exclusion Criteria: Diagnosed with already existing mental issues not related to Workplace stress

STUDY TOOL:

- ▶ structured self-administered questionnaire(with reference to different tools)

SAMPLE SIZE:

- ▶ 115(Calculated= 384)

SAMPLING TECHNIQUE:

- ▶ Purposive sampling + convenience

DATA COLLECTION PROCEDURE:

- ▶ Online Google Form with embedded consent

DATA ANALYSIS PLAN:

- ▶ Quantitative Data: Descriptive statistics, Normalization, trend analysis using MS Excel.

ETHICAL CONSIDERATIONS: Voluntary, right to withdraw, no identifiers

REVIEW OF LITERATURE

TITLE	SUMMARY
Stress at Work: Individuals or Structures?	This article critiques how legal systems address workplace stress, highlighting a gap between law and occupational psychology. Using the Job Demands–Resources (JD-R) model, it argues that stress is shaped more by organizational factors than individual weakness. Legal approaches often individualize stress, overlooking systemic issues. The author calls for integrating psychological insights into legal reforms.
Association Between Occupational Stress and Sleep Quality: A Systematic Review	This systematic review (2011–2022) from <i>Nature and Science of Sleep</i> found a consistent negative link between occupational stress and sleep quality across 38 studies. Most used subjective tools like PSQI. Factors included work conditions, lifestyle, and psychological mediators. The review calls for more research using objective measures and focusing on underrepresented job groups.

Managing Stress at Workplace	This article highlights rising workplace stress and its effects on employees' physical, psychological, and behavioral health. It outlines internal and external stressors, methods of measurement, and consequences like hypertension and depression. It emphasizes individual (e.g., sleep, time management) and organizational (e.g., work-life balance, tech use) strategies for stress reduction.
Daily Work Pressure and Task Performance: The Moderating Role of Recovery and Sleep	This study examines naval cadets over a 30-day voyage, finding that daily work pressure can boost task performance—especially when supported by adequate sleep and recovery. It highlights the role of rest in enhancing performance in high-reliability settings.
Shift Work Sleep Disorder and Job Stress in Shift Nurses: Implications for Preventive Interventions	This study on 580 Italian shift nurses found that women reported higher job strain, insomnia, and sleepiness. Low social support—not high job stress—was strongly linked to sleep issues, especially in women. It recommends support-based interventions for female shift workers.
Factors Affecting Sleep Quality in Firefighters	This study on 118 Iranian firefighters found that 59.3% had poor sleep quality. Key factors included low back pain, shift work, high BMI, and occupational stress—though stress lost significance in multivariate analysis. It stresses early intervention to protect safety and performance.

Occupational Stress and Employees' Complete Mental Health: A Cross-Cultural Empirical Study	This cross-cultural study of 440 employees from Cabo Verde and China found that occupational stress harms mental health, with burnout fully mediating this effect. Optimism moderates the stress–burnout link but not stress–mental health directly. Cultural differences shape stress responses and outcomes.
Work Stress, Mental Health, and Employee Performance	This study of 196 SME employees in China found that work stress during COVID-19 reduced performance by harming mental health. While servant leadership was expected to buffer this effect, it showed no significant impact. The study highlights the need for mental health support to sustain performance in crises.
Is Gender an Antecedent to Workplace Stressors? A Systematic Review and an Empirical Study Using a Person-Centred Approach	This study found minimal and inconsistent gender differences in workplace stress exposure. While women faced more emotional and interpersonal stressors, overall risk profiles were similar. Men were slightly more likely to fall into low-stress categories, challenging strong assumptions about gender-based stress disparities.
Gender Differences on Coping with Job Stress and Organizational Outcomes	This study found that women use more emotion-focused coping, while men prefer problem-focused strategies for job stress. Despite these differences, both styles had similar impacts on stress, job satisfaction, and organizational commitment.

Prevalence of Work Stress
among Private and Public
Sector Employees in Delhi:
A Differential Study

This study found that private sector employees in Delhi face higher occupational stress than public sector workers, especially due to role overload, ambiguity, and poor working conditions. Public sector employees reported stress from political pressure and responsibility. Sector-specific stress management is recommended.

Organizational Role Stress
Among Public and Private
Sector Employees: A
Comparative Study

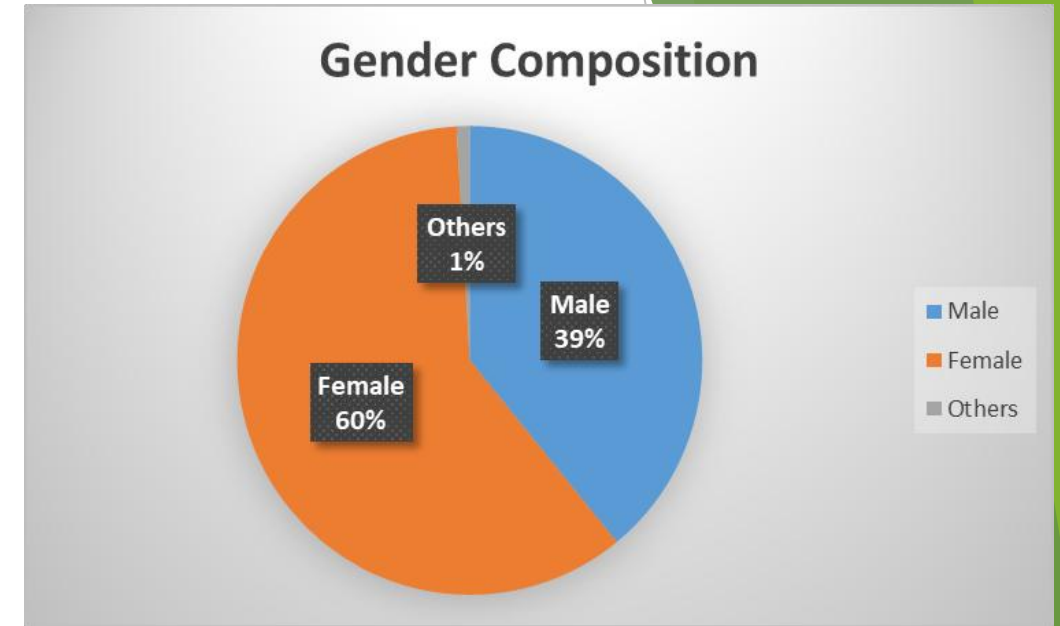
This study found that while overall stress levels were similar, private sector employees in Uttar Pradesh experienced more role overload, inter-role distance, and personal inadequacy than public sector workers. Education and experience influenced stress, highlighting the need for sector-specific interventions.

RESULTS

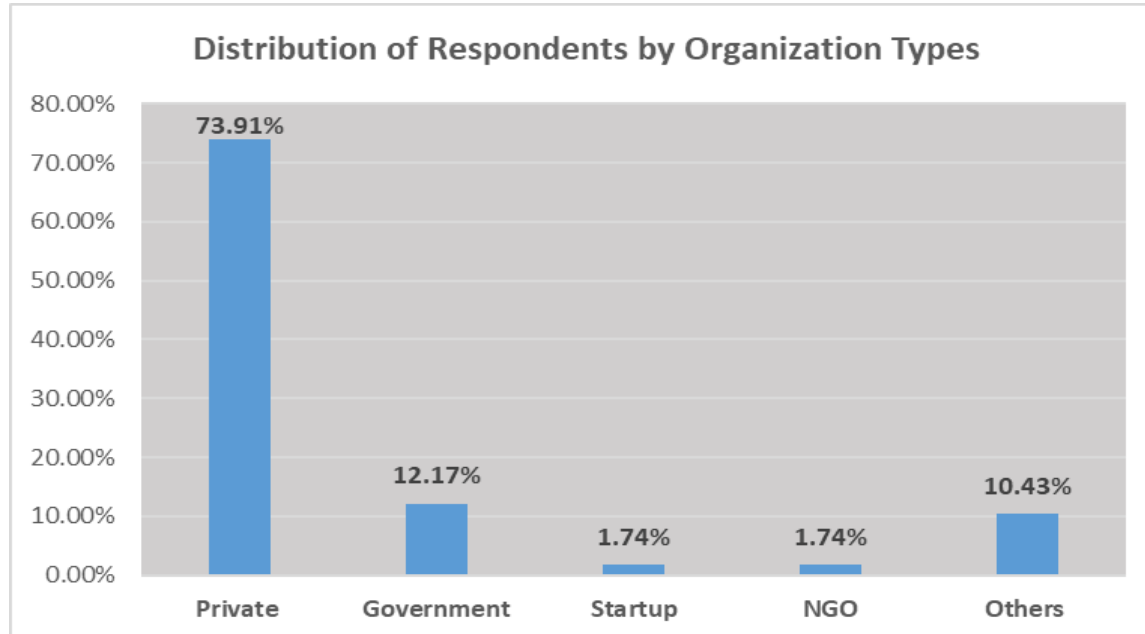
Age-wise distribution of respondents (n=115)

Age Group (Years)	Number of Respondents	Porportion (%)
18-24	29	25.2
25-34	52	45.2
35-44	15	13
45-54	13	11.3
55 and Above	6	5.21

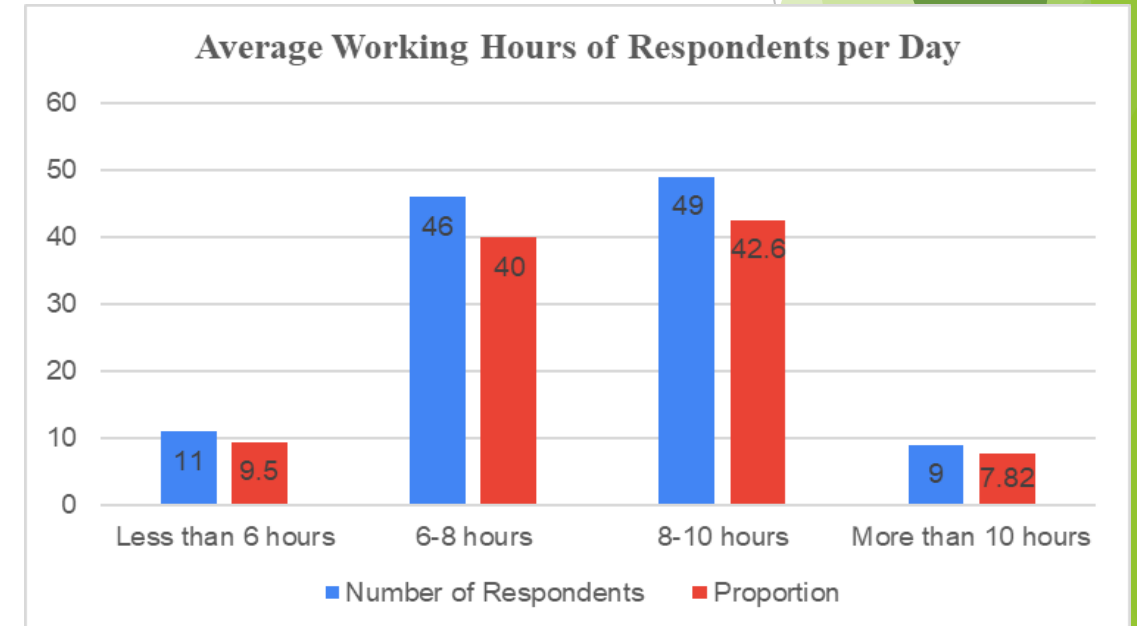
Gender Distribution of Respondents (n=115)



Organization type (n=115)



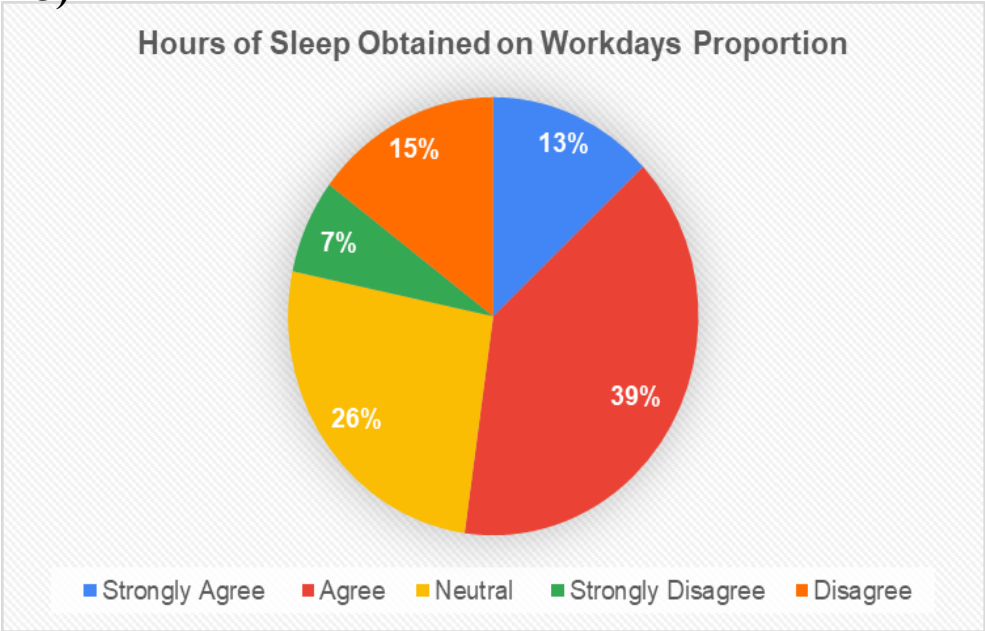
Average hours of working (n=115)



Perception of Workplace Stressors among Employees(n=115)

Statement	Strongly Agree (n/%)	Agree (n/%)	Neutral (n/%)	Disagree (n/%)	Strongly Disagree (n/%)
I am expected to complete too many tasks within a limited time frame	13(11.3%)	44(38.2%)	38(33%)	14(12.1%)	6(5.21%)
I find it difficult to make clear decisions when I am under workplace stress.	20(17.3%)	33(28.6%)	36(31.3%)	19(16.5%)	7(6.08%)
I feel emotionally drained at the end of the workday	17(14.8%)	43(37.4%)	34(29.6%)	16(13.9%)	5(4.3%)
I am expected to be constantly available for work-related communication (email, phone, etc.) outside work hours.	21(18.2%)	27(23.4%)	39(33.9%)	16(13.9%)	12(10.4%)
I often feel overloaded with my work responsibilities.	21(18.3%)	46(40%)	37(32.2%)	7(6.1%)	4(3.5%)

Hours of sleep obtained on Workdays among Respondents (n=115)



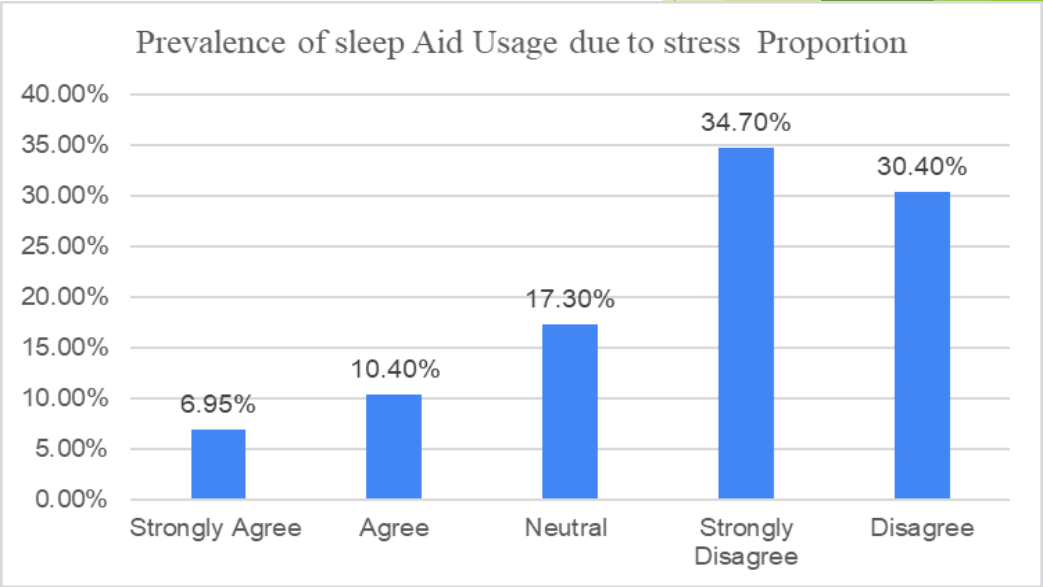
Impact of workplace stress on Sleep Pattern Among Respondents (n=115)



Reported Sleep-Related Issues and Behavioral Responses Attributed to Workplace Stress (n=115)

Response Category	Number of Respondents	Proportion (%)
Strongly Agree	20	17.4%
Agree	37	32.2%
Neutral	36	31.3%
Strongly Disagree	8	7%
Disagree	14	12.2%

Prevalence of sleep Aid usage due to stress(n=115)



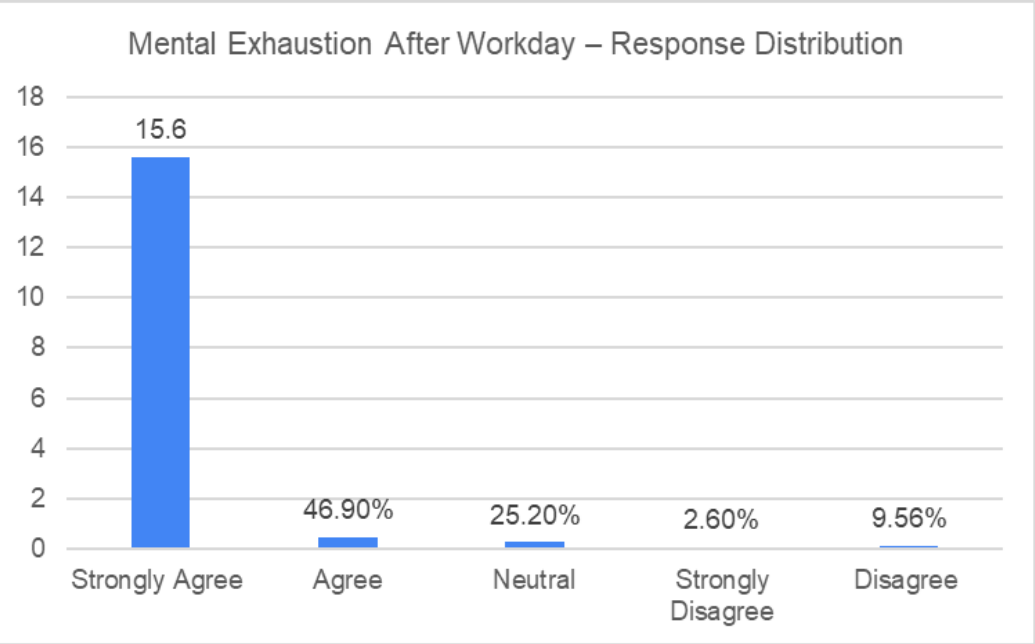
Sleep quality worsening due to an increase in workload (n=115).

Response Category	Number of Respondents	Proportion (%)
Strongly Agree	19	16.5
Agree	46	40
Neutral	28	24.3
Disagree	18	15.6
Strongly Disagree	4	3.47

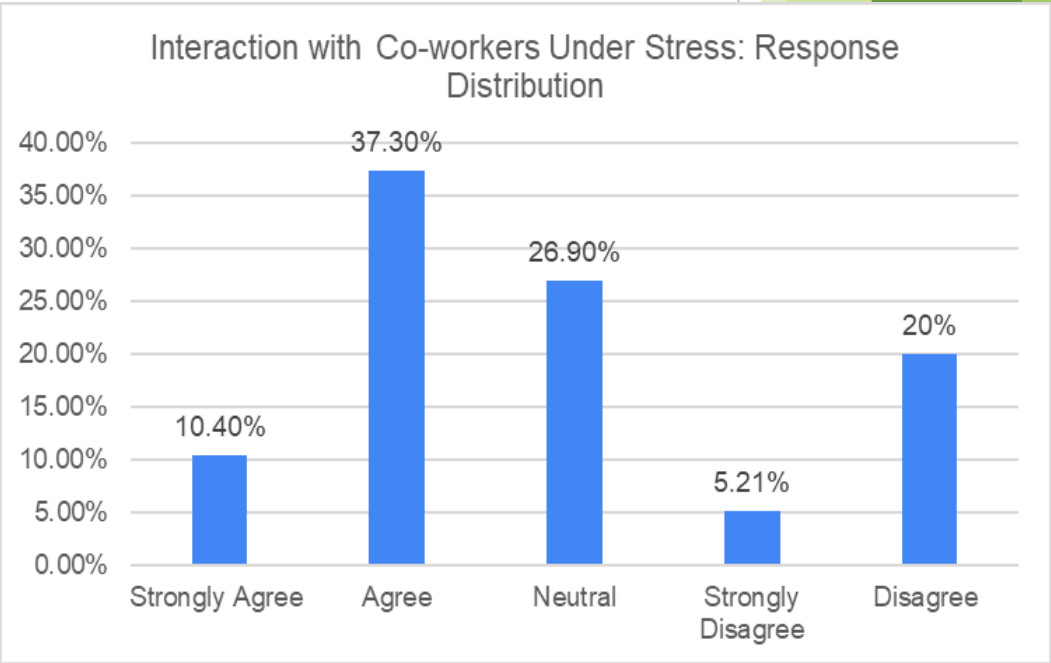
Impact of Stress on Personal and Professional Relationships(n=115).

Response Category	Number of Respondents	Proportion
Strongly Agree	19	16.5%
Agree	38	33%
Neutral	35	30.4%
Strongly Disagree	4	3.47%
Disagree	19	16.5%

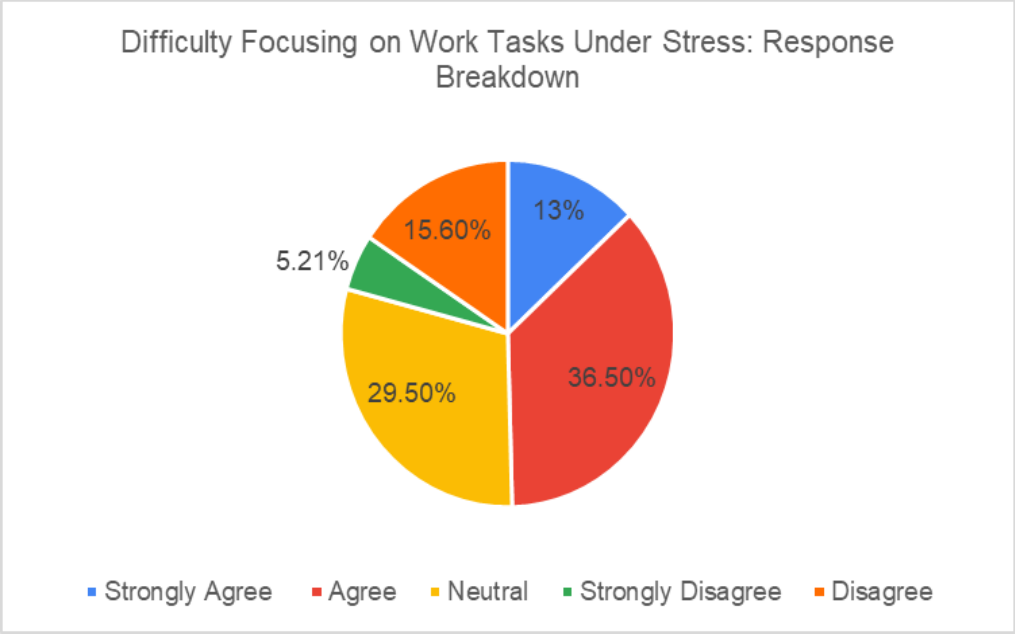
Mental Exhaustion After the Workday(n=115)



Avoiding Co-worker Interaction When Stressed (n=115)



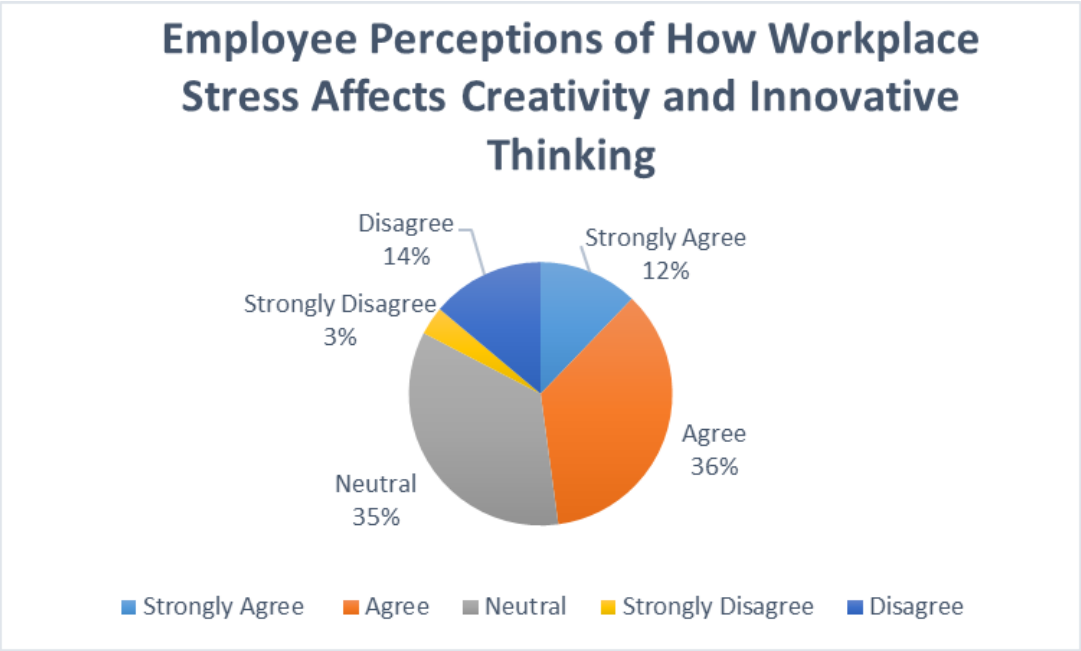
Difficulty Focusing on Work Tasks Under Stress(n=115)



Impaired recall of work-related information during stressful periods(n=115)

Response Category	Number of Respondents	Proportion
Strongly Agree	13	11.3%
Agree	45	39.13%
Neutral	31	26.9%
Strongly Disagree	5	4.34%
Disagree	21	18.2%

Employee Perceptions of How Workplace Stress Affects Creativity and Innovative Thinking



Employee Perceptions of How Workplace Stress Affects Creativity and Innovative Thinking (n=115)

Objective-wise summary of findings

Objective 1: To identify the most common sleep disturbances associated with workplace stress

- ▶ A **significant proportion** of respondents reported **poor sleep quality** associated with increased **workload and job pressure**.
- ▶ **Over 56%** agreed or strongly agreed that **stress affects their sleep quality**.
- ▶ **Nearly 50%** admitted to **changes in sleep schedule and behavior** during stressful work periods.
- ▶ Although most respondents reported **6–8 hours of sleep**, many still experienced **fatigue and non-restorative sleep**, suggesting quality was affected more than duration.
- ▶ **Only 17%** used **sleep aids**, indicating either **under-treatment** or a **preference for natural coping methods**.
- ▶ These findings **mirror Mao et al. (2023)**, who found a **consistent negative association** between **occupational stress and sleep quality** across occupations.

Objective 2: To explore emotional and psychological symptoms experienced by stressed employees

- ▶ **More than 67%** reported feeling **emotionally and mentally exhausted** by the end of their workday.
- ▶ Over **50%** experienced **stress-related behavioral changes** such as **irritability, mood swings, and social withdrawal**.
- ▶ About **50%** admitted that **workplace stress affected their personal and professional relationships**.
- ▶ Respondents reported a **tendency to avoid co-worker interactions** when under stress.
- ▶ These symptoms are consistent with **emotional burnout**, as noted in **Panigrahi (2016)** and **Fida et al. (2023)**.
- ▶ **Women and early-career professionals** appeared more affected, supporting literature that highlights **demographic vulnerabilities**.
- ▶ Emotional distress was observed to **spill over beyond the workplace**, impacting **social and familial life** as well.

Objective 3: To evaluate how workplace stress affects cognitive functions (attention, memory, decision-making)

- ▶ **Around 50% reported difficulty focusing** on work tasks under stress.
- ▶ **Over 50% experienced memory lapses**, particularly with work-related information.
- ▶ Many respondents stated that **stress reduced their creativity and innovative thinking**.
- ▶ Participants noted **poor decision-making and problem-solving ability** under pressure.
- ▶ These cognitive disruptions align with **Christie & Shultz (1998)** and **Chen et al. (2022)**, who found that **chronic stress impairs attention, memory, and cognitive agility**.
- ▶ **Mental exhaustion** was seen as both an **emotional outcome** and a **trigger for cognitive decline**, affecting workplace productivity and efficiency.

RECOMMENDATIONS

- ▶ Offer confidential counseling and psychological support services to help employees manage stress and sleep disturbances by implementing Employee Assistance Program
- ▶ Define "no communication zones" outside work hours to prevent constant availability expectations
- ▶ Conduct regular psychosocial risk assessments using tools like BJSQ, PSQI, and DASS-21 to monitor employee well-being.
- ▶ Evidence-based programs like Cognitive Behavioral Therapy (CBT) for work-related anxiety and sleep disorders.
- ▶ Use anonymous employee surveys to identify stress hotspots and address them proactively.

THANKYOU