

Research Article

Modeling Occupational Stress on Employee Performance with Mediating and Moderating Roles of Social Support: Structural Equation Modeling and Multivariate Analysis

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Received: 14 July 2024; **Revised:** 5 August 2024; **Accepted:** 14 August 2024

Abstract: Purpose: This empirical study investigated the relationship between occupational stress and employee performance and the mediating and moderating effects of social support on the relationship between occupational stress and the performance of IT sector employees in Bangalore city. Methodology: A quantitative methodology was used. The data were collected via a questionnaire to measure the three reflective constructs of the study: occupational stress, employee performance, and social support. Factor loadings > 0.5 for the items of all three constructs were considered for analysis. The questionnaire's internal consistency was measured by assessing Cronbach's alpha and the split-half correlation coefficient. SEM analysis was carried out on the valid responses of 500 responses via AMOS version 28. Findings: The results of the Shapiro-Wilk test for normality indicated normally distributed data. Excellent model fit was observed, as indicated by the model fit statistics. A statistically significant direct effect between occupational stress and employee performance and social support was observed, with both the variable performance of occupational stress and social support explaining 28% of the variance in the dependent variable. performance This study also examined the moderating role of social factors in the relationship between occupational stress and employee performance. Social support also moderated the performance of the IT sector employees. Positive and statistically significant moderating effects of social support on the relationship between occupational stress and employee performance were observed. The slope analysis revealed that social support strengthens the relationship between occupational stress and employee performance. The authors suggest that organizations adopt social support strategies, such as breaks, meditation, and yoga, to relieve stress and increase social support among employees. Originality: This study assessed the effects of modeling occupational stress on employee performance with mediating and moderating roles of social support via structural equation modeling analysis and multivariate analysis.

Keywords: occupational stress, social support, slope analysis, employee performance

MSC: J28, J45, J5, M5

1. Introduction

The word “stress” comes from the Latin word “Stringere”, which was coined by an Austrian endocrinologist and refers to difficulty, distress, suffering, and an unpleasant circumstance or condition [1]. Occupational stress, defined as the stress that a person experiences while working, has a discernible detrimental effect on an individual’s functional, emotional, behavioral, and overall performance on a global scale, regardless of the type of business and employment. Globalization, technological advancements, fierce rivalry, job demands, and an increase in workload all contribute to occupational stress. Stress is a state of mind; however, the degree of stress an employee perceives varies from employee to employee. Stress is the result of men’s altered character or response to external conditions, which leads to modifications in behavior, psychology, and physical health. Behavioral changes, psychological disorders, physiological disturbances, and decreased performance are among the causes of the chronic occupational stress experienced by employees in the IT sector [2]. Behavioral changes, psychological disorders of employees and decreased performance, in particular, are some of the side effects of occupational stress. Several psychological effects-panic attacks, mood disorders, nervousness, a bloating stomach, stomach upset, irritable bowel syndrome, musculoskeletal disorders and shortness of breath-are some of the negative causes of stress [3]. Interpersonal conflicts, work-family interrole conflicts, and a lack of work resources can cause stress in employees.

Occupational stress, if present for a long time, can result in metabolic imbalances in the body, and there is a strong correlation between occupational stress and metabolic syndrome [4]. Work-related stressors are associated with cognitive and behavioral reactions, burnout, sleep disturbances, turnover intentions, and decreased job satisfaction [5]. There was a significant association between age and work-related stress across the sociodemographic dimensions. Organizational culture, the working environment, social support, and peer relations are associated with occupational stress. Task-related characteristics, exposure levels, involvement in specialized work, and organizational policies are important in determining the risk of occupational stress.

Performance is defined as completing a task to the best of one’s ability and speed, compared with a planned outcome with set standards of correctness and completeness. When an assignment is fulfilled in a way that absolves the performer of all contractual obligations, it is referred to as performance. It is a framework for handling personnel administration. In a certain sense, performance is the capacity to meet objectives and benchmarks. For example, an organization’s vision and mission. Performance is the combination of intended activities and worthwhile results from those behaviors. Performance is a key concept for the accomplishment and prosperity of organizations, and job performance is a person-specific variable, or the work of a particular person. Performance is the culmination of an employee’s actions while they are at work, and those actions should help the organization achieve its vision, purpose, and objectives [6].

A lack of occupational health can decrease organizational performance and organizational commitment [7]. Performance and job stress are correlated in older workers in the service sector. The concept of organizational constraints encompasses all of the workplace variables that interfere with an individual’s ability to perform his or her job well, such as dealing with frequent interruptions from managers or coworkers and not having access to the tools, resources, or training required [8]. Among employees who experience stress at work, occupational stress is stigmatized. Employees can be most productive when they are fit and healthy. Organizations need to thrive to reduce stress in the workplace by adopting coping mechanisms [9]. Increased counterproductive work behavior, decreased teamwork (contextual performance), and worse task performance are related to elevated stress levels. Role overload and job performance are mediated by occupational stress [10]. Counterproductive work behavior, absenteeism, negative effects on teamwork, increased incidence of substance disorders, and aggressive attitudes at work are some of the effects of occupational stress [11]. The purposeful attempt to lessen stress is called coping. Coping strategies and coping skills are popular terms used to describe psychological coping mechanisms. Implicit absenteeism is a result of a lack of occupational coping and social support. The authors reported a negative relationship between absenteeism and perceived social support and a positive correlation between occupational coping and self-efficacy. In another study, the authors investigated the mediating role of coping styles via a meta-analysis and systematic review. The authors reported a positive association between occupational stress and burnout. Negative coping styles mediate the relationship between stress and burnout. In another study, the authors examined the association between perceived stress and turnover intention in female healthcare staff and the effects of

approach coping, a stress mitigating strategy [12]. The study concluded that preventive and proactive coping mediated the relationship between perceived stress and turnover intentions. However, a positive relationship between preventing and proactive coping was observed [13]. Approach coping is a tactic defined by overt attempts to address a situation through practical problem solving and overt activity, such as consulting with experts, coming up with ideas, and considering other options. The problem to be solved and the stress-inducing agent will be the main points of emphasis in these tactics. While adopting “approach coping” techniques may cause employees to feel more stressed in the short term, they ultimately benefit from greater morale, greater performance, and increased performance. Coping with and dealing with occupational stress are multidimensional and depend on several situational and circumstantial factors. The better the coping strategies are, the more the employee develops himself or herself according to the situation and stressors, reducing the negative effect of stress on performance.

Yousaf et al. [14] examined occupational stress and its detrimental effects on front-line hospitality industry employees in the People’s Republic of China, including job engagement and turnover intentions. This is accomplished by applying the conservation of resources (COR) theory and the buffering hypothesis of social support. Job satisfaction is found to be a mediating mechanism in the relationships between occupational stress and job engagement and between occupational stress and employee turnover intentions for front-line hospitality industry workers, integrating COR theory and the buffering hypothesis of social support. The authors also discovered the function of work-social support as a boundary condition. For workers who experience strong levels of social support at work, the links between stress and its detrimental effects are weak.

Al-Ameedee [15] used a quantitative study that gathered data from a structured questionnaire to examine the effects of business ethics on stress, anxiety, and depression as well as the success of auditors in Iran and Iraq. The study’s findings indicate a positive correlation between business ethics and auditor success in Iran and Iraq as well as a negative and significant correlation between business ethics outcomes and the stress, anxiety, and depression that these professionals experience.

Salehi et al. [16] evaluated the psychological traits of auditors (self-consciousness, jealousy, bias, trust, cautiousness, happiness, agility, shyness, aggression, forgiveness) in relation to occupational innovation barriers and organisational conflicts in Iraqi audit firms. A total of 318 front-line employees of a restaurant chain in the People’s Republic of China’s East provided primary data in two waves of interviews. Job satisfaction is found to be a mediating mechanism in the relationships between occupational stress and job engagement and between occupational stress and employee turnover intentions for front-line hospitality industry workers, integrating COR theory and the buffering hypothesis of social support. The authors also discovered the function of work-social support as a boundary condition. For workers who experience strong levels of social support at work, the links between stress and its detrimental effects are weak.

2. Review of the literature

2.1 Theoretical foundations and hypothesis development

2.1.1 Stress-strain model

Using structural equation modeling, Slocum [17] investigated the general strain theory in the context of adult substance use. The variables that were examined included stressor amplification, evocative and active selection, behavioral continuity—a direct result of negative emotionality and low constraint on substance use—and passive selection. The mediator stress proliferation has also been investigated considering the larger body of research on stress. The two distinct datasets used in this study together offer details on the lives of high-risk people from infancy through adulthood. There is conflicting support for GST explanations of continuity. The most empirical support was given to the more dynamic aspects of the stress process, such as proliferation and amplification, and the direct and moderating effects of negative emotionality and low constraint. The author suggested that investigating the social mechanisms through which stressors evolve over time deserves greater focus.

Park and DeFrank [18] deployed the stressor-strain model and investigated the importance of proactive personality in determining (a) exposure to stressors, (b) stressor reactivity, (c) coping choices, and (d) coping effectiveness with reference to workplace bullying. The impact of workplace bullying on physical strain was found to be mitigated by

proactive personalities. However, the relationship between proactive personality and strain was found to be mediated by positive reinterpretation coping, while proactive personality also affected coping choices. Additionally, a proactive personality moderated the association between strain and coping mechanisms. Less proactive people may find that active coping helps them deal with bullying at work.

Garst et al. [19] used multivariate latent growth curve models in a longitudinal study with six measurement waves to examine the theoretical models that explain how stressor–strain relationships develop over time. Studying the relationship between work stressors and strains in the context of the East German environment is appropriate in this high-level environment. These findings demonstrated that stressors had an effect on strain traits and state components. There was a relationship between the individual trends in uncertainty (a stressor) and worrying (a strain); worrying also displayed a short-term relationship with time pressure (an additional stressor). Specifically, the growth curve approach was the only one that allowed for breakdown into trait and state components.

2.1.2 Stress-coping model

Rusch et al. [20] investigated the cognitive appraisal of stigma stress and emotional stress reactions (social anxiety, shame) and cognitive coping responses in the context of a stress-coping model. The authors gathered self-reports from 85 people with schizophrenia or schizoaffective or affective disorders. Increased social anxiety is directly proportional to high stigma stress but not to cognitive coping responses. Lower self-esteem and greater hopelessness were predicted by social anxiety and shame but not by social performance or seating distance. The coping strategies of undervaluing education and work and attributing failure to discrimination have been linked to hopelessness. Poorer social performance and greater seating distance were predicted by the coping mechanism of in-group comparisons. We may learn more about how stigma impacts people with mental illness by examining the cognitive appraisal of stress related to stigma, emotional stress reactions, and coping mechanisms. The reason why stress reactions largely predict negative outcomes can be explained by trade-offs between different stress reactions. Targeting emotional stress reactions and dysfunctional coping mechanisms could be beneficial for interventions designed to lessen the detrimental effects of stigma on individuals who suffer from mental illness.

The causes of adolescent substance use were examined by Wills and Filer [21] in the context of the long-term health effects of alcohol and cigarette use. Adolescent substance use is a concern for clinical psychology because it is associated with other problem behaviors, such as aggressive and depressive symptomatology, and because early onset of substance use has a significant predictive value for later substance abuse problems. The study reported that the factors associated with stress and approach coping can mitigate stress, in turn decreasing substance use.

Pakenham et al. [22] investigated antenatal depressive symptomatology in the context of a stress/coping model. The authors observed the effects of coping strategies and appraisal on depression directly and indirectly. Using a cross-sectional study in which data from the trimester of pregnancy were collected, 242 primiparous women were included in this empirical study. Events in life, coping resources (social support, the strength of the woman's prior relationships with her parents), threat and self-efficacy assessments, and coping techniques (wishful thinking, positive reappraisal, problem solving, emotional approach) were among the predictors. The regression analysis results revealed that depression has a direct effect on increased stress in life, threat assessment, wishful coping, and decreased positive reappraisal. The anticipated effects of wishful thinking on depression-related stress exacerbation were confirmed. The anticipated stress-buffering effects of coping resources and coping strategies on depression were not positively supported. The results offer preliminary evidence in favor of the use of a stress/coping model to direct future investigations into psychosocial antenatal depression predictors.

2.1.3 Stress and social support model

A three-factor model of occupational stress was tested by Searle et al. [23] in the context of how job demands, job control, and social support affect strain levels in a mail sorting laboratory simulation environment. Social support was manipulated in the study. Group comparisons were made on self-reported stress and arousal measures taken before and after the task. Throughout the computer task, performance was continuously monitored, and afterward, each of the 120

participants reported how they felt they had performed. In high-demand situations, stress levels were found to be higher, and perceived performance was found to be lower; this pattern was also noted in low-social-support situations. Contrary to the theories, neither task control nor the interactions between the manipulations led to increased stress. On the other hand, there was a significant interaction effect between demand and control for performance, with task performance being worse under high demand and low control conditions. The degree of fit between ideal and actual social support was found to influence stress and perceived performance, according to work preference measures.

AbuAlRub [24] investigated the effect of occupational stress on job performance and the effect of social support from coworkers among hospital nurses in the context of a stress-social support-performance model. The data were gathered from 263 American hospital nurses and 40 non-American nurses to study these relationships. The degree of reported job performance and the degree of reported job stress were both improved by perceived social support from coworkers. Additionally, a curvilinear (U-shaped) relationship between job stress and performance was found in the analysis; nurses with moderate job stress felt that their performance was lower than that of those with low or high job stress.

2.1.4 Occupational stress and performance

Occupational stress is the stress perceived by employees from their job/employment. Occupational stress has physiological, psychological and psychosocial effects, such as anxiety, gastric disorders, musculoskeletal spasms, and irritable bowel syndrome (IBS), which is a functional gastrointestinal disorder. The IBS further deteriorates with stress and affects the productivity and performance of employees. Employees with IBS report increased occupational stress and work productivity impairments, such as absenteeism, psychological distress, and a negative quality of life, which all have an impact on employee performance. These findings are similar to those of IBS in the general population [25]. High levels of occupational stress are linked to several physical and mental illnesses in today's society. Healthcare systems cost between 300 and 400 million annually and cause musculoskeletal disorders, cardiovascular disease, and psychological problems [26, 27]. Higher levels of occupational stress are a significant factor adversely influencing workers' performance, attitudes, and behaviors [9]. In another study, the authors investigated occupational stress and its associated psychological effects on musicians in the United States. Work schedules, tours and performance stress were significantly associated with depression, anxiety and alcohol abuse, which were inversely correlated with performance stress. The authors suggested resilience, approach coping strategies and psychotherapeutic intervention strategies to mitigate the negative health effects of occupational stress [28].

Increased counterproductive work behavior and elevated stress levels are associated with decreased contextual performance and task performance. However, effective teamwork can reduce stress levels and increase employee performance. Crucially, role overload occurs when an employee has multiple responsibilities and lacks resources, and all aspects of job performance are affected [10]. The authors examined the associations between organizational role stress, employee job performance, and emotional intelligence. According to the authors, job performance and emotional intelligence are inversely correlated with organizational role stress [29]. The authors investigated the role and effects of technostress in the context of educational environments in the UK. The explorative qualitative methodology revealed that role ambiguity, reduced work-life balance and turnover intentions are associated with technostress. In another study, the authors investigated whether employee well-being-oriented HRM practices can help mitigate stress and enhance the quality of work life and job performance, with employee thriving as a mediator. The structural equation model results reveal that thriving mediates the relationships between burnout and employee performance and between workload and employee performance. The results show different ways in which well-being-focused HRM can improve worker performance by lowering burnout and increasing thriving [30].

Performance is the desired behavior and the valuable outcome produced by those behaviors. Performance is also affected by the complexities of the job. Occupational stress is harmful and costly for organizations. The "International Labor Organization" reported that the consequences of occupational stress roughly cost up to 10% of a country's GNP [31]. The most widely used performance behavioral models merged with performance models to study the effects of occupational stress on performance were developed by Campbell in 1990 [6]. The widely recognized models include Campbell's, employment-specific task proficiency, nonjob-specific task proficiency, both oral and written communication,

demonstrated effort, personnel discipline, relationships with peer and peer team performance facilitation, and leadership and management.

When a regular, prompt response is unavailable, the term “coping” refers to the ability of an individual to manage stress or to master a state of threat or challenge [32]. One of the main functions of coping in human adaptation is the deliberate attempt to lessen stress. Individuals adopt one or another type of adaptive behavior to address stressful situations. Occasionally, a person may react spontaneously to modify and lessen the effects of stress at a subconscious level [33]. There is a threefold impact of social support on the relationships between occupational stressors and strains. Social support attenuated the connection between stressors and strain, lessened experienced strains, and lessened perceived stressors. According to Voswesvaram [34], there is little evidence that social support has either a mediating or suppressive influence on the process of work-related stress.

2.1.5 Occupational stress and social support

The authors conducted a cross-sectional survey of employees in mainland China to research the effect of stress perception on job burnout, as well as the effects of social support and gender. Researchers have reported that social support plays a partial mediating role in occupational stress and burnout. Females experience greater social support than males do [35].) The authors investigated the effect of perceived social support on the association between low occupational coping self-efficacy and implicit absenteeism among critical care unit nurses. This study also used a cross-sectional study from hospitals in Sichuan Province, China, to investigate the reliability of social support in clinical nurse management. According to the authors, perceived social support mediates the relationship between a lack of occupational coping self-efficacy and implicit absenteeism [36]. The intensive care unit nurses had a high level of implicit absenteeism and moderate perceived social support. The authors recommended that nursing managers pay attention to nurses with low levels of social support and negative coping methods and take steps to reduce critical care unit nurses’ professional stress and minimize implicit absenteeism.

Izadi et al. [34] studied the association between occupational stress and job performance among Tehran University hospital staff. Intensive care unit nurses reported significant levels of implicit absenteeism, moderate perceived social support, and low occupational coping self-efficacy. Nursing managers should pay attention to nurses who lack social support and use negative coping strategies, as well as take steps to reduce professional stress and limit implicit absenteeism among critical care unit nurses. Yu et al. [37] investigated the work experiences of nurses working in the Department of Pulmonary and Critical Care Medicine (PCCM) during the Omicron outbreak in China, namely, the Omicron virus. According to the study, perceived social support systems (team cohesion, family support, and head nurse leadership) reduce stress and improve performance.

2.1.6 Structural equation modeling studies

Moon et al. [38] investigated the effect of the “Mentoring New Nurses for Transition and Empowerment Program” (MNTEP), in which clinical nurse educators teach stress-coping skills, on the clinical transition of new nurses in South Korea. The intervention and comparison groups differed significantly in terms of mean self-efficacy scores ($t = 2.45$, $p = 0.017$) and perceived social support from clinical nurse educators ($F = 4.51$, $p = 0.038$). The intervention group experienced substantial changes in field adaptation ratings between the pretest and posttest ($t = -3.12$, $p = 0.004$).

Yakub et al. [39] examined how common and risky occupational stress was for those who worked at port terminals in the context of social support. This study highlights the alarming prevalence of occupational stress among Malaysian port terminal employees. The identified factors, including age, social support, task-related aspects, exposure levels, specialized work involvement, and organizational culture, play crucial roles in defining the risk of occupational stress in this context. Social support is a major factor in mitigating stress-related issues.

Rapisarda et al. [40] examined the impact of occupational stress on the mental health of construction personnel by carrying out a survey of 62 expert constructs from 4 countries. The SEM results indicate that health coping and individual resilience strategies and primary intervention methods at the workplace are needed to mitigate mental health stressors at the workplace to create a psychologically healthy environment in the workplace. Primary intervention measures can

enhance employee job satisfaction, employee psychological well-being and performance. The authors suggested that organizations identify measures that are missing to mitigate stress and incorporate these measures into human resources policies.

The intricate relationship between occupational stress and employee performance has been the subject of extensive research, with a growing body of literature employing structural equation modeling (SEM) to explore the mediating and moderating effects of various factors. The authors investigated the important aspects of multidimensional stress in workplace settings and its impact on performance through the mediating effects of social support.

The authors reported the direct impacts of stressors on employee performance and provided insights and future directions using multivariate statistical structural equation modeling studies to dissect the complex relationship between stress and employee performance [41]. The authors further elaborated on how job burnout can be a pathway [42]. The authors examined the role of emotional stability and workplace stressors [43, 44] and concluded that employees with greater emotional stability can better manage stress. The authors further carried out structural equation model studies to verify the mediating effects of intrapreneurial and innovative behavior [45, 46].

The authors reported the SEM analysis results and the constructs that mediate engagement, empowerment, and motivational factors to identify factors that can translate to enhanced employee performance [47, 48]. Putri et al. [49] and Rahimi Pordanjani et al. [50] further elaborated upon the basis of this model and introduced organizational culture and positive organizational behavior as the main dimensions that can mediate the stress-performance relationship.

Rahmayanti et al. [51] reported the moderating role of leadership in stress-performance dynamics in healthcare settings. Another study emphasized the SEM approach to identify the importance of ethical considerations in mitigating occupational stress [52, 53].

Further studies shifted the focus to leadership styles and the evolution of performance management systems as pivotal factors in employee satisfaction and performance, respectively [49, 54]. The other authors highlighted the influence of leadership, with Sundari and Sudiro focusing on transformational leadership and Thukral motivation as a pathway in performance appraisals [55, 56]. Udin [57] concluded this body of work by presenting ethical leadership as a buffer against work stress, thereby enhancing performance through motivation.

2.1.7 Motivation behind the study

Occupational stress has several physiological, psychological and health consequences. Hypertension, diabetes, musculoskeletal spasms, corpus-tunnel syndrome, coronary artery disease, and burnout are some of the consequences. If the stress is not controlled, it leads to burnout. Continuous burn-out may lead to death. Recently, I came across to old news that the VP of SAP died with massive cardiac attacks. The treating physician said, “Mr Ranjan Das could do everything but could not control stress”. This is the actual motivation behind this study.

2.2 Research question

RQ1: Is there a relationship between occupational stress and social support?

RQ2: Is social support positively associated with employee performance?

2.3 Research gap

The authors critically reviewed the stress-strain theory, stress-coping theory, stress-job performance theory and social support theory. Most of the studies used regression analysis with composite variables. Some studies have concluded that conclusions do not support these theories. The authors conducted this empirical study to close the knowledge gap on social support strategies and organizational problems such as employee performance and occupational stress in the context of stress-strain-coping-social support theories. There are considerable gaps in the study of the influence of social support on occupational stress and its association with employees and the mediating and moderating effects of social support via multivariate analyses such as structural equation modeling. Furthermore, researchers have highlighted the importance of social support in mitigating stress and enhancing employee performance. The IT sector and the large number of employees working in this area are important, particularly in Bangalore city. Furthermore, there is an urgent need to address and

examine occupational stress, employee performance, and social support in the post-COVID-19 pandemic scenario. The suggested study will assist in addressing concerns such as occupational stress and its correlation with worker performance by examining the mediating and moderating impacts of social support. Following a thorough examination, the research gaps are taken into consideration, and the following assumptions are proposed. The authors' hypothetical framework is shown in Figure 1.

2.4 Hypotheses

H_1 : Occupational stress is statistically significant and influences the performance of information technology sector employees.

H_2 : Social support has a statistically significant influence on the performance of information technology sector employees.

H_3 : Occupational stress has a statistically significant influence on social support among information technology employees.

H_4 : Social support has a mediating effect on the performance of information technology employees through occupational stress.

H_5 : Social support has a moderating effect on the performance of information technology employees through occupational stress.

H_6 : There are statistically significant group differences in the context of gender related to occupational stress, performance and social support.

2.5 Operational definitions

Occupational stress: Stress that is experienced at work is referred to as occupational stress. There are 5 items related to occupational stress. The mean score on the occupational stress scale represents occupational stress.

Performance: The concept of performance has multiple dimensions. The performance scale consists of 5 items. Performance is the performance scale's mean score.

Social support: Having a support system of friends and family can help people maintain a good outlook on life and a positive self-image when things become tough. We call this social support construct, and this construct has 4 items.

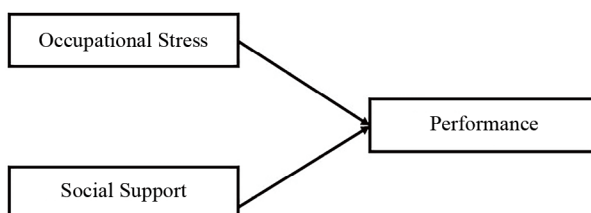


Figure 1. Theoretical framework

3. Theoretical framework

Recently, the authors examined the consequences of social support and work-life balance in information technology and educational services, respectively, for the unpredicted challenges of the COVID-19 pandemic. The conceptual framework was developed and is presented in Figure 1 and Figure 2 [58–60]. The researchers examined the issues and side effects related to telecommunication employees and information technology employees who were working from home. The authors reported work-life conflicts while working from home due to role-related boundaries that were not well defined. Prasad et al. [58] and Prasad and Satyaprasad [59] suggested that mitigating role conflict and enhancing

social support would be immensely beneficial for maintaining work-related stress and work-life balance. The theoretical associations among the study variables are presented in Figure 3.

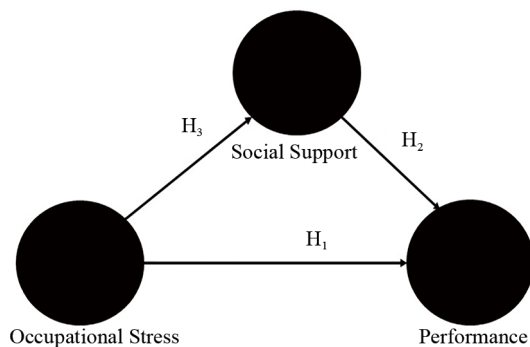


Figure 2. Authors hypothetical model

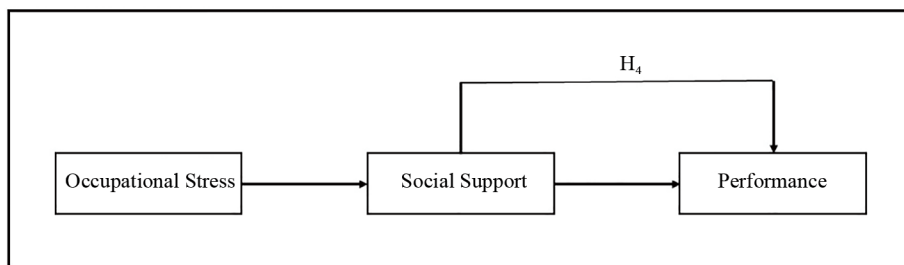


Figure 3. Mediation Model Adopted from [61]

The moderating effects of social support on employee performance through occupational stress were examined to better comprehend the study following the model of Hair et al. [62] presented in Figure 4.

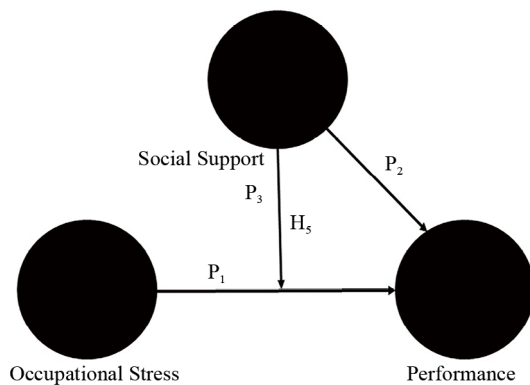


Figure 4. Moderation Model Adopted from [62]

3.1 Research design

Using a more formal, typical, structured investigation with well-stated hypotheses and questions, a descriptive research method was employed. Descriptions of phenomena, traits of a subject population and the identification of relationships between various variables were employed in the research studies.

4. Methodology

4.1 Data collection

This study employed convenience sampling to gather data from the IT sector, a method chosen for its practicality and efficiency. While convenience sampling does not provide a statistically representative sample of the entire population, it offers a pragmatic approach for accessing a specific, relevant group of respondents within a limited time frame and reaching the targeted population. This sampling method is particularly useful in exploratory studies where the aim is to gain initial insights into a phenomenon rather than to generalize findings to the entire population (Stratton [63]). Given the study's focus on understanding specific psychological dynamics within a particular working group, convenience sampling was an appropriate choice. The study's decision to collect data from information technology sector employees is strategically significant. The use of a cross-sectional research design further facilitated the study's aim to explore the relationships between occupational stress, performance and social support at a single point in time. Although this approach does not allow for the examination of causality or changes over time, it is effective for identifying existing patterns and correlations within the data (Wang Cheng [10]). The participants in this study were provided with cover letters that outlined the purpose of the research, assured them of the confidentiality of their responses, and emphasized adherence to ethical research practices. These cover letters serve as important tools for ensuring informed consent and reinforcing the commitment to maintaining the highest standards of research ethics and participant privacy.

The data were collected via a structured questionnaire to measure three reflective constructs: occupational stress, performance and social support. The data were gathered by publishing the questionnaire on Google Forms, and a link was provided to the participants, who were employees working in information technology, through email and WhatsApp.

4.2 Participants

The study has 14 statements, and the required sample size according to this formulation is 120 [64]. The 300 valid responses are far greater than the required sample size of 195. However, 3 responses were dropped because they were incomplete, and a sample of 300 subjects, including 156 men and 144 women, was included in this study. The demographic characteristics are presented in Table 1.

4.3 Sample size and sampling technique

The information technology sector population is unknown, and the required sample size was determined via the method of Cochran [65]. According to this method, the required sample size was 385. However, the study used 300 valid responses for the data analysis. Following the criterion provided [64] for SEM analysis, $50+5x$, where x is the number of statements, was used. The present empirical research has 14 questions, and the required sample size per this criterion is 120. The valid responses of 300 subjects for this empirical study are greater than the required sample size. A power analysis was carried out. The standard deviation of the sample is 1.17, and at the 0.05 level, the actual power is 0.9455. Therefore, a sample of 300 is adequate for analysis.

Table 1. Demography and descriptive statistics of the sample

“Item”	<i>f</i>	“Per cent”
“Gender”		
“Male”	156	52
“Female”	144	48
“Age Group (Years)”		
“20-29”	95	31.67
“30-49”	80	26.33
“40-49”	72	24.00
“> 49”	53	17.67
“Marital Status”		
“Married”	155	51.33
“Unmarried”	145	48.33
“Education”		
“SSC”	30	10.00
“Graduate”	125	41.67
“Post-Graduate”	124	41.33
“Others”	21	7.00
“Children”		
“Yes”	110	36.67
“No”	190	63.33
“Experience (Years)”		
“1-5”	65	21.67
“6-10”	55	18.33
“11-20”	100	33.33
“> 20 Years”	80	26.67

“Source: primary data processed”

5. Survey instruments

The study was conducted via a 20-item questionnaire measuring 3 reflective constructs: 7 items for occupational stress, 7 items for performance, and 6 items for social support. The questionnaire was developed following the models of Campbell for performance [6], Occupational stress and social support Prasad et al. [66], Srivastava et al. [67], and Srivastava et al. [68] for performance scales. These questionnaires have been validated, tested and widely used. The statements were appropriately modified to suit the study and systematically mixed to avoid bias. Out of 18 statements, 2 each from occupational stress, performance, and social support were excluded from the study because the outer loadings of these items were < 0.5 ; thus, a total of 14 statements were considered for the data analysis. The reliability of the 14-statement questionnaire was assessed by measuring the reliability statistic Chronbach’s alpha. The overall Cronbach’s alpha for the study variables was 0.915. The individual Cronbach’s alpha values for occupational stress, performance, and social support were > 0.9 , indicating questionnaire reliability and internal consistency when measured with both “Cronbach’s alpha and split-half (odd-even) correlation (Table 2).

The Cronbach’s alpha was calculated via the following formula [69]:

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum_{i=1}^k \sigma_y^2}{\sigma_x^2} \right)$$

The composite reliability (CR) was calculated via the following formula [70]:

$$\frac{(\sum_{i=1}^p \lambda_i)^2}{(\sum_{i=1}^p \lambda_i)^2 + \sum_i^p V(\delta)}$$

The average variance extracted was calculated via the following formula [70]:

$$AVE = \frac{\sum_{i=1}^k \lambda_i^2}{\sum_{i=1}^k \lambda_i^2 + \sum_{i=1}^k \text{Var}(e_i)}$$

An abstract is a summary of the content of the manuscript equations (1)-(10).

Here, k is the number of items, λ_i is the of item i , and $\text{Var}()$ is the variance of the error of item i .

Table 2. Factor analysis: Factor loadings of study variable

Sl No	Item	Factor Loading
Occupational Stress Cronbach's $\alpha = 0.948$, $CR = 0.949$, $AVE = 0.787$		
1	"I have excessive work and work pressure"	0.90
2	"I have to manage the excessive work with insufficient resources"	0.92
3	"I have to work extra time in order to accomplish my tasks"	0.88
4	"My work is stressful and I work under great deal of pressure"	0.87
5	"I feel physically unwell sometimes (panic attack, bloating, sweating, shortness of breath, frequent headache) "	0.87
Employee Performance Chronbach's $\alpha = 0.11$, $CR = 0.913$, $AVE = 0.679$		
1	"I am not satisfied the way I carry out the jobs due to excess work load"	0.83
2	"I need the cooperation of colleagues and subordinates"	0.87
3	"I have to carry some work uninterestedly due to group pressures"	0.86
4	"I am given clear course of action regarding the scope of my job"	0.79
5	"I need to do follow the instructions which are not perfect a against better judgment"	0.76
Social support Chronbach's $\alpha = 0.920$, $CR = 0.921$, $AVE = 0.744$		
1	"I need to care of my family and work"	0.88
2	"I receive emotional support from my family"	0.82
3	"There are several people who I trust to solve my problems regarding career or changing my job or family problems"	0.89
4	"When I feel lonely there are several people, I can talk to"	0.85

Source: Primary data processed

6. Data analysis

Exploratory factor analysis, confirmatory factor analysis, structural relationship analysis to test the hypotheses, and mediation and moderating analyses were carried out. The mediation analysis was carried out following the procedure of Preacher and Hayes [71]. Social support is the mediator that is particularly salient in the context of occupational stress and performance. Sherry et al. [72] used social support as a mediator of the relationship between perfectionism and depression in the context of the social disconnection model. Schradle Dougher [73] modeled social support as a mediator of stress. Yarcheski Mahon [74] examined the moderator-mediator role of social support in perceived stress and symptom patterns. The moderator was carried out following the procedure of Hair et al. [62]. Direct, indirect, and total effects were evaluated for the mediation analysis. A bootstrapping process was employed to analyze mediation. To perform nonparametric inference and modeling, bootstrapping is a process that involves randomly selecting a large

enough number of data subsets from the initial research sample (Nitzi et al. [75]). To retrieve the t-statistic value for structural model hypothesis testing, bootstrapping through a resample of at least 500 should be employed. This is an efficient method for doing so (Hair et al. [76]).

In moderation, the influence of the independent variable occupational stress and the dependent variable performance is altered because the third variable is a moderator of social support. It can influence the strength of the relationship between the independent variable (occupational stress) and the dependent variable (social support). The moderator variable will interact with the independent variable to determine its influence on the dependent variable. We formed the product term of occupational stress and social support. This interaction term allows the researcher to know that the presence of a moderator significantly influences the relationship between the independent variable and the dependent variable. As our moderator variable is a continuous variable, we prefer the interaction term method to carry out our moderation. We used composite variables to perform moderation with path analysis. Once the product term has been created between the independent variable and moderator variable, the high collinearity issue is addressed by mean centering the variables (Frazier et al. [77], Dawson [78]). Path analysis was performed, and the moderating role of the moderator variable was tested. A simple slope analysis was carried out to test the 2-way interaction via the Statistical Tool Package provided by James Gaskin (https://statwiki.gaskination.com/index.php?title=Main_Page).

7. Results

The results of the hypothesis testing, moderation and mediation analyses, SEM analysis, and structural model. To ascertain whether additional research is required to determine the reflective measurement, the validity and reliability of the three reflecting latent components in the study are assessed [79]. The measurement model with factor loadings is shown in Figure 5. Convergent validity was investigated to assess the factor loadings, composite reliability (CR), average variance extracted (AVE), and outer measurement model. The measurement model was analyzed by observing the factor loadings of the reflective constructs. To improve the outer model, the six indicators with low (< 0.5) factor loadings—two from each of performance, social support, and occupational stress—were eliminated [76]. Once the low-factor loadings were eliminated, SEM analysis was performed again. An outstanding outer measurement model is shown by the factor loadings for the rerun model for the 14 items for the four reflective constructions, with average loadings > 0.7 [80]. The suggested cutoff value of 0.7 loading is an appropriate outer measurement [76, 80]. The outer factor loadings for all three reflective constructs are presented in Table 2, and it is evident from the values that the outer model is excellent.

7.1 Measurement model

CFA was carried out via AMOS to test the measurement model. The factor loadings were assessed for each item (Figure 5). The measured model fit statistics “CMIN/DF 2.217, CFI 0.984, SRMR 0.029, AGFI 0.936, RFI 0.972, TLI 0.981, IFI 0.984, RMSEA 0.049, and PClose 0.524” had normal values [81–83]. The factor loading values [84] are excellent, acceptable, and nonnegative, and all values are greater than 0.5, with average factor loadings > 0.7 for all three constructs; additionally, the model has an excellent fit [85]. The measurement model is presented in Figure 5.

Cronbach’s alpha and composite reliability were used to evaluate construct reliability. The Cronbach’s alpha of every study construct was tested above the advised threshold of > 0.70 [86]. The benchmark and recommended value of 0.70 was not met by the composite reliability, which varied from 0.913 to 0.942. Thus, the construct was determined to be reliable (Table 2).

The average variance extracted (AVE) was used to measure the convergent validity of the scale [70]. The AVE values were above the 0.50 criterion [70]. As a result, convergent values are necessary for the scales utilized in this empirical study (Table 5). The heterotrait-monotrait (HTMT) ratio was also used to evaluate discriminant validity. According to the Fornell and Larcker criterion, discriminant validity is established when the square root of the AVE for a construct is greater than its correlation with the other constructs in the study. In the present study, discriminant validity was not established entirely via the Fornell and Larcker criterion. However, when the HTMT ratio was used, all ratios were less than the required limit of 0.85 [87, 88]. Therefore, discriminant validity was established (Table 3).

The heterotrait-monotrait ratio is calculated via the following formula (Roemer et al. [88]):

$$\text{HTMT}_{ij} = \frac{\overbrace{\frac{1}{K_i K_j} \sum_{g=1}^{K_i} \sum_{h=1}^{K_j} r_{ig, jh}}^{\text{arithmetic mean of indicator correlations between } \xi_i \text{ and } \xi_j}}{\sqrt{\underbrace{\frac{2}{K_i(K_i-1)} \sum_{g=1}^{K_i-1} \sum_{h=g+1}^{K_i} r_{ig, ih}}_{\text{arithmetic mean of indicator correlations within } \xi_i} \cdot \underbrace{\frac{2}{K_j(K_j-1)} \sum_{g=1}^{K_j-1} \sum_{h=g+1}^{K_j} r_{jg, jh}}_{\text{arithmetic mean of indicator correlations within } \xi_j}}}$$

Table 3. Discriminant validity: Fornell and Larcker Criterion

	Occupational stress	Performance	Social support
Occupational stress	0.887		
Performance	0.486***	0.824	
Social support	0.270***	0.342***	0.862
Validity: HTMT			
Occupational stress	1		
Performance	0.497	1	
Social support	0.273	0.348	1

Source: Primary data processed

7.2 Structural model

A structural equation model generated through AMOS was used to test the relationships. The model fit statistics presented earlier indicated an excellent structural model. The squared multiple correlation was 0.28 for employee performance, which indicates that 28% of the variance in performance is accounted for by the constructs of occupational stress and social support (Figure 6).

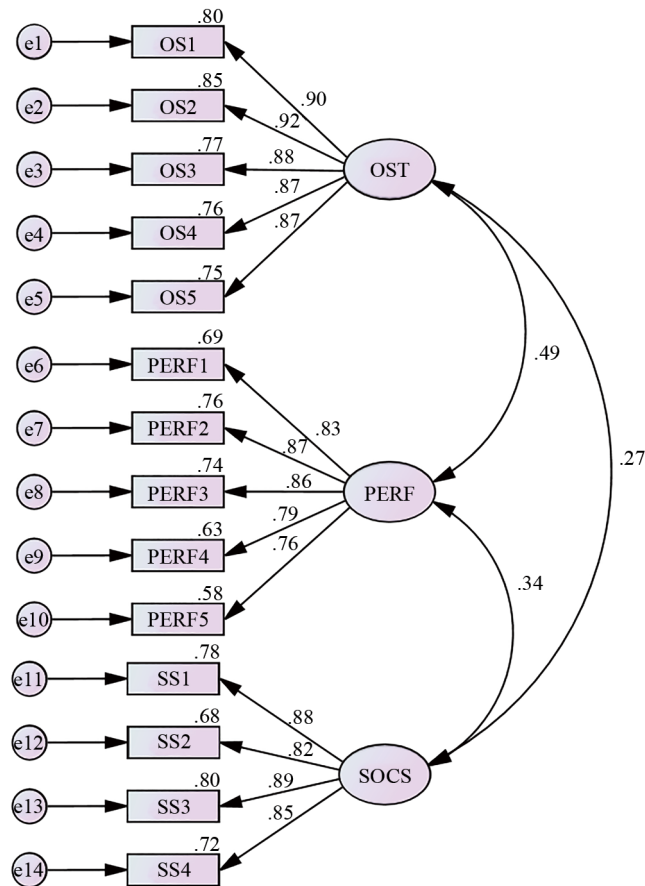


Figure 5. Measurement model: Structural relations among the study variables (OST: occupational stress, PER: performance, SOCS: Social Support)

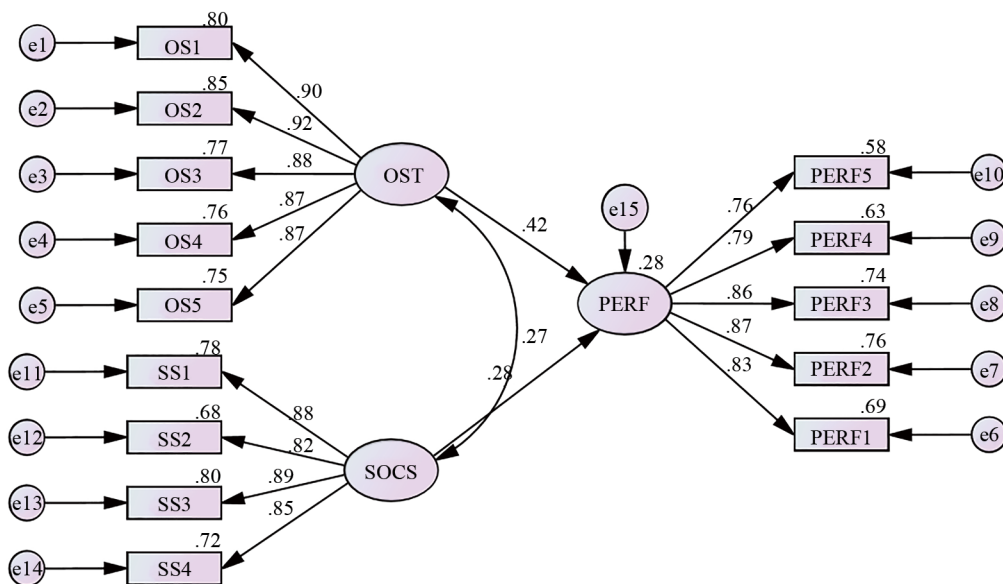


Figure 6. Structural model with relationships OST: Occupational Stress; SOCS: Social Support; PER: Performance

7.3 Testing of hypotheses

This study assessed the impact of occupational stress on employee performance. Table 4 shows that the regression weights for occupational stress and performance are statistically significant and indicate a negative relationship ($\beta = -0.550$, $t = -6.412$, $p < 0.05$), and if occupational stress increases by one unit, performance decreases by 0.550 units, indicating a negative association between occupational stress and employee performance. Hence, H_1 : Occupational stress has a statistically significant influence on the performance of information technology sector employees.

Similarly, the estimate for social support and performance is 0.137 ($t = 2.608$, $p < 0.05$), indicating a positive association between social support and performance. When social support is increased by one unit, performance increases by 0.137 units. Therefore, H_2 : Social support has a statistically significant influence on the performance of information technology sector employees. Occupational stress has a negative relationship, as indicated by the SEM estimates ($\beta = -0.268$, $t = 3.723$, $p < 0.000$), indicating that if social support increases by one unit, there will be a decrease of 0.268 units of occupational stress, supporting H_3 : Occupational stress has a statistically significant influence on social support among information technology employees.

Table 4. Estimates of structural equation modeling (hypothesis testing)

Hypothesis	β	T	p	Decision
H_1 : OST→PER	-0.550	-6.412	***	“Supported”
H_2 : SOCS→PERF	0.137	2.608	0.009	“Supported”
H_3 : OST→SOCS	-0.268	-3.723	0.008	“Supported”

Source: primary data processed

7.4 SEM multigroup analysis

The multigroup analysis helps determine whether there is variance among the groups in a study sample by looking at the significant differences in the group-specific parameter estimates [76]. To investigate potential group differences between male and female employees, a multigroup analysis employing the primary SEM was conducted for this study.

When two groups were compared, the results of the sex-based multigroup analysis revealed statistically significant variance in the associations. To examine the differences among genders (male/female) in the study sample, a simple multigroup analysis with group-specific estimates was performed, fitting the SEM without equality constraints across the groups. The groups were allowed to have their estimates. The resulting model fit decreased significantly, indicating that the gender groups differed significantly in the study sample. Women experienced more stress than male employees did. The relationship between OST and PER significantly differed, with a p value < 0.05 for females and $p > 0.05$ for males. The regression estimates and p values indicated that individual groups were significantly different. When social support is increased by 1 unit, employee performance increases by 0.521 units for males and by 0.720 for females. The estimates show significant differences, including their respective p values. Thus, hypothesis H_6 is supported.

Table 5. Multigroup analysis results (gender)

Relationship	Main SEM		Male		Female		Z score
	Estimate	P	Estimate	P	Estimate	P	
OST→PER	-0.133	0.08	-0.232	> 0.005	-0.115	0.000	-2.43**
SS→PER	-0.106	0.013	-0.093	0.000	-0.104	***	-5.16***
OST→SS	0.720	***	0.521	***	0.730	***	5.39**

Note: *** p value < 0.001 ; ** p value < 0.005

7.5 SEM multigroup analysis

The authors examined the mediating role of social support on employee performance ($\beta = 0.338$ (direct effect), $p < 0.01$; & 0.048 (indirect effect), $t = 2.734$, $p < 0.005$). The direct and indirect mediating effects are statistically significant, and the partial mediation of social support supports H_4 : Social support has a mediating effect on the performance of information technology employees through occupational stress.

Table 6. Summary of mediation analysis

Relationship	Direct effect	Indirect effect	Confidence Interval		p value	Conclusions
			Lower bound	Upper bound		
Occupational Stress → Social Support → Performance	0.338 ($p < 0.001$)	0.048	0.023	0.174	< 0.001	Partial mediation

Source: Primary data processed

7.6 Moderation analysis

To better understand the role of social support in the relationship between occupational stress and performance, moderation analysis of the composite variables was carried out. The product term was formed with independent and moderating variables, and mean centering of these variables was performed to mitigate the problems of high collinearity. A statistically significant positive moderating and interaction effect of social support on the relationship between occupational stress and performance ($\beta = 0.095$; $t = 3.176$, $p < 0.05$) supported H_5 : Social support has a moderating effect on the performance of information technology employees through occupational stress (Table 6).

Table 7. Summary of the moderation analysis

Relationship	Beta	CR	P
Occupational stress → Performance	0.607	11.655	$P < 0.01$
Occupational stress → Social Support	0.235	4.675	$P < 0.001$
interOSCCxSOCSCC → Performance Interaction between occupational stress and social support on performance	0.185	3.176	0.007

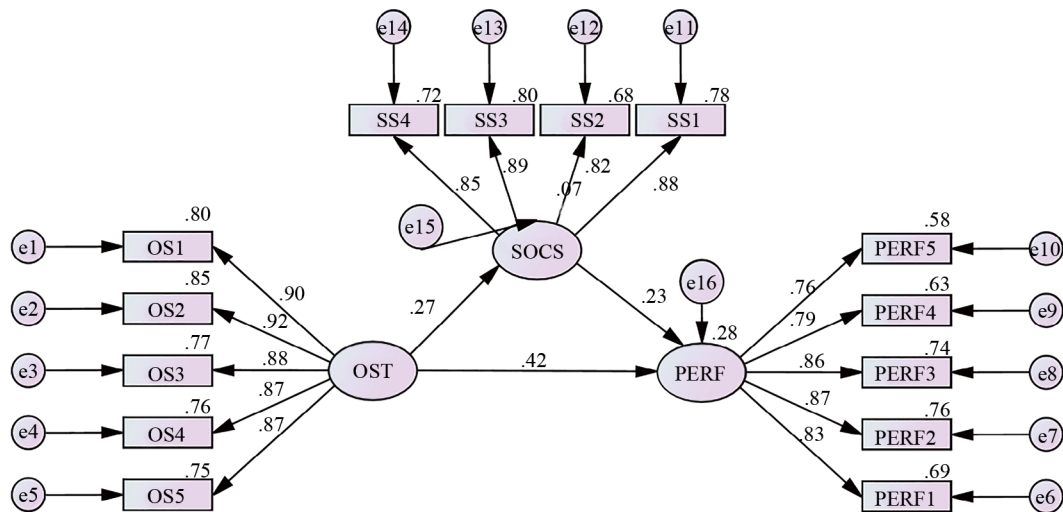


Figure 7. Mediation analysis: OST: SOCS: Social support; PER: performance

A simple slope analysis was carried out to better understand the moderating relationship between occupational stress and performance through social support. These results indicate that social support strengthens the association between occupational stress and performance.

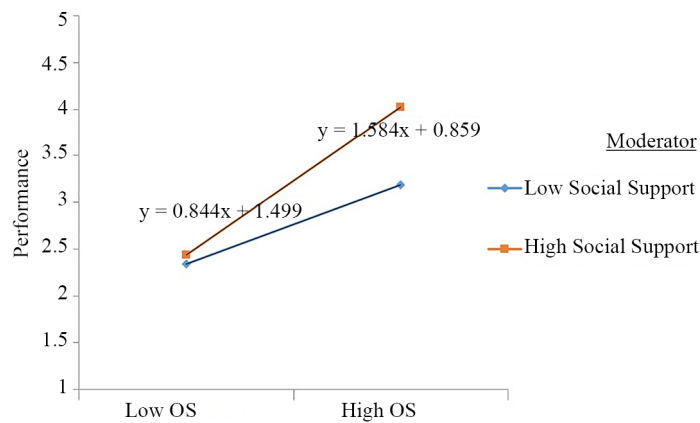


Figure 8. Simple slope analysis on the Nature of moderating effects of Social Support on performance through occupational stress (Social support strengthens the association between occupational stress and performance)

8. Discussion

The occupational stress model used and applied in this study provides broad details about the level of occupational stress experienced by IT sector employees, including occupational stress-causing components and their effects on performance. The social support strategies adopted by IT sector employees were studied and reported. The results from the statistical analysis reveal that IT sector employees experience moderate or medium-level stress. The results further reveal that, irrespective of age group, gender, and sector, employees experience moderate or moderate levels of occupational stress. The respondents in the 20- to 30-year-old age group experienced more stress than did those in the other age groups because of less experience. The simple multigroup analysis indicated that the gender groups (men and women) differed significantly. There was a statistically significant group difference between genders in terms of

occupational stress. Married women experience more occupational stress due to their dual roles as mothers/wives and employees. Most of the observations confirm that the results are in line with those of comparative studies carried out by the authors [89] and Chonticha [90–94].

Qiao et al. [95] investigated how attitudes toward EBP among medical professionals in HIV clinics in China may be impacted by work and family contexts, as measured by three psychosocial indicators (i.e., occupational stress, work-related social support from coworkers, and work-related social support from family). The hypotheses were tested via SEM analysis. SEM revealed that attitudes toward evidence-based practice (EBP) were positively correlated with coworker social support related to work, whereas occupational stress was negatively correlated with this support. Similarly, family social support related to work was positively correlated with attitudes toward evidence-based practice (EBP) and negatively correlated with occupational stress. Although there was a negative correlation between occupational stress and attitudes toward evidence-based practice (EBP), the significance of the correlation did not reach 0.05. The relationship between occupational stress and attitudes toward evidence-based practice was partially mediated by family social support related to work. Our results are consistent with the findings of the authors.

Liu et al. [96] ascertained the structural connections between nurses' perceived social support, psychological capital, job stress, and occupational burnout. From March to August 2018, data from 766 registered nurses in three general tertiary Class A hospitals were gathered via a cross-sectional design. The suggested model was investigated via structural equation modeling. The suggested model was validated by the research data. Workplace stress, psychological capital, and perceived social support all strongly influence occupational burnout. Burnout is indirectly influenced by job stress through psychological capital and perceived social support. Forty-nine percent of the variance in the explanation of burnout was accounted for by the influencing factors. Similarly, in our results, the independent variable explained 28% of the variance.

The occupational stress component role conflict is the dominant source of occupational stress among IT-sector employees, and ANOVA post hoc results (not presented) indicate that employees aged 20-29 years and women will experience more role-conflict-related stress because of inexperience and handling of dual roles, such as mothers and employees, and because of which role they attend first. However, compared with role conflict, physiological factors are less stress-causing components. Another significant finding is that male employees receive less emotional support than female employees do. Workload is statistically significant and influences performance but at various levels. Role conflict is a predominant stressor among all groups of employees. Most of the results are in line with those of similar studies carried out by [97–102].

The results indicate that most employees use emotional and informational social support strategies; however, male employees prefer social support strategies to mitigate stress. Informational strategies are more beneficial to all employees in the long term. However, some IT sector employees use cognitive behavioral avoidance and receive some benefits from perceived occupational stress, but these strategies have not been effective for a long period of time. With respect to gender differences, emotional social strategies are beneficial to female employees, and informational social support strategies are beneficial to male employees. Most of the results of our study are in line with those of [5, 101, 103, 104].

9. Conclusions

This empirical research study was carried out by surveying information technology employees in Hyderabad city. The questionnaire was developed, tested, and published on Google Forms, and links were provided through email, WhatsApp, and Links. The 300 valid responses were subjected to SEM analysis, and the results are presented. The multigroup analysis revealed statistically significant gender differences, and women experienced more stress. Role conflict was the dominant stressor, and women experienced more stress due to dual/triple roles as mothers, employees, and wives. The authors suggest meditation, social support among employees, frequent breaks, and the use of ergonomics in the office to mitigate occupational or job stress. However, stress is inherent to one's nature, and the degree of stress one can handle depends on one's personality.

This study makes a significant contribution to the field of organizational psychology by demonstrating the influential role of occupational stress and social support. Social support interventions are necessary to mitigate occupational stress in

the IT sector. The findings reveal the complexity of behavioral changes due to stress and decreased employee performance, highlighting the necessity of integrating aspects of social support into stress-mitigating strategies. This study not only reinforces the importance of social support in managing occupational stress but also enhances performance. These insights are critical to policy makers, educators, and environmental organizations in crafting more effective, tailored and holistic approaches to framing policies to enhance supportive work environments. Ultimately, this research paves the way for a deeper understanding of the interplay between occupational stress and performance in the context of social support as a mediator, opening new avenues for enhancing the research by adding more variables such as emotional intelligence and job satisfaction.

Depending on how resilient the state effects are, meditation may have a therapeutic role in treating stress-related disorders, or it may mitigate the negative effects of regular stress in daily life. If these effects of meditation carry over and permanently change the meditator into certain traits, then the significance of meditation as a stress intervention suitable for daily life may prove to be a major effective intervention [105]. Therefore, the author suggested mediation as an intervention for mitigating stress and increasing quality of life. There are a growing number of studies examining the protective effect of social support against physical and psychological disorders that arise from stress. Additionally, long-lasting effects in stress mitigation have been observed by intervention programs developed for a diverse range of clients, including elderly people, on the basis of the hypothesized advantages of increased social support for those experiencing stress [106]. Employee well-being depends critically on their ability to recover from work. Although studies have shown the advantages of recovering after work, much less attention has been given to recovering during work breaks. In this review, we methodically examine the empirical data that are currently available regarding the connection between knowledge workers' performance and well-being and work breaks [107].

10. Limitations of the study

Shortfalls in survey research are common. These issues are associated mainly with the research questionnaire. Self-report questionnaires may sometimes not be perfectly correct or reliable. The researcher has no idea who filled out the questionnaire, whether it is the respondent or another person, and this may have affected the results. Another shortfall is that there is a chance of misunderstanding by the respondents of the question/statement, although the researcher provided an appropriate description related to the study. The researcher has used reverse key statements where appropriate to overcome and mitigate such types of problems. The results of Cronbach's alpha indicated strong internal consistency of the questionnaire/instrument, as confirmed by both the statistics and the other Spearman-Brown split-half reliability statistics at the overall level. The model fit statistics from the SEM analysis revealed that the study variables maintained reliability and discriminant validity. The study outcomes can be generalized to similar types of studies with large sample sizes.

The study was restricted to the Hyderabad Metro because of its nature; however, the results can be generalized for carrying out similar types of studies. This research provides insight for future and young researchers.

11. Theoretical contributions

This research offers fresh insights into the protective functions of occupational stress and perceived social support, which act as moderators of the relationship between job stress and employee performance. The findings highlight the significance of peer social support and the need for additional studies to examine the U-shaped relationship between job stress and job performance. Thus, the current study offers preliminary support for SDM and indicates that one reason why people with high levels of socially prescribed perfectionism are susceptible to depressive symptoms is that they may feel a subjective sense of alienation from other people. Our research indicates that incorporating work and family contexts-particularly family support-into adoption and implementation strategies of evidence-based practice is crucial. The current study emphasizes the necessity of lowering occupational stress and improving social support related to work for information technology progressers, who frequently work in volatile environments. Furthermore, one major obstacle

preventing IT employees from adopting a positive attitude toward handling occupational stress may be the absence of family support related to their work. As a result, interventions meant to encourage the adoption and application of social support strategies must incorporate particular techniques for resolving work-family conflicts as well as enhancing family members' comprehension of and support for IT sector employees.

Furthermore, the findings of this study contribute substantially to the existing body of knowledge in organizational psychology, particularly in understanding the mechanism through which social support interventions can influence employee performance. The findings extend this knowledge by empirically demonstrating how structural social support interventions are needed to foster employee performance. This emphasizes that the potential of stress-mitigating strategies will not only mitigate stress but also enhance the mental health of employees and help them cope with similar types of situations.

12. Practical implications

The study suggests several policy implications aimed at enhancing employee well-being with sustained social support interventions. The findings advocate the implementation of stress mitigation strategies that integrate social support strategies into employee policies. This approach can lead to a more effective and enduring nature of support in work settings. Organizations can play a pivotal role in fostering a supportive work environment. By encouraging active participation in social support activities, employees can develop and reinforce themselves to address stress-related issues. The authors recommend the development of family-based community programs that focus on the well-being of employees. These programs include workshops and activities designed to align personal values with social-family gatherings. In line with this, these programs can provide employees with a practical approach for handling stress-related issues.

13. Future directions

This study, while contributing valuable insights, has certain limitations that provide avenues for future research. One notable limitation is the cross-sectional design, which is also effective for understanding the relationships at a single point in time and does not allow for conclusions about causality or changes in behaviors and attitudes over time. Longitudinal studies will be beneficial in understanding the evolving nature of these relationships and in determining the lasting impacts of psychological interventions. Additionally, the study focuses on information technology employees, which limits its generalizability to other cultures and age groups. However, the authors observed significant sex differences. Moreover, the reliance on self-reported measures, while practical, can introduce biases such as social desirability and self-assessment inaccuracies. The incorporation of objective measures or observational data could increase the reliability of future research that incorporates constructs such as emotional intelligence and job satisfaction. Exploring these aspects in subsequent studies would significantly enrich our understanding of the intricate dynamics among occupational stress, social support and employee performance.

Acknowledgments

The authors thank all the respondents who responded to our survey.

Ethical approval

Ethical review and approval were not needed for the study, as the authors followed the following steps:

- Informed consent from participants
- “The purpose of the survey is clearly explained.”

• “The participants were fully informed about the purpose of the survey. They had a clear idea of how their data would be used and the extent of their involvement. This allowed the participants to agree and voluntarily participate and provide honest feedback.”

Conflict of interest

The authors declare there is no conflict of interest at any point with reference to research findings.

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