

CHAPTER 2

LITERATURE REVIEW

The researcher has conducted an extensive study of empirical materials about Work Stress, its Stressors, and the issues of Job Satisfaction and its impact on employees' productivity, specifically the IT sector employees working in India. This literature review helps identify research gaps specific to the workplace stress context among employees and its effect, which is why a problem statement and clear research questions are formed for the study. The literature review also helps identify specific research gaps and delineates the study's boundaries. The researcher identifies themes such as Work or occupational stress, stressors, job satisfaction, and job productivity in the review to enable all the stakeholders to form a balanced assessment of issues and gaps that require further research. Moreover, the researcher gathered the relevant literature on the impact of work stress on employee productivity and job satisfaction in the IT industry across various dimensions. For this purpose, a plethora of web resources such as Google Scholar, Web of Science, Semantic Scholar, Scispace and Scopus databases, to name a few, were used. The selection criteria included searching for studies from the earliest to the latest research across the field timeline. The researcher utilized the bibliometric technique of using keywords to investigate 130 articles integrated into Zotero Desktop, delimited from an initial 200 articles retrieved regarding IT and work stress.

2.1 Overview of the Indian IT sector:

According to recent articles published by Gartner through Business Standard Newspaper Online¹, Indian information technology (IT) sector spending is projected to reach approximately \$138.9 billion in 2024, an increase from \$122.6 billion last year. This amounts to a double-digit growth rate of 13.2 per cent per year.

The IT industry and BPO (Business et al.) services market in India is forecasted to grow by USD 151.59 bn during 2022-2027, denoting an accelerating growth at a staggering CAGR of 10.8% during the forecast period, as per the reports made in a book called "IT and BPO Services Market in India 2023-2027"².

¹Retrieved from: https://www.business-standard.com/industry/news/spending-in-indian-it-sector-to-clock-double-digit-growth-in-2024-gartner-124041700840_1.html as of 16-03-2022

²Retrieved from: <https://www.researchandmarkets.com/reports/4894469/it-and-bpo-services-market-in-india-2023-2027> as of 16-03-2022

In her research, Vijayalakshmi N. (2020) said that India has also emerged as a leading destination for outsourcing due to its vast pool of cost-effective software professionals, attracting many major IT companies from developed nations. Many Fortune 500 companies outsource their services to India, where IT exports account for 70-80% of total industry revenue (Vijayalakshmi.N, 2020).

Between April and November 2023, India's export revenue from IT services outsourcing, including Business Process Outsourcing (BPO), was vast. The overall IT industry and BPO services market in India during this period contributed significantly to the entire national economy, with the IT services and BPO combined generating a significant portion of the export revenue. India's IT-BPM (Business Process Management) industry generated a revenue of approximately \$245 billion in 2023, with IT services outsourcing playing a crucial role in this figure. This represents a positive growth compared to the previous year, despite global economic challenges and regional conflicts that have influenced trade dynamics, according to the reports in a book called "IT and BPO Services Market in India 2023-2027"³.

While the Indian IT sector has grown, it was arguably driven more by low-cost services businesses under severe pressure. Even more so, according to a report by Wikipedia⁴, the industry is now doubling down on quality, cost-effective goods and services to maintain its competitiveness.

As a result, the IT industry is demanding, fixation, and replete with numerous industry-specific characteristics. Many employees must overwork to comply with deadlines, working 45-50 hours instead of the standard 40-hour week. However, the quick pace of the technology process causes more and more intense pressure on employees regarding work stress and job satisfaction. Prominently, 17.7% of IT professionals experience significant work stress. The prevalence is higher among women and mid-level managers, as per the article published in the Journal of Family Medicine and Primary Care (Trivedi et al., 2024)⁵.

Subikshaa et al. (2018) said long-term work stress harms employee productivity. Almost 58% of the workforce in India has a weak work-life balance, which is higher than the 40% number in the rest of the world (Subikshaa & Jasmin, n.d., 2018).

³ Retrieved from: <https://www.researchandmarkets.com/reports/4894469/it-and-bpo-services-market-in-india-2023-2027> as of 16-03-2021

⁴ Retrieved from: https://en.wikipedia.org/wiki/Information_technology_in_India as of 08-05-2021

⁵ Retrieved from: https://en.wikipedia.org/wiki/Information_technology_in_India as of 08-05-2021

Thus, it can be said that the Indian IT sector, a vital instrument in the country's economic growth, can be characterized by a double-edged sword of high technological progress and high work stress. Also, the international quality standards, including the Capability Maturity Model (CMM) that India has achieved, have added more value to looking towards it as an outsourcing destination for IT services, as per Vijayalakshmi N. (Vijayalakshmi.N, 2020). The success of the Indian IT industry is also further attributed to additional factors such as a large English-speaking population and decades of specialized experience in disciplines like software development and quality assurance, which has made it easier for India-based companies to obtain new opportunities from developed countries through business process outsourcing than other developing economies. The IT sector in India is today at a level that has enabled the country to be counted among the global leaders, thanks primarily to the efforts of industry stakeholders, educational institutions and related government initiatives, according to Wikipedia (Vijayalakshmi.N, 2020) ⁶.

The current review organizes current scholarly production into coherent themes that illustrate the origin of stress, its consequences for work performance, and some metrics used to calculate productivity and satisfaction for the job. The findings suggest that the primary sources of stress -- working conditions and work-related factors such as high demands, low control and lack of social support in the Workplace have adverse effects on employee well-being (health), work productivity and job satisfaction.

Occupational Stress—A Significant Work-Related Health Problem in the IT Sector: Occupational stress is well recognized as one of the significant sources of work-related health issues. According to Rathore et al., (Trivedi et al., 2024) (Rathore & Ahuja, 2015), high levels of occupational stress are part and parcel of working within tight deadlines in a fast-paced environment, as prevalent in the IT sector.

Organizations could use several interventions to mitigate work stress and increase productivity. We need companies to stop measuring productivity by hours worked and focus on employee satisfaction and the quality of Work produced. Building a robust and reliable support structure within the company might promote camaraderie and decrease feelings of isolation among the employees. Promoting flexible work hours to enable employees to

⁶ Retrieved from: https://en.wikipedia.org/wiki/Information_technology_in_India as of 08-05-2021

manage their personal and professional lives more effectively can also be beneficial, according to Prathyusha B (Prathyusha, 2019).

Understanding this intricate relationship between work stress and productivity in the Indian IT sector is essential to building valid interventions. These findings may assist future research and policy-making on improving the team-level work climate for IT workers, addressing specific workforce challenges women face. Addressing these concerns will not just lead to a more positive work culture; it can help stakeholders develop an environment where employees are happier and, therefore, achieve higher productivity levels, ultimately aiding the growth and sustainability of this sector.

This research uses structural equation modelling (SEM: CFA, EFA) techniques to explore the relationship between work stress, work productivity and job satisfaction among IT workers. SEM is the joint application of psychometric and econometric methods that are then used to examine theoretical models through scientific means to test hypotheses created by the researcher, as well as a better understanding of how constructs exist simultaneously within complicated systems. SEM examines how well the theoretical model fits the sample data produced. It is used for measurement as a construct and structural modelling to verify the relationship between certain constructs.

The researcher conducted a detailed review of the prior research on work stress, employability, productivity, and performance among IT employees. This review, with a speciality in the Indian IT sector, helps point out many research gaps that necessitate attention and understanding. A literature review is essential to establishing research gaps, revealing unanswered questions and defining the problem/issue scope in detail. The review comprises work stress, determinants of work stress, job satisfaction of an employee and work productivity. This structured process helps all stakeholders to clearly understand the research gaps and specific issues that need to be targeted by the research.

2.2 Literatures:

This chapter thoroughly examines multiple types of research, articles, books, and related blogs to assess the impact of work stress and its implications on employee productivity and job satisfaction. The study includes research in the IT sector. It examines the effects of relevant work stress in multiple fields, providing a more comprehensive idea of the issue and helping identify familiar patterns or relationships in the results.

2.2.1 Studies related to Work stress/ stress at the Workplace:

In a 1951 article, the British Medical Journal argued that stress is both a result and a cause. The American Institute of Stress points out that stress at Work is a common issue affecting many employees. Approximately 80% of workers reported feeling stressed, with 40% saying their job is highly stressful. These numbers indicate that workplace stress management is critical for organizations and companies⁷

It was also stated that work stress might not only be a personal issue of enhancing employee well-being but also essential to the overall organizational success and having a positive and productive work environment. Meanwhile, Antonovsky and Kats (1967) studied the concept of the sense of coherence (SOC) in their research paper "The Sense of Coherence and Its Role in Health." They found from the studies that a strong sense of coherence, known by understandability, feasibility, and meaningfulness, helps an individual's adaptability against stressors. The study also found that people with a high SOC are more capable of perceiving life events as manageable, understanding them as coherent, and finding them meaningful, thus reducing the impact of stress on their health (Antonovsky, A., & Kats, R. 1967).

Lazarus and Cohen (1977), in their paper "Environmental Stress," explored stress concerning the field of environmental psychology, and they found that stress results from the interaction between individuals and their work environment. Their research even concluded that stress is not only a result of external conditions but is significantly influenced by individual personal opinions and mental evaluations. The study emphasizes the importance of understanding the active interaction between environmental factors and an individual's views, and it also recommends that it is essential to address both external stressors and internal mental operatives (Lazarus & Cohen, 1977). In their research, McCubbin and Figley (1983) pointed out the difference between job demands and an employee's ability to provide mental security for their family as a primary source of job stress (McCubbin & Figley, 1983).

French et al. (1982) concluded that the nature of job demands significantly influences job stress and strain, the amount of control employees have over their Work, and the availability of social support. They even highlighted those organizational changes, such as restructuring and changes in job roles, can increase job demands and reduce job control, leading to higher levels of stress and strain. The study emphasized the importance of organizational

⁷ Retrieved from <https://www.stress.org/> the American Institute of Stress. (n.d.). Stress in the Workplace, as of 16-05-2021

interventions to mitigate stress, such as increasing job control and enhancing social support systems within the Workplace (Sell et al., 1984).

Cohen (1984), in his review "Social Support and Health: A Review of the Literature," studied the relationship between social support and health outcomes. He found that social support is critical in enhancing physical and psychological well-being, reducing stress, enhancing coping mechanisms, and enhancing healthier behaviours. The study also explained the importance of social support in reducing the effects of stress and supporting resilience against illness (Schaefer, 1985).

The International Labour Organization's Report said that employees who are appreciated for their efforts also have a sense of control over their Work and have a higher chance of maintaining higher levels of job satisfaction and overall well-being. The findings also prove that addressing these psychosocial factors is crucial for reducing workplace stress and increasing productivity. It was also noticed that a mismatch between job demands and a person's abilities creates mental and physical challenges for individuals and organizations (ILO, 1986).

Effective stress management is essential for individual well-being and organizational success. Organizations with comprehensive stress management strategies can enhance employee satisfaction and productivity, reduce absenteeism, and mitigate burnout. Such strategies suggest providing support through employee assistance programs, offering stress reduction training programs, and developing a healthy work-life balance. According to Walonick et al. (Walonick et al, 1993), regular analysis and refinement of stress management practices ensure they remain practical and relevant.

Cox and Griffiths (1995) developed a framework to understand how people respond to stress by focusing on the main components of the stress process. The study concludes that understanding work stress requires a comprehensive approach that considers the nature of stressors and the methods used to measure them. They highlight the importance of distinguishing between different types of stressors and their impact on employees (Cox & Griffiths, 1995).

Job stress stems from various sources and affects people differently. It can also be observed from the research published by Dollar and Metzger in the International Journal of Stress Management, highlighting the significant and pervasive issue of work stress and its implications for employee health, motivation, and productivity. The authors said that work

stress is not only a personal issue for employees but also a systemic problem that affects job performance. They also found various sources of work-related stress, including job demands, lack of control, and poor social support, which can lead to adverse health outcomes such as anxiety and depression. The relationship between employee health and the psychosocial aspects of Work is well-documented in the research done (Dollar & Metzger, 1999).

Park's 2007 study, "Work Stress and Job Performance," reveals that stress negatively impacts job performance, reducing productivity, increasing absenteeism, and increasing turnover. It highlights that demographic factors like age, gender, and education affect stress performance. The study recommends tailored stress management strategies and solid organizational support to mitigate these effects and improve employee performance (Park, 2007).

Mangkunegara (2013) defined work stress as the pressure employees feel at Work, manifesting as unstable emotions, restlessness, trouble sleeping, smoking excessively, inability to relax, anxiety, nervousness, high blood pressure, and stomach problems (*Manajemen Sumber Daya Manusia Perusahaan - 2013*, n.d.).

The ILO's 2012 report "Stress Prevention at Work Checkpoints: Practical Improvements for Stress Prevention in the Workplace" provides a comprehensive approach to mitigating workplace stress. It offers a checklist and guidelines for auditing and enhancing workplace practices to address psychosocial risks. Key points include identifying stressors, evaluating work conditions, and implementing improvements to reduce stress. The tool emphasizes the importance of creating a supportive work environment by improving job design, increasing employee participation, and providing resources for stress management. By focusing on these areas, the ILO aims to prevent stress-related issues and promote a healthier workplace (ILO, 2012a).

Ahmed and Ramzan (2013) found that job stress significantly impacts employee performance in the banking sector. High stress lowers efficiency, job satisfaction, and productivity. The study emphasizes the need for effective stress management strategies, such as improving work conditions and offering support, to enhance performance and job satisfaction. Addressing stress can also help reduce turnover and foster a more positive work environment (Ahmed, 2013).

The study on job stress and employee performance in the banking sector in Pakistan shows how stress can hurt productivity and performance. High-stress levels make employees less efficient, less satisfied with their jobs and lower their overall performance. The study

suggests that banks should implement good stress management practices to reduce these adverse effects. This suggests improving working conditions, offering support, and creating a positive work environment. By reducing stress and giving employees the tools to handle it, banks can boost performance, lower staff turnover, and increase job satisfaction. Sauter and Murphy (2013) also noted that job stress happens when job demands do not match a person's skills or resources (Hurrell Jr et al, 2013).

Furthermore, ICRIER Working Paper No. 278 discussed how rising temperatures affect productivity, showing that heat, health issues, and decreased productivity are more significant problems for businesses in poorer countries due to climate change (Sudarshan et al., 2015). Moreover, Akanji's study underscores the critical influence of workplace stress on employee performance. High stress levels negatively impact employees' productivity, job satisfaction, and effectiveness. Stressors such as excessive workload, lack of support, and poor working conditions contribute to diminished performance and increased absenteeism (Akanji, n.d.).

Research by the Associated Chambers of Commerce and Industry of India (ASSOCHAM) found that 42.5% of private sector employees in India struggle with depression or anxiety disorders, which is higher than those in government jobs. This is mainly because of demanding schedules, high stress, and pay based on performance. The study suggested that companies should start wellness programs to tackle these long-term health issues⁸. Hasibuan (2016) added that work stress impacts people's feelings and thoughts (Hasibuan, M. S. P, 2016). Gururaj et al. (2016), along with The National Mental Health Survey of India (2015-16) in their research, also provided details about stress-related disorders and mental health issues made worse by workplace stress (Gururaj, G et al, 2016).

Hans Selye first studied the concept of stress, particularly work stress, and defined it as the emotional and physical strain that arises when job demands do not align with an employee's skills, resources, and needs (Institut universitaire en santé mentale de Montréal, 2012). The study concludes that employees who engage in high emotional labour may experience more significant stress and difficulty separating Work and personal life. Consequently, the study underscores the importance of organizational support systems, such as training programs and supportive management practices, in helping employees effectively manage emotional demands and maintain a balanced life. Improving work-life balance enhances employees'

⁸ Retrieved from: https://www.business-standard.com/article/current-affairs/assocham-survey-reveals-that-42-5-of-corporate-employees-suffer-from-depression-115040600448_1.html as of 11-07-2021

well-being and contributes to higher job satisfaction and increased commitment at Work, particularly in the hospitality sector (Hofmann et al, 2017).

Richa Burman and Tulsee Giri Goswami (2018) researched through 203 research papers from 1993 to 2017 to understand workplace stress. They found that work stress negatively affects employees' personal relationships, health, and well-being. They also found common causes of work stress and coping mechanisms, thus suggesting that everyone attend regular stress management seminars to teach employees about work stress, its effects, and how to manage it. This review provides crucial information for researchers and practitioners and helps human resource management (Burman & Goswami, 2018). Adiguzel and Kucukoglu (2019) said that work stress is a condition where tension changes physical conditions, thinking, and emotions (Adiguzel, A., & Kucukoglu, S, 2019).

A survey conducted by India Today found that 73% of IT employees in India feel stressed due to uncomfortable workplaces, office politics, heavy workloads, long hours, not feeling valued, and constantly dealing with technology⁹.

In India, many professionals feel stressed at Work, and a LinkedIn survey revealed that more than half (55%) of employed individuals experience this. The pandemic increased well-being issues, with many employees considering well-being measures a luxury¹⁰.

A study by Oracle and Workplace Intelligence found that Indian professionals experience higher stress levels than the global average in most cases. This is due to social separation, lockdowns, uncertainty during the pandemic, and increased mental stress at the Workplace¹¹.

In his research, Sutanto et al. (2021) studied how work stress affects employee performance at Karanganyar Primary Tax Office in Indonesia, with 122 employees participating. Their empirical study proved that work stress significantly boosts employee performance (Sutanto, et al, 2021).

Amin et al. (2022) conducted a similar study at CV Berta Lestari Anggana in Indonesia with 40 employees and found that work stress significantly improves performance. Marpaung et al. (2022) studied 76 employees at CV. Mitra Karya Abadi in Indonesia found that Work stress positively and significantly affects performance (Amin et al. 2022) (Marpaung, et al,

⁹ Retrieved from: <https://www.hrkatha.com/research/it-employees-in-india-highly-stressed/> as of 11-07-2021

¹⁰ Retrieved from: <https://www.indiatoday.in/education-today/latest-studies/story/world-mental-health-day-55-of-indian-employees-feel-stressed-says-linkedin-report-1863187-2021-10-10> as of 15-07-2021

¹¹ Retrieved from: <https://economictimes.indiatimes.com/news/company/corporate-trends/indians-professionals-suffer-higher-stress-level-than-most-workers-globally-shows-study/articleshow/87328039.cms> as of 15-07-2021

2022). Conversely, Karim (2022) studied 87 employees at PT Pan Baruna Pekanbaru in Indonesia and found that work stress negatively affects performance at Work (Karim, et al. 2022).

A McKinsey study from February to April 2022 surveyed nearly 15,000 employees and 1,000 HR decision-makers across 15 countries, including India. It found that burnout rates in Asia, especially India, are higher than the global norm. Workplace mental health challenges persist despite employers' efforts. In India, 41% of employees cite a lack of separation between Work and personal life as a stress-inducing factor¹².

The American Psychological Association's 2023 Work in America Survey highlights the changing landscape of workplaces and the need for mental health support. Increased pressures in the pandemic also negatively affected employees' stress levels and job satisfaction. Usually, stress management was the employees' responsibility, but employers now recognize their role in supporting employees' mental health¹³.

Moreover, it found that burnout rates in Asia, especially India, are higher than the global norm. Workplace mental health challenges persist despite employers' efforts. In India, 41% of employees cite a lack of separation between Work and personal life as a stress-inducing factor¹⁴.

In conclusion, work stress is a serious condition that impacts both people and companies. Depending on the factors involved, it can either help or hurt performance. Studying work stress is essential for the well-being of employees and the success of businesses. Understanding and managing work stress can create healthier workplaces and improve employees' feelings. Regular stress management workshops and effective coping strategies are crucial to reducing the adverse effects of stress. This makes the study of workplace stress crucial for research and real-world use.

2.2.2 Work Related Factor:

Work-related factors are significant causes of employee stress, as shown by several studies. For example, Greiner (1998) (Greiner, 1998) found that when job demands go beyond what a person can handle mentally, it can lead to feeling overwhelmed and burned out. Feinberg et

¹²Retrieved from: <https://www.mckinsey.com/featured-insights/future-of-asia/employee-mental-health-and-burnout-in-asia-a-time-to-act> as of 22-08-2021.

¹³Retrieved from: <https://www.apa.org/pubs/reports/work-in-america/2023-workplace-health-well-being>. as of 22-08-2021.

¹⁴Retrieved from: <https://www.apa.org/monitor/2023/01/trends-worker-well-being> as of 25-09-2021.

al. found that work stress is exceptionally high in customer service jobs because employees face conflicting demands from different sources. They also said that work-related stress often happens when job demands become greater than too much for someone to handle, which leads to feeling overwhelmed and burnt out. This is common in jobs where employees face conflicting demands from different people, for instance, in customer service roles (Feinberg et al., 2001).

In addition, occupational stress occurs when employees experience aversive or unpleasant emotional states in their Workplace. Kyriacou and Sutcliff defined stress as unpleasant emotions like tension, frustration, anxiety, anger, and depression. Newton (2009) and Head and Wearing (2002) also defined workplace stress as the above definition (PVS, 2018).

The chapter "Job Stress Research at NIOSH: 1972–2002" by L.R. Murphy thoroughly examines thirty years of research by the National Institute for Occupational Safety and Health (NIOSH) on job stress. Over these decades, NIOSH made significant strides in understanding what causes job stress, how common it is, and its effects on workers' health and well-being. The research pointed out several key factors contributing to job stress, such as heavy workloads, long working hours, lack of control, and poor relationships with coworkers. These stressors can lead to severe problems, including mental health issues like anxiety and depression, as well as physical health problems such as heart disease and back pain. One of the essential outcomes of this research is that it helped shape interventions and policies to prevent and manage job stress, making workplaces healthier for everyone (Murphy, 2002).

Akinboye et al. (2002) found that management changes, long work hours, and bullying are major stress factors that negatively impact employee well-being. Things like management changes, long work hours, layoffs, bullying, and harassment add to work stress, particularly for women, affecting both their physical and mental health (Akinboye et al., 2002).

To measure work stress, we look at mental issues like anxiety and physical health problems (Tellier & Dowden, 2004). Tellier and Dowden (2004) also proved from their research that understanding work stress requires looking at mental and physical health (Tellier & Dowden, 2004).

Teachers also face much stress from overcrowded classrooms, long hours, high expectations, and lack of resources, which affects their job satisfaction (Karuna & Viswanadham, 2011). Moreover, research done by Karuna and Viswanadham (2011) on teachers and the research

done by Anbarasan and Jaganath (2014) on IT workers both showed that different jobs have their stress challenges related to the Work they do (Anbarasan, N. A., & C. Jaganath, 2014).

A big part of work stress is caused by excessive workloads, leading to long hours and extra strain (Aftab & Javeed, 2012). Aftab and Javeed (2012) found that having too much Work is a significant stress factor.

Research on IT professionals shows that different groups experience stress differently, so stress management needs to be tailored to each group (Anbarasan & Jaganath, 2014).

Stress also comes from not feeling appreciated, financial problems, rigid schedules, and work-life balance issues, all impacting productivity and job performance. Indumathi and Thirumakkal (2015) also pointed out that not being recognized and struggling with work-life balance can hurt job performance and productivity (Indumathi & Thirumakkal, 2015).

Some studies say flexible work hours can reduce stress and make employees happier (Nair & Krishnan, 2016). While employees report moderate stress and overall job satisfaction, the study highlights that excessive stress can negatively impact their mental and physical health. Nair recommends several stress management strategies for organizations, including introducing relaxation activities, skill development programs, and flexible work arrangements. The paper concludes that while Infosys employees demonstrate reasonable job satisfaction, implementing targeted stress relief initiatives could further enhance their well-being and productivity (Nair, K. (2016).

The paper by Nakka and Naidu (2016) explores work-related stress among women employees in the IT sector in Visakhapatnam, highlighting that the intense demands of the industry—such as long working hours, tight deadlines, and challenges in maintaining work-life balance—contribute significantly to stress. This stress impacts both personal and professional lives, leading to health issues like fatigue, anxiety, and reduced job performance. In conclusion, the research shows that long-term stress can lead to health problems and make people less satisfied with their jobs (Anuradha & Naidu, 2016).

Sabharwal (2017) found that stress seriously affects physical and mental health, with too much Work and poor work environments being key factors. These findings indicate that work-related stress is a big problem, showing that good strategies to manage stress and help employees stay healthy and productive are essential (Sabharwal, S et al, 2017).

These studies show that work-related factors are a significant source of stress, impacting employees' mental and physical health, job performance, and job satisfaction.

2.2.3 Role Related Factor:

Mack, Nelson, and Quick (1998) identified four primary sources of work stress: role factors, job stressors, physical stressors, and interpersonal stressors. Role confusion and conflicting expectations were especially harmful.

Longenecker et al. (1999) found that problems with roles and the work environment can lead to low morale and more absenteeism in IT. According to several studies done in the field, role-related factors are considered one of the most significant sources of stress at Work. The study identifies critical stressors specific to IT professionals, such as high workloads, rapid technological changes, tight deadlines, and job insecurity. The research highlights how these stress-related issues affect individual performance and organizational effectiveness (Longenecker et al, 1999).

In their Work, Khetarpal and G. Kochar (2006) describe "role stress" as the pressure people feel when trying to meet expectations tied to their job, both from themselves and others. They also found out from the study that 40% of women interviewed had low-stress levels, while 36% felt significant stress related to Work; the main reasons were poor relationships with colleagues, lack of personal satisfaction, and not using their skills to the fullest at Work (Khetarpal, A., and G. K. Kochar, 2006).

Bhatt et al. (2008) also discovered that 'Role Boundedness' causes stress among Indian IT workers, mainly because of long hours and tight deadlines, which mess up their work-life balance. Drafke (2009) explained that underusing skills, having too much Work, and lacking resources raise stress levels (Drake, M, 2009). Kavitha (2012) highlighted that married women face more workplace pressure in the IT industry than unmarried ones, showing how personal and professional factors mix (Kavitha, P, 2012). Satpathy, Patnaik, and Mitra (2014) noted that constant skill updates and high demands in IT can increase stress and affect job success. These findings show that role-related factors are major stressors crucial for understanding and managing workplace stress (Satpathy, et al, 2014).

2.2.4 Health Related Factor:

Work-related stress is influenced by various demands and environmental factors, including how much control people have over decision-making, as described by demand-control theories (Baker, 1985).

As Ilgen (1990) highlights, stress is a significant health problem with far-reaching consequences for individual well-being and organizational productivity. Studies on the same matter also reveal stress's significant impact on people and organizations, making it a costly issue to tackle. The estimates also suggested that work-related stress significantly costs the national economy in terms of sick pay, lost productivity, healthcare, and legal costs (Palmer et al., 2004).

Workplace stress has received considerable attention in social psychological research (Cooper et al., 2001). Findings show that long-term stress negatively affects individual health (Mohren et al., 2003; Ursin & Eriksen, 2004) and employees' attitudes towards their organization (Cropanzano et al., 2003).

Personal traits also play a crucial role; for example, research has shown that introverted individuals with high levels of neuroticism, like physicians, are more likely to develop stress-related health issues (McManus et al., 2004). This shows the need to consider both personality traits and work environment factors when understanding the impact of stress on health (McManus et al., 2004).

Sowmya's (2010) research also proved that, in the department of personal and organizational development, he observed the levels of physical, mental, and behavioural stress experienced by individuals in their professional, personal, and social lives. On the other hand, there was no link to be found between age and physical stress-related medical symptoms, while it was seen that chronic personal stress might affect employees' sleeping habits. Additionally, the research showed that age influences how behavioural stress impacts job performance and nutritional balance. The study also found that a significant positive link exists between the experiences of male and female workers, suggesting that gender plays a vital role in stress management (KR, Sowmya, 2010).

The highest rate of work-related health issues has led to an average of 23 lost days per person. Industries such as defence, public administration, teaching, and social care were all particularly affected, with 9.9 million days of medical or sick leave from 2014 to 2015 (HSE,

2015). These insights show how important it is to address health-related factors as significant stressors in the Workplace.

2.2.5 Organizational Factor:

According to Schabracq (2003), an organization's culture plays a crucial role in how stress develops, and organizational changes can significantly impact this. While organizational cultures provide established ways to handle everyday challenges, their flaws can also lead to employee stress. The work environment and tasks must be well-structured for employees to focus and stay healthy. Four critical factors support this: orderliness, social connections, alignment of beliefs and values, and safety. If any of these factors are out of balance, it can trigger stress. Even though it has been proved through earlier findings that organizational changes can disrupt this balance, taking proactive steps can help lessen its adverse effects and create a supportive work environment (Schabracq, M. J., 2003).

A positive organizational culture that emphasizes employee well-being, regular recognition and feedback, inspiring leadership, open communication, and teamwork is helpful and guards employees against job stress and burnout. This is especially clear in the hospitality industry, where such a culture supports resilience, job satisfaction, and employee retention (Kokt & Ramarumo, 2015).

In schools, teacher stress is strongly influenced by organizational factors such as management and administration, student behaviour, time demands, and personal issues outside of Work (Ahmad Saufi et al., 2021). Moreover, work-related stress is a widespread and severe problem at any workplace caused by various organizational factors. A large study across six electronics companies in the field found that stress shows up as intense anger, severe job dissatisfaction, and physical problems like headaches and stomach issues. The study also pointed out the four primary reasons for employee stress development: poor relationships, a bad organizational culture, work obstacles, and unsupportive leadership. Addressing these issues can help create a healthier work environment and lessen the adverse effects of stress (Kang, L. S., & Singh, R., 2021).

These findings show that organizational factors are important sources of stress in the Workplace, especially in fields like IT. By understanding and addressing these sources of stress, organizations and companies can better manage work stress and create a more supportive and effective work environment for their employees.

2.2.6 Gender Related Factor:

Gladies and Kennedy (2011) found that female employees in India's IT sector are more vulnerable to the adverse effects of the organizational climate and job pressure. They stress that managing stress is crucial for IT companies to identify and address the root causes of stress and create a positive work environment. This underscores the importance of effective stress management and supportive work culture, particularly for women in the IT industry (Gladies, J. Juliet & Vijila Kennedy, 2011).

Gbolahan and Catherine (2012) investigated how perceived stress affects anxiety during performance reviews, considering factors like core self-evaluations and gender. They found no significant differences in stress and discomfort during performance reviews between men and women based on these factors. However, they noticed that men generally earned higher salaries, and women experienced more stress. This suggests that HR professionals should create policies and performance evaluations to reduce stress, emphasizing the need for gender-sensitive approaches to enhance workplace well-being (Gbadamosi, G., & Ross, C, 2012).

Kumudha A. and Jancy Rani's 2012 study revealed that 120 women workers experienced a range of stress-related health issues, such as frequent colds, migraines, back pain, fatigue, tonsil disease, stomach problems, high blood pressure (60%), irritability (60%), eye problems (60%), and stress fractures (43%). This also proves the importance of effective stress management in the Workplace (Kumudha, A., & Rani, J. 2012).

Revati, C. D. (2012) studied a total of 92 people (48 women and 44 men) and found from empirical studies that women comparatively experienced much higher stress levels than men. Moreover, it was observed that women also faced unique challenges like family issues, health problems, heavy workloads, poor working conditions, and conflicts with others, compared to their counterparts, which had a significant impact on their job performance. Men, on the other hand, reported that stress from rivalry, health issues, and heavy workloads prove to be a source of stress. The study suggests that organizations should invest in Employee Assistance Programs (EAP) and wellness initiatives to help manage stress and enhance employee well-being (Revati, C. D., 2012).

T. S. Janani (2016) looked at stress levels among women employees in the IT sector in Coimbatore City, surveying 1,026 women. The study found that stress significantly affects these women, though it does not seem to lower their productivity. Married women were

found to be more affected by stress-related issues like anxiety, depression, low self-esteem, ulcers, and uterine problems compared to unmarried women. The study also recommended that married women use stress management techniques, positive thinking, time management, good sleep, and healthy eating to tackle stress at Work. Single women could benefit from simple relaxation techniques and help themselves to perform better at Work (Janani, T. S., 2016).

Overall, these findings prove essential in showing that gender-related factors are important workplace stress sources. Understanding and addressing these gender-specific stressors can help organizations and institutions involving both genders manage stress better and create a more supportive and effective work environment for every employee.

2.2.7 Personal and Interpersonal Factors:

Interpersonal stressors refer to difficulties dealing with relationships with coworkers, friends, family, and associates. Ronald (2002) conducted a comprehensive study on how job-related factors affect working women's job satisfaction and well-being. The study looked at a large group of women. It examined how physical demands, job instability, hazards, work-family conflict, and other stressors like the physical environment and job demands impacted their well-being. It included many women in low-status jobs, giving essential insights into their experiences. The findings showed that personal and job-related stressors significantly impact women's well-being (Burke, R. J., 2002).

Cryer et al. (2003) focused on how chronic stress affects well-being, relationships, and job performance. They also researched the best stress management strategies that can be applied from a health perspective. Moreover, they even found that a mix of physical activity, a healthy diet, enough sleep, relaxation techniques, social support, positive self-talk, and cognitive-behavioural therapy can help reduce the adverse effects of chronic stress and thus help improve overall health. This study highlights the importance of managing stress through personal health habits and support from others (Cryer et al, 2003).

Satija S. and Khan W. (2013) emphasized the importance of managing workplace stress and its effect on employees' creativity and professionalism. Their study showed that emotional intelligence (EQ) plays a significant role in reducing work-related stress. They also observed that EQ is a significant factor in job stress, which shows that organizations should mainly focus on developing EQ and stress management programs to help create a healthy and

productive work environment. This shows that personal coping skills and relationships play a role in reducing and effectively managing stress at Work (Satija S. and Khan W, 2013).

Karthik (2013) looked at the causes of workplace stress, focusing on the interaction between personal and professional factors. He noted that stress could have positive and negative effects, with moderate levels improving work performance. The study suggested that the right amount of stress could boost productivity, while too much stress could have harmful effects. Karthik also discussed the importance of employees being involved in stress management and how they can help reduce stress at Work, emphasizing the importance of personal and interpersonal factors in managing stress (Karthik, 2013).

These studies show that personal and interpersonal factors are important workplace stress sources. Individuals can effectively manage work stress by addressing these factors through healthy habits, developing emotional intelligence, and having supportive relationships with family and colleagues. Understanding and dealing with these personal and interpersonal stressors can help organizations create a healthier and more productive work environment for their employees.

2.2.8 Environmental Factor:

DeFrank and Ivancevich (1998) highlight a growing number of stress-related claims at the Workplace in their research. They identified vital stress factors from the research, like layoffs, workplace violence, new technology, and diversity. These issues can lead to stress-related illnesses and injuries. In addition to this, they also reported that changes in workers' compensation laws, especially for stress-related claims, can be responsible for stress problems. It was suggested that they have employee support programs, flexible work hours, and change company rules and activities to reduce stress. All of these steps can help employees handle stress better overall and thus help to create a healthier work environment (DeFrank & Ivancevich, 1998).

Manivannan, Krishnapriya, and Nandhini (2014) studied stress among IT workers in Chennai's IT Park. The fast growth of the software industry has put more pressure on IT workers to balance Work and personal life, leading to job stress. Their study of three IT companies found that most IT workers face significant challenges that add to their stress. They stress the importance of productivity in the IT sector and say managing stress is crucial for keeping productivity high (Manivannan, et al. 2014).

These studies show that workplace stressors include layoffs, violence, new technology, and trying to balance Work and personal life. Addressing these issues through support programs and changing company rules can help create a healthier and more productive work environment.

2.2.9 Financial and Career-Related Factors:

A significant stress factor for IT professionals is their salary for doing the Work. Many IT workers start with low pay compared to other jobs requiring similar skills. For example, in India, the starting salary for IT professionals is around Rs. 10,000 per month, which is very low compared to other fields or jobs where employees are paid. This difference in pay many times leads people to switch jobs to find better salaries (Report, "Jobs with Justice," October 2006).

In his Work, Robbins (2004) also explains that stress is complex when people face demands or chances that align with their goals but come with uncertain results. This means that stress is sometimes good and can motivate people to change their behaviour and adapt. It is essential to look at stress's positive and negative effects on people (Robbins, 2004).

Charu M.'s (2013) study, "Effect of Stress at Work on Quality of Life (QWL) Among the Associates of the IT Industry," found a strong connection between high stress levels and poor quality of work life for IT professionals. The study highlighted several factors affecting job satisfaction, like fair pay, clear job roles, supervisor support, a good work environment, job fit, role flexibility, and stress. Rapid changes in technology in the IT industry were also a significant stress factor for employees. These findings show that addressing financial and career issues is essential to improve job satisfaction and reduce stress in the IT sector (Charu, 2013).

2.2.10 Studies Related to Job Satisfaction:

Job satisfaction is essential for understanding how work stress affects employee productivity and well-being. Kuo and Chen (2004) found that personal factors like marital status, age, job title, and salary influence job satisfaction. This shows that personal and job-related factors need to be looked at to help improve job satisfaction (Kuo and Chen, 2004).

Srilal and Maheshpriya (2015) investigated the problems small and medium software companies face in hiring and keeping software developers employed. They found that high job turnover and low employee retention are caused by stress at Work, which ultimately

affects job satisfaction. High workloads, meeting targets, and night shifts worsen job satisfaction. They also found that age, marital status, income, and work experience affect employees' job satisfaction (Kuo et al, 2004).

Riaz et al. (2016) studied the link between job stress and job satisfaction among nurses at DHQ Hospital in Okara. They found that higher stress was mainly related to higher job satisfaction. This may suggest that managing stress well can help improve employees' satisfaction with their jobs. This study shows that handling stress properly is essential for keeping employees satisfied (Riaz et al. 2016).

Jaafar, Hassan, and Zambia (2021) examined stress and job satisfaction among lecturers at Politeknik Tuanku Sultanah Bahiyah in Malaysia. They found that less stress was linked to higher job satisfaction. This shows that managing stress is essential for boosting employee motivation and satisfaction (Jaafar et al, 2021).

Kiruthika and Rajini (2021) also examined how work stress affects job satisfaction among IT workers in Coimbatore City, Tamil Nadu. They found that younger IT workers were more stressed and less happy with their jobs than older workers. Even though they had a good work-life balance and support from their jobs, many younger workers were not satisfied with their pay and benefits. The study recommended that companies should work on better stress management, increase salaries, and build a positive work environment to make employees happier with their jobs (Kiruthika & Rajini,2021).

Bhanu and Sai Babu (2021) studied workplace stress and job satisfaction among IT workers in Visakhapatnam, India. They found that the fast IT industry growth might be responsible for much stress among the employees. Their research aimed to see how this stress affects job satisfaction and showed the importance of managing stress to improve employee well-being and performance (Mvv, 2017).

Dr. K. Mekala (2021) examined job satisfaction among IT employees in Coimbatore City. The study showed that job responsibilities, security, and salary are essential for job satisfaction. It recommended improving work culture and developing a plan to address these key factors to enhance job satisfaction (Mekala, K., 2021).

Akshita Sharma and Dr. Kaushlendra Mani Tripathi (2021) examined the relationship between job satisfaction and stress in the Workplace. They eventually discovered that higher stress is significantly linked to lower job satisfaction. They also concluded that stress

affecting work performance can have broader effects, leading to lower job satisfaction, so improving work conditions is essential to enhancing job satisfaction (Sharma et al. 2021).

Navneesh Tyagi and Rita Ran (2021) examined how work stress impacts job satisfaction and performance in the banking industry. They found that more stress is linked to better job satisfaction and performance, suggesting that managing stress well can improve both (Navneesh Tyagi & Rita Ran, 2021).

Dr. Suramya Mathai and Dr. Resmi R. (2021) studied occupational stress and job satisfaction among IT employees in Ernakulam District. Their research revealed a strong connection between stress factors and job satisfaction, highlighting the need for new practices to improve job satisfaction and keep employees satisfied with Work to the fullest extent (Mathai et al. 2021).

Robertson, Cooper, Williams, and Williams (1990) found that stress at Work negatively affects job satisfaction (Robertson et al, 1990). Similarly, Shah et al. (2012) found that organizational structure can hurt employee efficiency, but rewards can improve it (Shah et al. 2012).

Sang, Dainty, and Ison (2007) explored how gender affects occupational stress in the architectural profession. Moreover, they found that women had much lower job satisfaction, which often led to work-life conflicts, higher turnover intentions, and health issues among the employees (Sang et al., 2007).

In conclusion, these studies demonstrate that job satisfaction is essential to understanding how work stress impacts employee productivity. By managing stress well through coping techniques and considering both personal-interpersonal factors and job-related factors, companies can improve employee well-being and increase employee satisfaction, leading to higher employee performance.

2.2.11 Studies Related to Work Stress and Employees' Productivity:

The IT industry worldwide is often recognized for its excessive demand workload and high job pressures, often resulting in heightened stress levels among employees working in this sector. Not only does this Stress affect their well-being, but it also undermines their work productivity. There is a very complex relationship between work stress and productivity; organizations must make strategic decisions based on that. A few researchers say productivity is at its peak with moderate work stress. However, as it goes beyond that particular level,

productivity starts decreasing at an increasing rate. It also has been found that the productivity of employees remains poor at Shallowa level of Stress as well as at a very high level of Stress because, at a low level of Stress, employees may not be sufficiently energized and may not be whole-heartedly dedicated to their job, resulting in low productivity. Moreover, employees want to get out of that stressful situation at its peak, resulting in no concentration on work. Moreover, the pressure employees face while working in the IT sector often face to achieve organizational goals amidst high turnover rates intensifies the work stress caused and thus leads to burnout and decreased performance or less productive work.

David Allen's book *Getting Things Done* (2003) offers practical productivity advice that is accessible and applicable to all. Allen's methods help people link big-picture planning with everyday tasks, making it easier to manage time well. Readers and psychologists have praised this book for its helpful tips on balancing work and personal life, which makes it a valuable guide for anyone who wants to improve how they get things done (Allen, D., 2003).

Menezes (2006) defines productivity as how well an employee meets his/her employer's expectations in terms of both quantity and quality of work. Bojke et al. (2012) suggest another method of measuring productivity by comparing overall output to the input. These methods offer straightforward ways to measure how healthy employees perform, as explained in Singapore's productivity measurement handbook (2011). Using these tools helps organizations identify where to improve and support their employees better. "Value added per worker," a standard measure, shows how much an employee adds value to what the company produces (Menezes, 2006).

Research consistently demonstrates that workplace stress has serious adverse effects, including poorer job performance, increased fatigue, reduced learning capacity, and heightened signs of depression and hostility (Lepine et al., 2005). Early studies by Motorola, Packard, and Manning (1986) similarly showed the detrimental impact of workplace stress on employee well-being and performance (Lepine et al., 2005).

Halkos and Bousinakis (2008) proposed that job stress can have positive and negative impacts. According to them, while moderate Stress may motivate employees, excessive Stress can lead to diminished productivity at work, raise absenteeism, and escalate turnover rates, all of which can incur costs for organizations and jeopardize employees' health (Halkos, G., & Bousinakis, D., 2010).

Imtiaz (2009) explored the impact of Stress on employee performance, finding that personal issues, lack of support, and poor work environments significantly decrease productivity and elevate turnover rates. Effectively managing Stress is critical because it directly influences employee performance and organizational goal achievement. This study, analyzed using SPSS Version 16, also shows the importance of implementing stress management strategies to enhance employee well-being and productivity (Imtiaz, S., 2009).

Adaramola (2012) examined how mental and physical Stress at work impede employee performance and workplace safety. Stress can lead to more accidents, mishandled customer interactions, and conflicts due to discrepancies between job demands, available resources, and employee needs. Addressing workplace stress is essential to boosting productivity and efficiency in challenging situations (Adaramola, S. S., 2012).

Khalid A. (2012) identifies a significant correlation between Stress and organizational work performance. His study, "Role of Supportive Leadership as a Moderator between Job Stress and Work Performance," exclaims how vital the role of supportive leaders is in mitigating the adverse effects of Stress on employee performance for any organization. When leaders provide their employees with adequate support and resources, employees can perform better at work overall (Khalid, A., 2012).

In their research, Naqvi et al. (2013) define Stress as a mental health issue that can manifest physically significantly when the demands exceed employees' capabilities. Complex relationships with colleagues and supervisors, workloads beyond what employees can handle, and financial worries increase stress levels. Their research demonstrates a clear link between Stress and reduced employee productivity. The Stress Pulse Survey Report (2014) supports these findings, highlighting significant drops in daily productivity due to Stress, with many employees reporting losing an hour or more each day at work (Naqvi, et al., 2013).

De Silva and Thilakasiri (2014) investigated how workplace stress influences employee behaviour and productivity. Stress can lead to positive and negative behavioural changes, but excessive Stress diminishes productivity and increases absenteeism, turnover, and accidents—factors that can negatively impact a company's financial health. The American Institute of Stress estimates annual workplace stress costs amounting to \$300 billion. Their study, involving 77 Air Force officers, found a weak positive correlation between Stress and output, suggesting socioeconomic factors play a crucial role in how Stress affects employees (De Silva et al., 2014).

Ratnawat and Jha (2014) underscore the importance of addressing workplace stress, which can negatively impact employee health and productivity. Despite the well-established connection between Stress and job performance, there is a noticeable gap in research exploring how Stress influences productivity (Jex, 1998). Ratnawat and Jha (2014) looked at studies from 1990 to 2014 to understand how Stress affects job performance. They found 35 factors that affect how well someone does their job and planned to study how Stress affects people's productivity. They gave suggestions for how to study it better in the future. Knowing how Stress works at work is critical for companies to make good plans to manage it, which helps workers feel better, work better, and make the whole company do better (Ratnawat & Jha, 2014).

Stress affects people differently depending on how they deal with it. When stress levels are too high or too low, it can make people feel evil at work. This can lead to issues like feeling anxious, sad, or even physically sick, causing them to visit the doctor more often (Goldberg, 2014).

Also, research by Bashir and Ramay (2010) shows that Stress from work significantly affects how well someone does their job. This highlights why it is essential to deal with Stress and the problems it causes at work (Bashir & Ramay, 2010).

Public Health England (2015) discusses presenteeism as essential for measuring employee productivity. Presenteeism occurs when employees are physically at work but not fully involved or getting much done. To know how productive employees are, we must consider presenteeism and whether they work well during their hours¹⁵.

Shree Raja and Murali (2015) looked deeply into what makes workers more or less productive and how we measure that. They found important things like job quality, how well the boss manages things, workers' skills, money worries, tools, and materials. They split these into two groups—people's jobs and how they run the business. They found that in India, Spain, and the UK, how well the boss manages and the workers' skills significantly impact how much work gets done. However, things like new ideas, how much energy people have, what they want to get done, how long things last, and staying safe all make it harder to do more at work. They also noticed that not managing resources well in building things stops workers from doing a good job (Rajat Gopal et al., 2015).

¹⁵Retrieved from https://www.researchgate.net/publication/328201471_Measurements_of_workplace_productivity_in_the_office_context_A_systematic_review_and_current_industry_insights as of 05-09-2021.

Okeke and Oboreh (2016) studied Stress's impact on productivity in Nigeria's banking sector, which is concerned with Stress's global negative impact on employee productivity. Based on the Person-Environment (PE) Fit Theory, the survey covered five Awka banks using a 5-point Likert scale questionnaire for 250 employees. Analysis with chi-square tests and percentages showed significant productivity declines due to workload stress and absenteeism. The study urges Management to mitigate workplace stress and enhance productivity (Okeke et al., 2016).

Bharathi and Gupta (2017) reviewed job stress and productivity over four decades (1974–2016), focusing on India's IT sector, which employed 1.3 million women in 2016. The study also looked at many different types of jobs, like teaching, banking, helping, and jobs that had employees working with computers. They all had the same opinion and said that too much work, having trouble with what someone should do, unfair treatment, and how people talk to each other make people feel more stressed. They said how people work is very important for seeing how much someone can do. They also talked about how Stress at work makes it harder to get things done (Bharathi & Gupta, 2017).

Sharmilee Bala Murali, Abdul Basit, and Zubair Hassan (2017) examined how Stress at work makes it hard to get things done. They asked 136 people who work in different parts of Malaysia about their jobs. They also found that when people felt much pressure and did not know what to do, they did not do as much work, thus becoming less productive. However, when there was much work to do, and people wanted to do well, it helped them get things done. They said telling people what to do and when to do it helps them do better. Having more people in a study and using ways to understand what is happening more could help make studies better in the future (Sharmilee Bala Murali et al., 2017).

Harshana Sajith (2018) said that feeling too stressed at work because there is too much to do can make people sick and stop them from getting things done. Despite Stress's drawbacks, it can boost morale in specific contexts. The article covered stress concepts, models, and impacts on organizational efficiency, emphasizing top Management's role in managing Stress for better workplace morale and productivity (Harshana Sajith, 2018).

Muhammad Ehsan and Kishwar Ali (2019) explored the effects of work-related Stress on job performance among Faisalabad's bank employees. A study with 50 employees and surveys looked at Stress and found that it makes people work less. Stress comes from pressure, being

unsure what to do, and fights at work, making people do their jobs worse (Muhammad Ehsan & Kishwar Ali, 2019).

Allah Baksh, S., and Sulaiman, N. (2019) studied Stress in the IT/ITES industry. They found that Stress hurts people's work and makes the company look bad. They used numbers to show this. They also found that reducing work stress is essential to improving performance (Allah Baksh, S., & Sulaiman, N., 2019).

Sucharitha, M., & Amzad Basha, M. (2020) examined how Stress affects work. They asked 200 people about work and said that feeling too much Stress hurts how people do their jobs because they think bosses want them to do better (Sucharitha et al., 2020).

Harry and Joy (2020) looked at how to manage Stress to help people do their jobs. They looked at ways to work and said that managing Stress can help people do more work and want to do their jobs better. They also found that giving people more ways to perform their jobs can help them work more and do better (Harry et al., 2020).

Dave Schoenbeck (2021) talked about how Stress and work go together. He said that Stress can make people do more work and think about what they can do to do better work. He said that working on what people do each day can help people do more work and think about what they can do to do better (Dave Schoenbeck, 2021).

Dedi and Iskanto (2021) discussed how Stress affects job performance. They said that feeling too much Stress makes people do their jobs less. They said that a computer program can show that Stress affects job performance because people do not feel like they can do better work when they feel too much stress (Dedi & Iskanto, 2021).

Shree, Bhavani, Bharthi, and Gobbilla (2021) revealed how Stress affects people's job performance in their studies. They also said that Stress makes people work less. They said that giving people more ways to do their jobs and talking to people about their work can help people do their jobs better (Bharthi, B. et al., 2021).

Barinem and Amah (2022) looked at how people do their jobs when they feel stressed. They said that Stress makes people do their jobs less. They said that giving people more ways to do their jobs and talking to people about their work can help people do their jobs better (Barinem et al., 2022).

Karim (2022) investigated the effect of work stress on employee performance at PT Pan Baruna Pekanbaru (Indonesia). The data collection technique that he used is based on the questionnaire. The number of participants was about 87 employees, and the analysis technique was simple regression analysis using SPSS. The results of hypothesis testing indicate that work stress negatively affects employee performance. Higher levels of work stress were associated with decreased productivity, lower job satisfaction, and increased absenteeism (Karim, 2022).

In conclusion, understanding and managing work stress is essential for organizations aiming to optimize employee performance and achieve sustainable success. By implementing effective stress management strategies, organizations can mitigate the negative impacts of Stress on productivity and foster a healthier, more productive workforce.

2.2.12 Studies showing the effect of Work stress, Job satisfaction and Employee productivity with Gender as a moderator.

The study conducted by Sofoluwe et al. (2015) examined the relationship between Gender, Stress, and job performance for academic staff in tertiary institutions in Anambra State, Nigeria, using a descriptive survey method with approximately 500 participants. The author used work overload as the primary source of Stress, followed by role conflict and performance pressure. The findings of the study showed that both Gender and Stress have a significant influence on job performance, with Stress negatively impacting productivity. The author recommends reducing workloads, encouraging academic publications, and considering Gender in task assignments to improve efficiency and effectiveness in teaching. It has been found that a significant relationship exists between gender and stress management strategies, indicating that the Management of Stress can depend on the Gender of the individual involved. Female lecturers, for instance, may experience stress differently due to their multiple commitments at home and work, which can hinder their ability to accomplish specific goals.

Moreover, male lecturers are reported to be more easily adjusted to Stress than their female counterparts, which suggests that Gender can influence how effectively individuals cope with Stress and, consequently, their job performance. The study also indicates that Gender and Stress significantly influence academic staff job performance in tertiary institutions (Sofoluwe et al., 2015).

The research done by Simona Gilboa et al. (2005), in the context of the relationships between role ambiguity, role conflict, and job performance, showed that role ambiguity and role conflict negatively affect performance, with demographic factors such as age, tenure, and Gender moderating these effects. According to the study, the relationship between Stress and work productivity is generally negative, as the findings indicate that various types of Stress, such as role ambiguity and conflict, are negatively related to work performance. Additionally, a meta-analysis on workplace stress indicates that various types of Stress, including role ambiguity and role overload, are negatively correlated with job performance, with age moderating the impact of role ambiguity. At the same time, Gender and tenure do not significantly influence these relationships. Additionally, empirical evidence suggests that the impact of Stress on performance may differ between genders; for instance, the relationship between ambiguity and performance was found to be significantly more negative among women than among men (Gilboa et al., 2005).

The study by M. Pilar Matud (2004) examines how men and women aged 18 to 65 deal with Stress and mental health. She found that women generally feel more stressed from significant life events and minor daily hassles than men. It was also noticed from the study that women also tend to experience more emotional and physical symptoms because of Stress. Although men and women go through similar challenges, women often see these challenges as more negative and hard to control, which leads them to cope more emotionally. On the other hand, men usually handle Stress by staying calm and thinking things through, with their Stress mainly coming from work and money issues. The study suggests that as society changes, the differences in how men and women experience and deal with Stress might decrease. It also points out that women might benefit from learning more problem-solving ways to manage Stress. Additionally, the study indicates that women scored higher on emotional and avoidance coping styles, while men scored higher on rational and detachment coping (Matud, 2004).

The study by Pilar Rivera-Torres, Rafael Angel Araque-Padilla, and colleagues (2012) looks at how job stress affects men and women differently using the Job Demand-Control-Support (JDCS) model. Data from 8,275 workers in Andalusia, Spain, shows that men mainly face high workload demands, while women deal with more emotional and intellectual demands. According to the study, social support helps reduce job stress more for women than men, thus showing the need for gender-specific workplace policies. Stress affects men and women differently: women tend to suffer from mental health issues like depression and anxiety,

which can hurt their work productivity. Women face more negative effects on creativity at work because of Stress. Men, on the other hand, are more likely to develop heart problems from job stress, which can affect their job performance. In general, job stress can lower productivity, creativity, and commitment for both men and women. The study also notes some limitations, like relying on personal opinions for data, and suggests that future research should look into stress factors based on Gender, industry, and job type (Rivera-Torres et al., 2013).

Barry J Babin et al. (1998) examined a study to explore the dynamics of customer contact positions in full-service restaurants. They focused on the conflicts between customers and employees and their effects on job satisfaction and role stress, particularly emphasizing gender differences. They found that role stress negatively affects female service providers' job performance more than males, while job satisfaction is more closely linked to quitting intent among male respondents.

Role stress affects female service providers' job performance more negatively than it does males' context. The study even showed that the relationship between role stress and job performance is moderated by Gender. Specifically, the positive role conflict-performance relationship is more significant among men than women, and the negative role ambiguity-performance relationship is more minor in absolute value (less harmful) among men than women. According to them, the role conflict-job performance path is positive and significant among men, whereas it is harmful and insignificant among women. The role ambiguity-job performance relationship is more negative among female than male service providers. It was also seen that work/nonwork conflict has a more significant indirect impact on quitting intent among men than women. Overall, these findings conclude that Gender moderates the effects of work stress on job performance, with men generally coping with work stress more positively than women.

The research highlights how important it is to understand gender differences in employee behaviour, especially in service jobs. Both men and women face different challenges that affect their job satisfaction and, in turn, their productivity at work (Babin & Boles, 1998).

The research done by Kristina Gyllensten et al. (July 2005) provides a comprehensive review of academic studies focusing on gender differences in workplace stress, thus showing the unique challenges faced by women. They found the impact of multiple roles, lack of career progress, and discrimination as the key stressors in cases of women while also noting that

some studies found no significant gender differences in stress levels at work. The study also discussed the concept of the "glass ceiling" and the underrepresentation of women in decision-making roles at work, along with the effects of sexual harassment and discrimination on women's psychological well-being. The term "glass ceiling" is related to women's career advancement as it represents a subtle but powerful barrier that limits women's progression to top management positions in large organizations. This lack of career progress is a significant source of work stress for women, leading to adverse health consequences and reduced job satisfaction. Moreover, according to the study, women face difficulties in accessing informal networks and mentorship opportunities, which are crucial for recognition and advancement, further contributing to their stress levels. There has been a lack of research investigating women and workplace stress, with many studies only including male participants, which impairs the accuracy of conceptual models and research findings.

Most research treats women as the same as men and does not consider race or socioeconomic status differences. To understand the effect of work stress, it is essential to consider all these factors. The author emphasizes the need for more detailed research that considers job type, education, and social support to understand better the role of Gender in workplace stress and how it impacts work productivity (Gyllensten & Palmer, 2005).

The study done by Lisa Tamres et al. (Feb 2002) provides a detailed look at coping behaviours by dividing 17 specific strategies into two types: problem-focused and emotion-focused coping. The research concluded that women generally use more coping strategies, especially those that involve seeking emotional support and using emotion-focused methods like rumination and positive self-talk. The study also examines different types of stressors, how they are perceived, and how they can influence these differences. Women often see stressors as more severe, which may lead them to use more coping strategies. According to the research, Gender has a clear and direct effect on how Stress is experienced at work; for example, women, even in dual-career families, spend more time on housework and being the primary caretakers of children more often than men, thus increasing the effects of Stress. Women also often have lower-status jobs and earn less for similar work, which can shape their perception of work stressors differently from men. These factors make women feel less control over their work environment, potentially leading to more significant Stress. It emphasizes the complexity of coping strategies and the need for clear definitions and measurements in research, considering factors like gender socialization, biological influences, and neuroticism (Tamres et al., 2002).

Martocchio and O'Leary's (1989) review compare how men and women experience Stress at work by combining results from various studies. They found that women usually report higher stress levels than men, often because of job expectations and balancing work with family life. Women, as compared to men, have to face unique stressors like emotional and social challenges and are more likely to feel stressed from role conflicts and too much work. Men, on the other hand, tend to stress more about their workload and job security. The study shows the importance of understanding these gender differences when creating stress management programs and workplace policies to support men and women in their workplace (Martocchio & O'Leary, 1989).

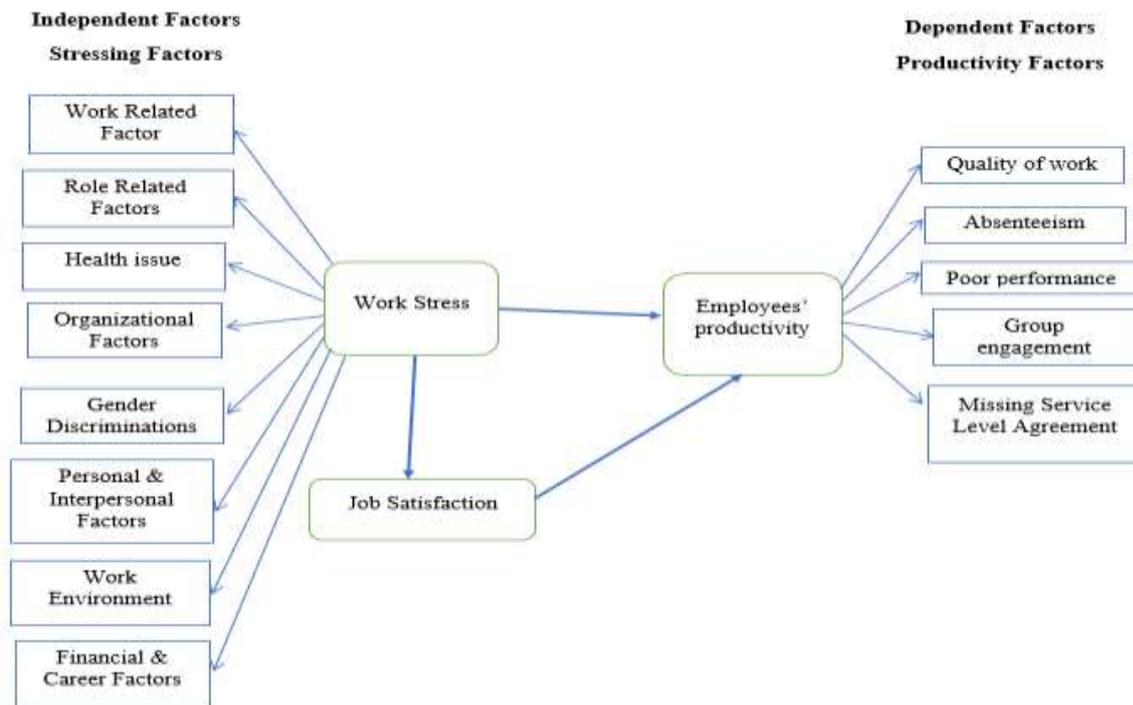
2.3 Research Gap:

Even though much research has been done on how Stress at work affects employees' productivity in different sectors, there are still some key things we still need to understand fully. One is how Stress impacts the employee's productivity, specifically in different job roles, industries, and cultural backgrounds. Many studies have shown that Stress can reduce productivity and performance at work, but they often miss out on how job satisfaction might change this relationship.

Job satisfaction plays a significant role in how employees deal with work stress. Research also points out that when people are happy with their jobs, they can handle Stress better, so their productivity might not suffer as much. On the other hand, if someone is unsatisfied with their job, Stress can severely affect their work and make it even more challenging for them to stay productive (Judge et al., 2001). This connection between work stress and job satisfaction can vary greatly depending on the type of job, the industry, and the culture (Geurts et al., 1999).

Understanding these differences is crucial for creating better stress management strategies that can boost productivity and well-being for employees in all kinds of work environments. This study aims to fill in the gaps by exploring how work stress, job satisfaction, and productivity are related and how this relationship affects employees in the Indian IT sector. This could enable us to compare the results with other findings and perceive how the relationship plays for employees across different fields and industries.

2.4 Conceptual Framework for the study:



The conceptual model being studied for this research was initially developed by T. Bharati. It has been adjusted to explore how an employee's job satisfaction mediates the relationship between job stress and productivity among employees working in the Indian IT sector. This modification is made mainly to examine the direct impact of job stress on productivity and how job satisfaction might influence this connection.

To do this, key factors were identified and considered through a thorough review of existing literature, ensuring they fit with the original model and help with the focus of this new study. These factors were then analyzed using exploratory factor analysis (EFA), with the varimax rotation method, to ensure the factor loadings were clear, concrete and meaningful. Next, the measurement models were tested using Confirmatory Factor Analysis (CFA), starting with first-order and then moving to second-order analysis, to confirm that the constructs were valid and reliable.

Finally, Structural Equation Modeling (SEM) was used to test the proposed relationship between job stress, job satisfaction, and productivity. SEM, which blends psychological and economic analysis, helps researchers test theoretical models, check hypotheses, and better understand the complex relationships between these factors. This SEM analysis aims to see how well the theoretical model matches the data, which includes job satisfaction as a

mediator. This will provide insights into how job stress, satisfaction, and productivity interact and influence different aspects of an employee's work life.

2.5 List of Hypotheses:

Research hypotheses are developed to analyze the relationships among the various factors and components and derive conclusions. In the current study, the researcher used the following hypothesis.

- H1: There is no significant relationship between Work stress and productivity among the IT employees in the IT Sector.
- H2: There is no significant relationship between Work stress and Employee job satisfaction.
- H3: There is no significant relationship between Employee job satisfaction and productivity.
- H4: There is no significant relationship between the demographic characteristics of IT employees and work Stress and its effect on productivity.
- H5: There is no significant association between demographic variables and the frequency of feeling stressed with work demands.
- H6: There is no significant relationship between Work stress related factors and employee productivity-related factors.
- H7: There is no significant influence of demographic variables on employees' quality of work life.
- H8: There is no significant impact of demographic variables of respondents on the employee productivity of respondents.
- H9: There is no significant relationship between the demographic variables of the respondent and the organization that should adopt some stress management strategies.

- H10: There is no significant relationship between demographics variable and there is a tough competition for getting Job in IT Sector in India.

2.6 Summary:

This research aims to fill a gap in understanding how work stress affects employee productivity, especially in different job roles, industries, and cultural settings. Although many studies show that work stress can lower productivity, they often miss how job satisfaction might change this effect. Employees who are satisfied with their jobs can handle Stress better, which might help them stay productive. However, this connection between Stress and productivity can differ depending on the job type, industry, and culture.

Focusing on the Indian IT sector, this study will examine how work stress, job satisfaction, and productivity are connected for employees in this field. The results offer valuable insights for creating better ways to manage Stress and boost productivity and well-being at work. The research also aims to compare these findings with other studies to see how these relationships work in different areas and industries.

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