

The Impact of Work-Related Stress on Job Performance Among Hospital Employees in the Kingdom of Saudi Arabia

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Abstract

The research aimed to examine the influence of work-related stress on the job performance of hospital employees within the Kingdom of Saudi Arabia. This inquiry sought to understand the extent to which stress in the workplace could affect the efficiency and effectiveness of healthcare professionals. To address the primary question and its associated sub-questions, the study adopted an empirical approach. This method allowed for a comprehensive analysis of various dimensions of job performance, including task execution, the influence of environmental and organizational factors, the ability to adapt to stressors, and the emergence of behaviours that could undermine workplace harmony and productivity. The investigation focused on a representative group of hospital staff in Saudi Arabia, encompassing a diverse sample of 225 individuals. This selection provided a broad perspective on the issue across different roles and responsibilities within the healthcare setting. A designed questionnaire served as the primary instrument for gauging the levels of work-related stress and the corresponding job performance among the participants. This tool was instrumental in capturing the nuanced experiences of the employees regarding workplace stress. The findings revealed a high prevalence of work-related stress among the hospital employees, which was inversely related to their job performance, which was observed to be at a moderate level. Notably, the study highlighted that while gender and job type did not significantly affect stress levels, the number of years of experience held a considerable impact. In light of these insights, it is advised that hospital administrations consider the implementation of targeted stress-reduction initiatives. These programs should be tailored to support less experienced employees, aiming to bolster their job performance and overall well-being.

Keywords: work-related stress, job performance, hospital employee

Introduction

The problem of work-related stress and its negative impact on productivity has gained global attention in organizations. To obtain a deeper knowledge of job stress and its influence on job performance, a holistic strategy that takes into account several elements such as individual personality traits, organizational factors, and work-family interaction is necessary.

Hans Selye's groundbreaking work in stress research, particularly his 1936 paper in *Nature*, laid the foundation for the field (Breitenbach et al., 2021). His concept of stress as a nonspecific bodily response to various stimuli, and his identification of the adrenal cortex as a key organ in stress reactions, have been pivotal in shaping our understanding of stress (Szabo et al., 2017). Selye's contributions extended beyond stress research, as he made significant discoveries in experimental medicine and endocrinology. His work has had a lasting impact, providing a framework for understanding the physiological responses to stress and the role of stress in various diseases (Jackson, 2014).

Research has consistently highlighted the importance of differentiating between positive and negative stress in the workplace. McGowan et al. (2006) emphasize the need to recognize the positive aspects of stress,

known as eustress, which can lead to positive outcomes and improved performance. This is in contrast to distress, which is associated with negative emotions and health issues (Kundaragi, 2015). However, Fevre et al.(2003) challenges the concept of eustress, suggesting that it may lead to inappropriate stress management. Despite this, the general consensus is that understanding and managing both eustress and distress is crucial for promoting employee well-being and productivity.

Stress is a complex phenomenon with both short-term adaptive and long-term harmful effects (Sun et al., 2022). Hadany (2006) suggests that the adverse effects of stress responses may have a selective advantage, and highlights the biochemical changes in fish under stress, which can lead to damaging side effects. Sai and Sriatha (2019) further explores the implications of stress for individual life history strategies, and discusses the protective and damaging effects of stress mediators, emphasizing the concept of allostatic load. These studies collectively underscore the need for a nuanced understanding of stress, considering both its adaptive and detrimental aspects (Srivastava, 2013).

Research has consistently shown that positive situations can be associated with beneficial effects of stress. Albort-Morant et al. (2020) found that individuals exposed to more stressful situations evaluated their experiences as more worthwhile and interesting. This was further supported by Varca (1999), who highlighted the adaptational significance of positive emotions during stress and the restorative function of positive emotions in coping with stress. These findings challenge the traditional view that stress is always harmful and suggest that positive experiences can also result from stressful situations (Ismail et al., 2015).

Job stress is the connection between an individual and their employment and how it affects their overall health and performance. According to Lazarus and Folkman (1984), one of the pioneers of stress research, job stress develops when a person feels that their social and personal resources are insufficient to handle the demands of their line of work. This suggests that a person's level of stress at work is influenced not just by objective factors like workload, deadlines, or conflicts, but also by their subjective evaluation of their own goals, values, beliefs, and expectations (Bjaalid et al., 2020). An essential element of this evaluation is the person's sense of control over the situation. When someone feels they have little to no control over the events that affect their employment, they are more likely to experience job stress. An individual's performance and enjoyment at work, in addition to their physical and mental health, may all suffer from job stress. Therefore, it's essential to understand the factors influencing workplace stress and acquire suitable coping techniques (Krijgsheld, et al., 2022).

Research problem

Nursing and medical jobs are seen as a stressful job because of the high demands, low authority, high expectations, and complicated and difficult activities involved. The primary stresses have been determined to be these. Studies have revealed that 50.4% of nurses experience moderate to high levels of work-related stress. Additionally, there is a substantial correlation between work-related stress and greater levels of turnover intention as well as worse job satisfaction (Babapour et al., 2022). Because work-related stress can impair a nurse's cognitive, emotional, and behavioral capacities, it also impairs the quality of care that nurses offer.

Research on the effect of work-related stress on hospital personnel' job performance in Saudi Arabia is, however, lacking, particularly when it comes to the mediating function of coping methods. The mental and physical techniques a person employs to deal with the pressures of a stressful circumstance are known as coping methods. Regarding the results of work-related stress, such as job performance, health, and well-being, various coping mechanisms may have varying consequences.

Based on the above, the current research will attempt to answer the following question:

What is the impact of work-related stress on job performance among hospital employees in the Kingdom of Saudi Arabia?

The aims and objectives of the research

The research aims to investigate the impact of work-related stress on job performance among hospital employees in the Kingdom of Saudi Arabia and to identify the factors that influence and moderate this relationship.

The research objectives

- To review the literature on the definitions, causes, and consequences of work-related stress and job performance in the healthcare sector.
- To design and administer a questionnaire to measure the levels of work-related stress and job performance among a sample of hospital employees in the Kingdom of Saudi Arabia.
- To test the hypotheses and investigate the relationships between job performance and work-related stress by utilizing descriptive and inferential statistics to evaluate the data.

- To discuss the findings and implications of the research for theory, practice, and policy in the healthcare sector.
- To provide recommendations and suggestions for future research on the topic.

The study questions

The study aims to answer the main question:

What is the impact of work related stress on job performance among hospital employees in the Kingdom of Saudi Arabia?

The main question can be further explored through several sub-questions which are as follow:

1. How does work-related stress affect task performance (e.g., efficiency, accuracy, productivity) among hospital employees in Saudi Arabia?
2. What are the contextual factors (e.g., organizational culture, work environment) that contribute to stress levels and subsequently impact job performance?
3. How does adaptive performance (e.g., flexibility, problem-solving) vary in response to work-related stressors in hospital settings?
4. What counterproductive work behaviors (e.g., absenteeism, interpersonal conflict) might arise due to stress, affecting overall job performance?

The importance of the research

Theoretically: The research can add to the body of knowledge already available on the complex and multifaceted concept of work performance in the healthcare industry, which includes task, contextual, adaptive, and counterproductive behaviors¹. It can also look at how work-related stress impacts various aspects of job performance and how different coping mechanisms and organizational interventions might lessen it. Work-related stress is a serious occupational health hazard for healthcare workers.

Practically : The research can offer significant perspectives to Saudi Arabian healthcare administrators and policymakers, who must confront the difficulty of guaranteeing the caliber and availability of healthcare services in a setting that is changing quickly⁵. Enhancing the well-being and contentment of hospital staff is also beneficial, as they play a crucial role in providing effective and efficient treatment.

Research Hypotheses

The research will test the following hypotheses

H1: Work related stress has a negative significant impact on employees' job performance in hospitals in the Kingdom of Saudi Arabia.

H2: Gender influences the level of work-related stress among hospital employees the Kingdom of Saudi Arabia.

H3: Experience influences the level of work-related stress among hospital employees the Kingdom of Saudi Arabia.

H4: Job description influences the level of work-related stress among hospital employees the Kingdom of Saudi Arabia.

H5: Age influences the level of work-related stress among hospital employees the Kingdom of Saudi Arabia.

Research limits:

Objective Limits: The study was limited to investigating the impact of work related stress on job performance among hospital employees in Kingdom of Saudi Arabia. Moreover, the research with investigate the influence of some independent variables on work related stress such as gender, age, job description, experience.

Human Limits: The study sample consisted of a group of workers at hospitals in the Kingdom of Saudi Arabia.

Place Limits: Hospitals in the Kingdom of Saudi Arabia.

Time Limits: Academic year 2023-2024.

Theoretical background

Definition of work-related stress

The reaction people may experience when confronted with expectations and pressures at work that are out of proportion to their skills and expertise and that test their capacity for adjustment is known as job-related stress. It may happen in a variety of work environments, but it is frequently made worse by staff members who believe they have little influence over work procedures and little support from managers and other employees. Stress may be produced by a variety of things, including inadequate management, inadequate job design,

inadequate organization, terrible working environment, and a lack of support. Stress can be harmful to employees' health as well as the performance of the company(Chen et al., 2022).

Common symptoms of work-related stress

Work-related stress is a multifaceted issue that can affect individuals in various ways. Physically, it often leads to exhaustion, muscle stiffness, persistent headaches, and irregular heartbeats. Many also experience sleep disturbances, including insomnia, and digestive problems ranging from diarrhea to constipation, along with skin issues.

Psychologically, this form of stress can trigger a host of emotional states such as depression, anxiety, a sense of hopelessness, irritability, and a general outlook of pessimism. It can overwhelm an individual, making it challenging to manage daily tasks or to make clear decisions due to cognitive impairments.

Behaviorally, the impact of work-related stress is evident through increased absenteeism, a rise in aggressive behavior, and a noticeable decline in creativity and initiative. Work performance may suffer, interpersonal relationships might strain, and individuals may experience mood instability, impatience, a lack of interest in activities once enjoyed, and social withdrawal(Maulik, 2017).

These symptoms highlight the importance of recognizing and addressing work-related stress promptly to maintain personal well-being and professional productivity.

The causes of work-related stress

The causes of work-related stress are multifaceted and can vary greatly among individuals and workplaces. However, some common causes identified in journal articles include:

- **Adverse Working Conditions and Management Practices:** Workplace stress is greatly increased by unreasonable demands, a lack of support, unfair treatment, limited decision freedom, a lack of appreciation, an imbalance between effort and reward, contradictory responsibilities, a lack of transparency, and poor communication, according to employee reports(Lagrosen and Lagrosen, 2022).
- **Organizational Factors:** Issues such as job insecurity, work intensity, greater workloads, and interpersonal conflicts are frequently cited as stressors. These factors can be exacerbated during economic downturns and organizational changes (Lagrosen and Lagrosen, 2022).
- **Workload and Control:** Workplace stress can result from both too much and too little work, as well as from a lack of control and involvement. Other prominent causes include job uncertainty or conflict, monotonous or unpleasant activities, and a lack of recognition in the workplace(Bhui et al., 2016).
- **Interpersonal Relationships and Working Conditions:** Stress levels might rise as a result of unsatisfactory interpersonal interactions, unfavorable job environment, and subpar leadership(Bhui et al., 2016).

Managing work-related stress

Managing work-related stress effectively involves a combination of personal strategies and organizational support. Here are some methods supported by scientific research such as (Johari,2020; Rabenu and Yaniv, 2017; Chen et al., 2022):

- **Personal Strategies:**
 - **Time Management:** Improve your time management skills to handle workloads efficiently.
 - **Mindfulness and Relaxation Techniques:** Practice mindfulness, meditation, or yoga to reduce stress levels.
 - **Physical Activity:** Engage in regular exercise, which can help alleviate stress.
 - **Healthy Lifestyle Choices:** Ensure adequate sleep, a balanced diet, and avoid excessive intake of caffeine and alcohol.
- **Organizational Strategies:**
 - **Work Environment:** Advocate for a supportive work environment that includes clear communication and realistic expectations.
 - **Professional Development:** Seek opportunities for skill development to increase job competence and confidence.
 - **Social Support:** Build a network of colleagues for emotional and practical support.
 - **Work-Life Balance:** Encourage the implementation of laws that support work-life balance, such flexible work schedules.
- **Coping Strategies:**
 - **Problem-Focused Coping:** This involves taking action to manage the stressful situation, such as seeking solutions, setting priorities, and asking for help when needed.

- Emotion-Focused Coping: This includes strategies to regulate emotions, such as seeking emotional support, re-appraising the situation positively, and practicing stress-reduction techniques.

Job performance definition

Job performance is typically defined as the value of the set of employee behaviors that contribute to organizational goals. This includes actions that are directly involved in producing goods or services or that provide an indirect role by supporting the organization's infrastructure. Performance is often measured through a combination of quantitative and qualitative metrics that can include productivity, efficiency, quality of work, and contribution to team or organizational objectives (Krijgsheld, 2022).

Measurement of job performance

To measure job performance, organizations may use various tools and methods such as:

- Performance Appraisals: Regular reviews conducted by supervisors to assess an individual's work performance against expected standards and objectives.
- 360-Degree Feedback: An approach wherein staff members obtain anonymous, private feedback from their coworkers.
- Key Performance Indicators (KPIs): Specific, measurable indicators tied to strategic objectives that help in assessing the effectiveness of an employee's performance.
- Objective and Key Results (OKRs): A goal-setting framework that helps to define and track objectives and their outcomes.

The measurement of job performance is crucial as it provides insights into an employee's effectiveness, informs decisions on promotions, compensations, and can identify areas for improvement and development (Motowidlo and Kell, 2012; Curral and Gomes, 2022).

The dimensions of job performance

The dimensions and determinants of job performance are critical aspects that help organizations and researchers understand how well individuals perform in their roles. Here's a summary of these concepts:

Dimensions of Job Performance:

- Task Performance: The efficiency with which employees carry out tasks that support the technological foundation of the company.
- Contextual Performance: Actions like organizational citizenship that support the social, psychological, and organizational environments.
- Adaptive Performance: The ability to adjust to and remain effective across a variety of situations, tasks, and environments.

Factors Affecting Work Performance:

- Declarative Knowledge: Knowing what is necessary to carry out a task.
- Procedural Knowledge and Skills: The ability to carry out a task or job.
- Motivation: The readiness to put up the effort required to complete a task.

Numerous elements, including as individual skills, personality traits, work experiences, and the organizational setting, have an impact on these dimensions and determinants (Motowidlo and Kell, 2012; Curral and Gomes, 2022).

When discussing the theoretical background of job performance, there are several key concepts and models that have been influential in understanding and assessing job performance. Here are some elements:

- Behavioral Approach: Job performance is often conceptualized as a set of behaviors that are beneficial to the organization. This approach emphasizes the episodic and aggregate nature of performance, where each instance of behavior contributes to the overall assessment (Motowidlo and Kell, 2012).
- Multidimensional Models: These models suggest that job performance is not a single construct but rather consists of multiple dimensions, such as task performance, contextual performance, and adaptive performance (Motowidlo and Kell, 2012).
- Theoretical frameworks often discuss various antecedents of job performance, including cognitive abilities, personality traits, motivation, knowledge, and skills, and how they interact to influence performance (Motowidlo and Kell, 2012).
- Engagement and Performance: Some theories propose that the level of an individual's engagement in their role—how much of their complete self they invest—can significantly affect their job

- performance. This covers how basic self-evaluations, perceived organizational support, and value congruence affect performance results (Rich et al., 2017).
- Performance Management Systems: The literature on performance management systems provides insights into how organizations measure and manage employee performance, integrating concepts from public administration, strategic planning, and management controls (Amic and Cepiku, 2020).
 - Holistic Analysis: A comprehensive view of job performance considers both individual and organizational factors, including the context in which performance occurs and the interactions between various performance determinants (Amic and Cepiku, 2020).

The relationship between work-related stress and job performance

The relationship between work-related stress and job performance is a complex one, and various theoretical frameworks and models have been developed. Number of studies presented various models to understand the relationship between work-related stress and job performance such as (Johari, 2020; Maulik, 2017; Sun et al., 2022; Jex, 1998) and they are as follow:

Demand-Control Model: This model suggests that job demands can lead to stress, but this effect is moderated by the level of control that an individual has over their work. High demands paired with low control can lead to high stress and lower job performance.

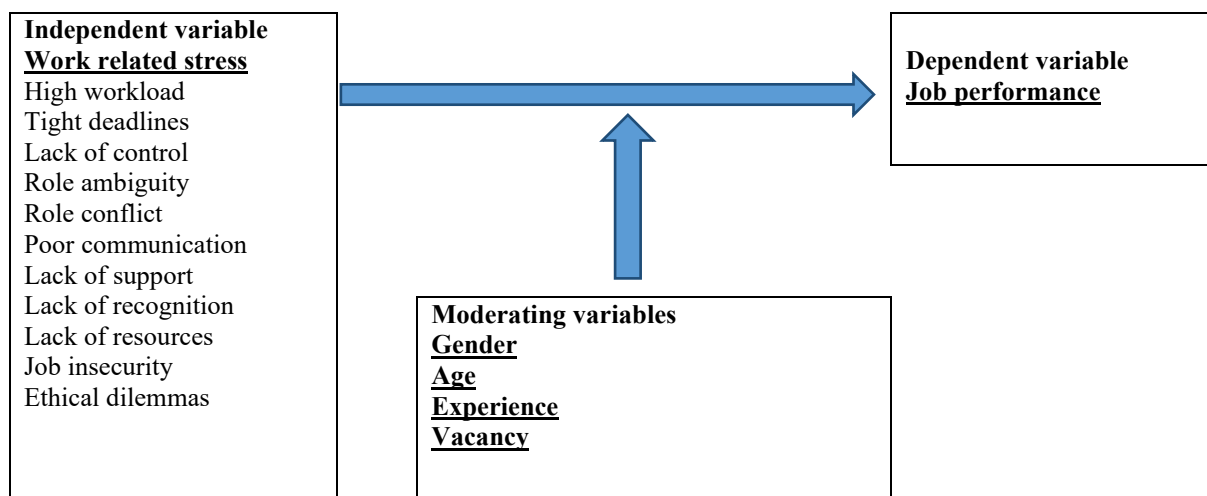
Effort-Reward Imbalance Model: According to this model, stress arises from an imbalance between the efforts an employee puts into their work and the rewards they receive in return. Lack of recognition and reward can lead to stress and reduced job performance.

Job Demands-Resources Model: This framework posits that while job demands can be stressful, resources such as social support, autonomy, and opportunities for professional development can buffer the impact of these demands on stress and job performance.

Transactional Model of Stress and Coping: This paradigm emphasizes the importance of assessment in determining stress levels and sees stress as the outcome of a transaction between the individual and their environment. How an individual appraises the demands of their job and their ability to cope can influence their stress levels and job performance.

Conservation of Resources Theory: This theory suggests that stress occurs when there is a threat to, loss of, or lack of gain in personal resources. These resources can be anything valued by the individual, including material, social, or personal resources.

This study will follow the following model:



Previous Studies

Work related stress studies

In today's occupations, work-related stress is a major problem as it has an impact on productivity and employee well-being. It is linked to a number of health consequences, from medical illnesses to psychological anguish. Numerous elements have been found in the research on this subject to contribute to work-related stress and its negative health impacts.

- The study by Wilkins and Beaudet (1998) investigates the differences between sexes in how job stress affects various health outcomes. Among men, job strain was significantly associated with migraines and psychological distress. Among women, job strain was linked to work injuries, and job insecurity was associated with migraines. High physical demands at work were related to work injuries for both men and women. The study examined health outcomes such as depression, migraines, work-related injuries, high blood pressure, psychological distress, and cardiovascular disease. These results imply that because occupational stress affects health outcomes differently in men and women, stress management strategies may need to be customized.
- The study by Ganster and Rosen (2013) provides a multidisciplinary review of the relationship between work stress and employee health. The research confirms that workplace strain, job instability, and high physical demands are associated with negative health outcomes. The study finds that job strain is linked to different health issues in men and women. For men, job strain is significantly associated with migraines and psychological distress. For women, job strain is more likely to be linked to work injuries. The Allostatic Load model provides a framework for understanding the physiology of stress and its effects on health in this study. This model takes chronic stress-related wear and tear on the body's systems into account. The results highlight how crucial it is to take gender into account when discussing professional stress and its negative effects on health.
- Stress related to work and nonwork can both have separate effects on one's physical and mental well-being, and placing too much emphasis on one aspect of one's life might exacerbate other health problems (Ganster and Schaubroeck, 1991).
- The structure and demands of a job can contribute to psychological disorders like depression. Stress management interventions should be customized to the needs of different occupational groups, as stress experiences and solutions may vary (Rees, 1995).
- The Allostatic Load model, as discussed by Sara et al. (2018), is indeed a pivotal framework for comprehending the multifaceted effects of workplace stress on health. Primary Mediators: These are the immediate responses of the body to stress, including the release of stress hormones like cortisol and adrenaline. They prepare the body to handle stressors through the "fight or flight" response. Secondary Mediators: These include the effects of primary mediators on the body over time. Prolonged exposure to stress hormones can lead to wear and tear on various physiological systems, a state known as "allostatic load." The model suggests that the cumulative burden of chronic stress can lead to adverse health outcomes, such as cardiovascular disease, psychological disorders, and a weakened immune system. In the context of the workplace, stressors can range from high job demands and low autonomy to poor social support and work-life imbalance. The Allostatic Load model helps in identifying how these stressors translate into biological responses that may eventually impact health. Understanding the pathways through which stress affects health can inform the development of interventions aimed at reducing allostatic load among employees. This could involve strategies to enhance workplace support, improve job design, and promote stress management practices.
- Chronic work-related stressors include temporary employment and a lack of work-family balance, with temporary workers typically experiencing higher levels of stress (Klitzman, 1990).
- Specific health outcomes like musculoskeletal pain, gastrointestinal disorders, and insomnia have been linked to work-related stress risk factors like excessive workload, role ambiguity, hostile work relationships, and lack of managerial support (Nakao, 2010).

The impact of work related stress on job performance studies

The impact of workplace stress on job performance has been the subject of much discussion lately, particularly among hospital staff members in the Kingdom of Saudi Arabia (KSA). The level of patient care may be negatively impacted by stress, according to studies, which is why stress at work is especially frequent among healthcare professionals.

- The study conducted by Aldaiji et al. (2022) provides valuable insights into the occupational stress and job satisfaction among healthcare workers in the Eastern Region of Saudi Arabia. The survey revealed that a significant majority of healthcare workers experienced moderate to high levels of stress. - The

- overall prevalence of occupational stress was reported to be 66.2%. Factors Contributing to Stress such as working more than 50 hours per week, engaging in night shifts, and facing a shortage of employees were identified as strong contributors to increased stress levels among healthcare workers. Despite the high levels of stress, the workers' job satisfaction did not decline. This unexpected finding suggests that the existing system of rewards and benefits may play a crucial role in maintaining job satisfaction. The study highlights the resilience of healthcare workers in the face of demanding work conditions. It also underscores the importance of a supportive work environment and adequate compensation in mitigating the negative effects of occupational stress. This research is particularly relevant in understanding the challenges faced by healthcare professionals and the effectiveness of organizational support systems in promoting job satisfaction.
- The study by Salam et al. (2019) investigates the link between work-related stress and medication errors among healthcare professionals. Specific stressors, including the pressure to meet deadlines and disruptions to family life due to work demands, were significantly associated with higher rates of medication errors. The study used documented incident reports to evaluate medication errors, providing a more objective measure than self-reported data. The results underscore the necessity of implementing effective stress management strategies within healthcare settings to minimize medication errors and enhance patient safety. The study suggests that addressing work-related stress is not just beneficial for healthcare professionals' well-being but is also critical for maintaining high standards of patient care.
 - The study by Ibrahim et al. (2021) focuses on the prevalence of work-related stress and its effects on mental health among employees at Ain Shams University Hospitals who are not directly involved in patient care. A significant portion of the staff experienced work-related stress, with about one-fifth facing serious mental health issues. The main contributors to occupational stress were identified as unpleasant or hazardous work conditions and a lack of control over job responsibilities. The study found that work-related stress was significantly associated with mental health problems, including depression, anxiety, and stress. These findings highlight the importance of addressing work environment factors and job control to mitigate stress and promote mental well-being among hospital employees.
 - The study by Alblihed&Alzghaibi (2022) examines the impact of the COVID-19 pandemic on the work-life balance, job security, and stress levels of frontline healthcare professionals in Saudi Arabia, and how these factors influence their intention to leave their jobs. The pandemic has exacerbated issues related to work-life balance, job security, and workplace stress for healthcare professionals. These heightened stressors have led to an increase in healthcare professionals' intentions to leave their positions in Saudi Arabia. The study found that burnout mediates the relationship between these stressors and the intention to leave. This means that the stressors contribute to burnout, which in turn influences the decision to leave. The findings highlight the critical need for effective retention strategies to manage stress and prevent burnout among healthcare professionals, especially during times of crisis. The research underscores the importance of addressing the well-being of healthcare workers to ensure the stability of the healthcare system during and after the pandemic.
 - Job stress was shown to be adversely correlated with all aspects of job satisfaction in Greek hospitals, with the main stressors being conflict, a severe workload, and a lack of workplace autonomy (Trivellas et al., 2013). Similarly, job-related stress was common among nurses in Dammam, Eastern Saudi Arabia, where it was found to be 45.5%. Significant predictors of stress included younger age, Saudi nationality, and work shifts (Salam, 2014).
 - Studies conducted in South Africa have demonstrated a strong correlation between work-related stress and burnout and nurses' overall health and job happiness, which has an impact on output and patient care quality (Khamisa et al., 2015). It has been discovered that occupational stress has a detrimental effect on pharmacists' work satisfaction in Saudi Arabia, with hospital pharmacists reporting lower levels of satisfaction (Aldaiji, 2022).
 - The study by Alanazi et al. (2019) highlights the prevalence of work-related stress among nurses in primary healthcare centers in Arar, Saudi Arabia. Approximately one-third of the nurses surveyed reported experiencing work-related stress. Nurses with higher education levels were more likely to report higher stress levels. The findings suggest a need for stress management training to help nurses cope with the demands of their job and reduce stress levels. These insights underscore the importance

of providing support and resources to healthcare professionals to maintain their well-being and ensure the quality of patient care.

- Last but not least, a study conducted on hospital staff members discovered a negative correlation between workplace stress and QWL, with job stress positively correlated with desire to leave the company. According to this, lowering occupational stress is essential for raising QWL and lowering turnover (Mosaddeghrad et al., 2011).

THREE: Research Methodology

Research design

This research used empirical method, using quantitative and qualitative approaches, which are the most appropriate methods for this study. The purpose of this method is to collect and analyze data and facts about the study problem and its implications. This method helps answer the study questions, tests the hypotheses, and achieves the objectives. The steps of this method are as follows:

- ✓ First, the research problem is defined and then the research title is chosen.
- ✓ Review previous literature and studies.
- ✓ Determine the research objectives, questions and hypotheses
- ✓ Design of research tool. Here the tool is a questionnaire.
- ✓ Determine the research population and choose the research sample. Here the sample will be a systematic random one.
- ✓ Apply research tools and collect data from the sample.
- ✓ Analyze data and use appropriate statistical tests.
- ✓ Obtaining results, interpreting them, and making suggestions.

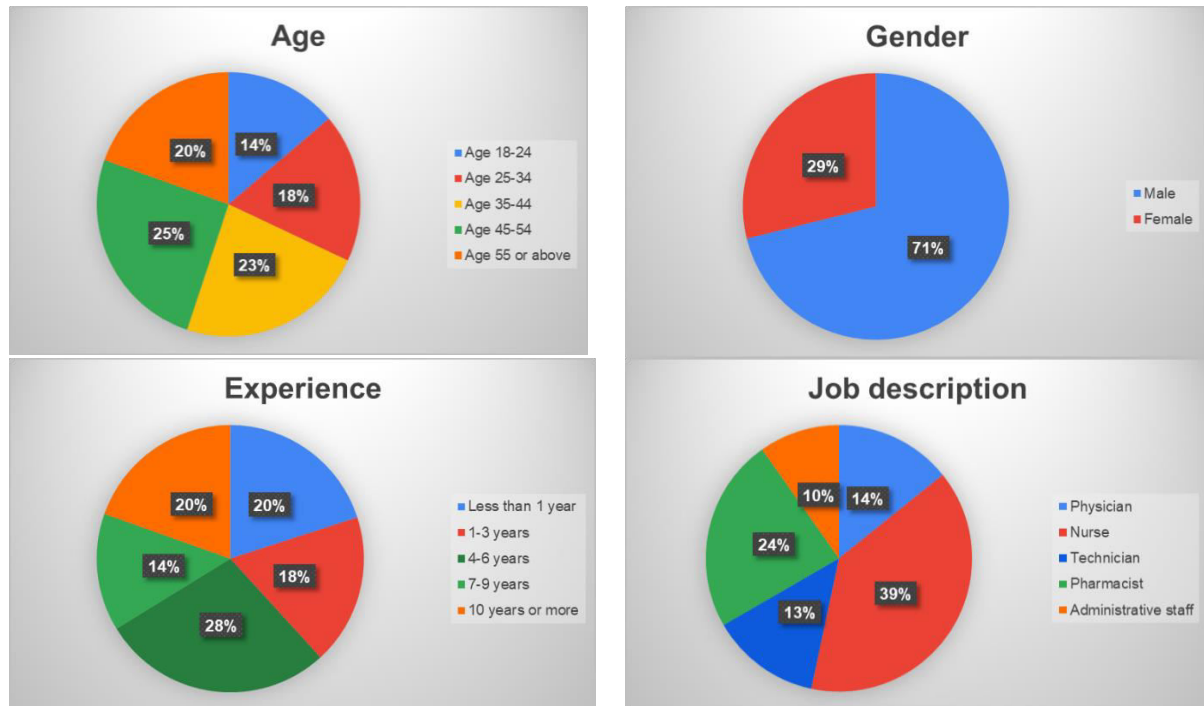
Research community and sample

The research community consists of all hospital workers in the Kingdom of Saudi Arabia. A simple random sample consisting of 220 members of health workers have been selected.

As presented previously, this research aims to study the impact of work related stress on job performance among hospital employees in the Kingdom of Saudi Arabia. To do this, data were collected from a random sample of 225 employees. The following table shows results that we obtained through analyzing the questionnaire demographic data.

Variable	Groups	Frequency	Percent
Age	18-24	31	13.78
	25-34	41	18.22
	35-44	52	23.11
	45-54	57	25.33
	55 or above	44	19.56
Gender	Male	160	71.11
	Female	65	28.89
How long have you been working in the hospital?	Less than 1 year	45	20.00
	1-3 years	41	18.22
	4-6 years	63	28.00
	7-9 years	32	14.22
	10 years or more	44	19.56
What is your job description?	Physician	32	14.22
	Nurse	88	39.11
	Technician	30	13.33
	Pharmacist	53	23.56
	Administrative staff	22	9.78

The table displays frequencies and percentages of sample members according to the variables of age, gender, number of years of experience in the hospital, and job title. Below are the graphical figures that represent the table.



Research data collection tools

A special questionnaire has been designed to collect data to answer the research questions and test its hypotheses. By asking respondents a sequence of questions designed to elicit certain information from them, questionnaires are a useful tool for data collection. There are several ways to deliver questionnaires: online, via mail, over the phone, or in person. Depending on the type of questions asked, a questionnaire might produce descriptive or numerical data. Numerical data is often generated by questions that have predetermined responses; descriptive data is generated by questions that allow respondents to provide their own replies.

The questionnaire consisted of three main sections as follows:

- The first section: designed to collect bibliographic data about the sample members, such as gender, age, job title, and experience.
- The second section: designed to collect data on job stress.
- The third section: designed to collect data about employees' performance.

Validation of the questionnaire

The questionnaire validity:

After the initial design of the questionnaire was completed, and before its use in collecting the necessary data to answer the research questions, the validity of the questionnaire was verified to ensure its suitability for use in the study. The validity of a questionnaire is defined as the extent to which the questionnaire can accurately and logically measure what it intends to measure, in alignment with the objectives of the study.

The internal consistency validity of the questionnaire was calculated by finding Pearson correlation coefficients between the score of each statement and the score of the dimension it belongs to. Additionally, Pearson correlation coefficients were calculated between the score of each dimension of the questionnaire and the total score of the questionnaire. The following table illustrates the results.

Work related stress		
N	Statements	Pearson correlation
1.	2. How often do you experience stress at work?	0.68**
3.	How would you rate your level of stress at work	0.69**
	The main causes of stress at work for you :	
4.	High workload	0.79**
5.	Tight deadlines	0.81**
6.	Lack of control	0.83**
7.	Role ambiguity	0.69**
8.	Role conflict	0.79**
9.	Poor communication	0.84**
10.	Lack of support	0.81**
11.	Lack of recognition	0.76**
12.	Lack of resources	0.82**
13.	Job insecurity	0.79**
14.	Ethical dilemmas	0.71**
15.	Work-related stress affects my physical health	0.73**
16.	Work-related stress affects my mental health	0.85**
17.	Work-related stress affects my personal life	0.75**
18.	Work-related stress affects my job satisfaction	0.83**
19.	Work-related stress affects my job performance	0.81**

** Indicates that the correlation coefficient is significant at the 0.01 level

It is clear from the table that all statements in the work related dimension are associated with strong positive correlation coefficients that are statistically significant at the significance level of 0.01, which indicates their internal consistency.

Pearson correlation coefficients between the scores of each statement from the dimension of job performance

Job performance		
N	Statements	Pearson correlation
20.	How would you rate your overall job performance	0.73**
21.	I achieve the goals and objectives of my job	0.72**
22.	I complete my tasks on time and with quality	0.84**
23.	I work well with my colleagues and supervisors	0.69**
24.	I provide good service to the patients and their families	0.82**
25.	I cope well with the challenges and difficulties of my job	0.84**
26.	I seek feedback and improvement opportunities for my job	0.76**
27.	I show initiative and creativity in my job	0.77**
28.	I adhere to the ethical and professional standards of my job	0.79**

** Indicates that the correlation coefficient is significant at the 0.01 level

It is clear from the table that all statements in the job performance are associated with strong positive correlation coefficients that are statistically significant at the significance level of 0.01, which indicates their internal consistency.

Reliability of the questionnaire:

The reliability of a questionnaire is defined as its ability to produce the same results when repeated under similar conditions, and it is an indicator of the quality and trustworthiness of the questionnaire and the data it collects. We used Cronbach's alpha coefficient to verify the reliability of the questionnaire's dimensions, and the following table shows the results:

N	Dimensions	Stat ement	Cronbach's alpha
1	Work related stress	19	0.82
2	Job performance	9	0.85

It is clear from the table that the Cronbach alpha correlation coefficients are positive and strong and indicate the stability of the study tool and its usability to collect data.

Estimating Questionnaire Responses

The questionnaire employed a five-point Likert scale, with responses ranging from "strongly agree" to "strongly disagree." For each statement in the questionnaire, a score of 5 indicated "strongly agree," while a score of 1 indicated "strongly disagree." These were coded numerically from 5 to 1, accordingly. To determine the level of responses, the arithmetic mean of the responses will be calculated, and to pass judgment on the level or degree of response, the responses are divided into five equal categories through the following formula:

Category length = (Maximum response limit - Minimum response limit) / Number of response alternatives = $(5-1) / 3 = 1.33$

Consequently, the distribution of responses according to the following degrees:

Estimation of Questionnaire Responses Based on the Arithmetic Mean

Average	Degree
1 to 2.33	Weak
2.34 to 3.67	Moderate
3.68 to 5	High

Statistical processing methods

Excel2007 and SPSS22 will be used to draw charts, conduct tests, and extract results. The following tests were applied:

- Descriptive statistics (percentages - frequencies)
- Pearson correlation to examine the association between variables.
- Simple regression to examine the impact of work related stress on job performance.
- Independent sample t-test to investigate the differences in the sample answers according to independent variables such as gender.
- ANOVA to investigate the differences in the sample answers according to independent variables such marital status.

CHAPTER FOUR: data analysis and results

This chapter presents the results, first describing the results of the work-related stress, then the results of the job performance, and then we present the hypothesis testing.

Work related stress

The following table shows the results of the work related stress

N	Statements	Mean	STD	Rank	Level
1.	How often do you experience stress at work?	3.97	0.14	2	High
2.	How would you rate your level of stress at work	3.64	0.13	14	Moderate
3.	<u>The main causes of stress at work for you</u> High workload	4.12	0.15	1	High
4.	Tight deadlines	3.75	0.13	11	High
5.	Lack of control	3.50	0.14	18	Moderate
6.	Role ambiguity	3.51	0.12	17	Moderate
7.	Role conflict	3.95	0.14	3	High
8.	Poor communication	3.95	0.14	4	High
9.	Lack of support	3.65	0.13	13	Moderate

10.	Lack of recognition	3.64	0.12	15	Moderate
11.	Lack of resources	3.90	0.15	6	High
12.	Job insecurity	3.60	0.14	16	Moderate
13.	Ethical dilemmas	3.71	0.13	12	High
14.	Work-related stress affects my physical health	3.83	0.13	8	High
15.	Work-related stress affects my mental health	3.81	0.13	9	High
16.	Work-related stress affects my personal life	3.89	0.14	7	High
17.	Work-related stress affects my job satisfaction	3.94	0.14	5	High
18.	Work-related stress affects my job performance	3.77	0.13	10	High
	Work related stress	3.78	0.13		High

The table indicates that the aspect related to work pressure received an arithmetic mean of 3.78 and a high availability level. This suggests that work pressure is high among hospital workers in Saudi Arabia. The table also shows that workers in Saudi hospitals experience high levels of stress, with the arithmetic mean for the work pressure statement being 3.97. However, the level of pressure was estimated by hospital workers to be moderate, with an arithmetic mean of 3.64.

The most common causes of work pressure, in order, are as follows: high workload, role conflict, poor communication, lack of resources, and tight deadlines, all in high level. Then in moderate level the main causes of stress at work are as follow: lack of support, lack of recognition, job insecurity, role ambiguity, and lack of control.

Furthermore, the sample individuals' responses indicated that work pressure affects job satisfaction at a high level, with an arithmetic mean of 3.94. Work pressure also has a high impact on personal life, with an arithmetic mean of 3.89, and on mental health, with an arithmetic mean of 3.81. It also affects job performance at a high level, with an arithmetic mean of 3.77.

Job performance

The following table shows the results of the job performance

N	Statements	Mean	STD	Rank	Level
19.	How would you rate your overall job performance	3.39	0.31	3	Moderate
20.	I achieve the goals and objectives of my job	2.95	0.18	6	Moderate
21.	I complete my tasks on time and with quality	2.71	.019	9	Moderate
22.	I work well with my colleagues and supervisors	2.99	0.15	5	Moderate
23.	I provide good service to the patients and their families	3.08	0.16	4	Moderate
24.	I cope well with the challenges and difficulties of my job	3.83	0.15	2	High
25.	I seek feedback and improvement opportunities for my job	4.17	0.43	1	High
26.	I show initiative and creativity in my job	2.82	0.61	7	Moderate
27.	I adhere to the ethical and professional standards of my job	2.78	0.68	8	Moderate
	Job performance	3.19	0.31		Moderate

The table shows that the workers rated their overall job performance as moderate with an arithmetic mean of 3.39, and the general job performance aspect was also considered moderate with an arithmetic mean of 3.19.

The statement "I seek feedback and improvement opportunities for my job" came with a high level and an arithmetic mean of 4.17. The statement "I cope well with the challenges and difficulties of my job" came with a high level and an arithmetic mean of 3.83. The statement "How would you rate your overall job performance" came with a high level and an arithmetic mean of 3.39. The statement "I provide good service to the patients and their families" came with a high level and an arithmetic mean of 3.08. The statement "I work well with my colleagues and supervisors" came with a moderate level and an arithmetic mean of 2.99. the

statement "I achieve the goals and objectives of my job" came with moderate level, arithmetic mean of 2.95. the statement "I show initiative and creativity in my job" came with moderate level, arithmetic mean of 2.82. the statement "I adhere to the ethical and professional standards of my job" came with moderate level, arithmetic mean of 2.78. Finally, the statement "I complete my tasks on time and with quality" came with moderate level, arithmetic mean of 2.71.

Testing of the hypotheses

H1: Work related stress has a negative significant impact on employees' job performance in hospitals in the Kingdom of Saudi Arabia.

Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	0.60 ^a	0.351	0.313		0.896

a. Predictors: (Constant), work related stress

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.512	0.155		16.249	.000
	work related stress	-1.039	0.044	-0.060	-1.901	.368

a. Dependent Variable: job performance

According to Table above, R square is 0.351, which shows that 35 percent of the dependent variable is being explained by independent variables.

According to table above, work related stress beta coefficient value is -0.039 with a significant value of 0.001 which is lesser than 0.05. In this case, work related stress has a negative significant influence on employee job performance.

H2: Gender influences the level of work-related stress among hospital employees the Kingdom of Saudi Arabia.

To test this hypothesis, we used an independent sample t-test to study differences in the level of job stress according to the gender variable, and the following table shows the results

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
work related stress	Female	65	3.74169	1.39763	.17335
	Male	160	3.81625	1.36666	.10804

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
work related stress	Equal variances assumed	0.072	0.789	0.07	223	0.943	.01442	.20234	.38431	.41316
	Equal variances not assumed			0.07	116.3	0.944	.01442	.20427	.39014	.41899

We note from the tables above that the average work related stress for females is 3.81 and the average work related stress for males is 3.74. To find out if this difference in the averages is significant, we note the significance level of 0.9, which is greater than 0.05, which means that the test is not statistically significant. That is, there is no difference between males and females in the level of work related stress. In other words gender does not influence the level of work-related stress among hospital employees the Kingdom of Saudi Arabia.

H3: Experience influences the level of work-related stress among hospital employees the Kingdom of Saudi Arabia.

To test this hypothesis, we conducted an ANOVA test between the responses of sample members according to the variable number of years of experience, and the following tables show the result

Descriptive

	N	Mean	Std. Deviation	Std. Error
Less than 1 year	45	4.47	.04201	.00626
1-3 years	41	4.21	.10419	.01627
4-6 years	63	3.68	.14736	.01857
7-9 years	32	3.38	.05822	.01013
10 years or more	44	3.17	.22583	.03444
Total	225	3.7861	.49583	.03306

ANOVA

work related stress

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	50.908	4	12.727	681.459	.000
Within Groups	4.109	220	.019		
Total	55.017	224			

We note that the level of significance in the variance test is 0.001, which is greater than 0.05, meaning that the test is statistically significant, and this means that there is an effect of the number of years of experience factor on the work related stress variable. To know the significance of the differences between the categories, we note the arithmetic averages, where we find that the average work related stress for workers with more than 10 years was 3.17 lower than the rest of the categories. We note that the greater the number of years of work, the lower the level of work related stress. This indicates that the number of years of experience helps workers in Saudi hospitals get used to the nature of the work and deal with work related stress so that its impact on them becomes less.

H4: Job description influences the level of work-related stress among hospital employees the Kingdom of Saudi Arabia.

To test this hypothesis, we conducted an ANOVA test between the responses of sample members according to the variable number of years of experience, and the following tables show the result

Descriptive

Job description	N	Mean	Std. Deviation	Std. Error
Physician	32	3.7756	1.2134	0.52125
Nurse	88	3.9866	1.26884	0.53569
Technician	30	3.6389	1.30002	0.51339
Pharmacist	53	3.4636	1.25944	0.54961
Administrative staff	22	3.6544	1.36907	0.54778
Total	225	3.78	1.29602	0.45973

ANOVA

Work related stress

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.233	4	1.808	2.053	.069
Within Groups	172.607	220	.785		
Total	179.840	224			

The table shows that the highest level of job stress is among nurses with a mean of 3.98, followed by doctors with a mean of 3.77. Pharmacists come last with a mean of 3.65. In order to know the significance of these differences, we note the level of significance, as we find from the table that the significance level of 0.069 is greater than 0.05, meaning that the test is not statistically significant. This means that there is no effect of the variable type of work in Saudi hospitals on the level of job stress among workers.

H5: Age influences the level of work-related stress among hospital employees the Kingdom of Saudi Arabia.

To test this hypothesis, we conducted an ANOVA test between the responses of sample members according to the variable number of years of experience, and the following tables show the result

Descriptive

Age	N	Mean	Std. Deviation	Std. Error
18-24	31	4.1945	0.01547	0.00278
25-34	41	3.999	0.07647	0.01194
35-44	52	3.7723	0.16697	0.02315
45-54	57	3.6211	0.0942	0.01248
55 or above	44	3.2134	0.22379	0.03374
Total	225	3.7775	0.49559	0.03304

ANOVA

work related stress

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	50.703	4	12.676	646.530	.000
Within Groups	4.313	220	.020		
Total	55.017	224			

We note that the level of significance in the variance test is 0.001, which is greater than 0.05, meaning that the test is statistically significant, and this means that there is an effect of the employee age variable on the work related stress variable. To know the significance of the differences between the categories, we note the arithmetic averages, where we find that the average work related stress for workers with age between 18-24 is 4.19 more than the rest of the categories. We note that the older the age, the lower the level of work related stress. This indicates age helps workers in Saudi hospitals get used to the nature of the work and deal with work related stress so that its impact on them becomes less.

Discussion and conclusion

Summary and discussion of the main findings

The main objective of the study is to study the impact of work related stress on job performance among hospital workers in the Kingdom of Saudi Arabia. After analyzing the data, the most important results can be summarized as follows:

The results show high levels of work-related stress among hospital employees in Saudi Arabia, as indicated by the arithmetic means, highlight a critical area for organizational and policy attention. Addressing the root causes of this stress is essential for enhancing job performance and ensuring the well-being of healthcare workers. This is consistent with the results of previous studies such as (Salam et al, 2019) and (Aldajji et al., 2022).

It is important to consider the broader implications of such stress levels. High workload, role conflict, and poor communication are identified as the primary stressors, which are common in hospital settings due to the demanding nature of healthcare work. The moderate level stressors, including lack of support and

recognition, further exacerbate the situation, potentially leading to job insecurity and role ambiguity. This is similar to results of previous studies such as (Sara et al., 2018) and (Nakao, 2010).

The high arithmetic mean scores for job satisfaction (3.94) and personal life (3.89) imply that work pressure is not only a professional concern but also intrudes into the personal domain, affecting overall well-being. Similarly, the impact on mental health (3.81) is significant, considering the critical role mental health plays in maintaining a productive and motivated workforce. This is consistent with the results of (Rees, 1995).

Moreover, the effect of work related stress on job performance (3.77) is particularly concerning in a hospital environment where optimal performance is crucial for patient care and safety. This suggests a need for interventions aimed at reducing work-related stress, such as improving communication, resource allocation, and providing better support and recognition systems. This is consistent with the result of Petty et al. (1984).

The analysis of the data reveals that hospital employees in Saudi Arabia perceive their job performance to be at a moderate level. They acknowledge that there is potential for improvement in their overall work output. Employees express a strong inclination towards seeking feedback and opportunities for improvement, indicating a commitment to professional growth and excellence in facing job challenges. This is consistent with the result of Petty et al. (1984).

However, the moderate perception of performance in areas such as collaboration with colleagues and supervisors, achieving job goals and objectives, demonstrating initiative and creativity, adhering to ethical and professional standards, and completing tasks with quality and punctuality suggests that there are barriers to achieving higher performance levels. These could be related to organizational factors, resource availability, or personal factors affecting the employees. Previous studies showed similar results such as (Ng and Feldman, 2008) and (Bakker et al., 2004).

The high regard for feedback and improvement reflects a positive aspect of the workforce's attitude, which can be leveraged to enhance performance in the moderately rated areas. By addressing the underlying issues that contribute to these moderate perceptions, hospital management can facilitate an environment that supports higher job performance and, consequently, better patient care outcomes. It is essential for the administration to explore these areas further and implement supportive measures to help employees reach their full potential. Previous studies showed similar results such as (Mol et al., 2005) and (Rotundo, 2002).

The hypothesis testing conducted within the research on work-related stress among hospital employees in Saudi Arabia has yielded insightful findings. The absence of a significant impact of gender and job title on work-related stress levels suggests that these factors do not contribute to the stress experienced by employees in this context. This is different of results of (Ganster and Rosen, 2013). This could indicate that stressors within the hospital environment are universally experienced, regardless of these variables.

Conversely, the number of years of experience appears to have an inverse relationship with work-related stress levels. This finding implies that more experienced employees have developed coping mechanisms or possess a level of expertise that mitigates the perception of stress. It is reasonable to infer that experience equips hospital workers with the skills and resilience needed to manage the demands of their roles more effectively. This is similar to previous studies results such as (Salam, 2014) and (Ng and Feldman, 2008).

Additionally, the influence of age on work-related stress levels, where older employees report lower stress, may reflect a similar accumulation of coping strategies over time. It could also suggest that with age comes a certain wisdom or perspective that allows for a more balanced approach to work-related challenges. This is similar to previous studies results such as (Salam, 2014) and (Ng and Feldman, 2008).

Recommendations for Hospital Management:

1. **Mentorship Programs:** Implement mentorship programs where experienced staff can guide less experienced employees, sharing coping strategies and expertise.
2. **Professional Development:** Offer continuous professional development opportunities to help employees enhance their skills and confidence in managing work-related challenges.
3. **Work Environment Improvements:** Improve the work environment by ensuring adequate resources, streamlining communication processes, and reducing role conflict.
4. **Recognition and Support:** Establish systems for recognizing employee achievements and providing support during high-stress periods or when dealing with job insecurity and role ambiguity.
5. **Age and Experience Consideration:** Tailor support programs to consider the varying needs based on employees' age and experience, as these factors influence stress levels and job performance.

Suggestions for Future Research:

- Based on the findings of the study, we present the following suggestions:
1. **Longitudinal Studies:** Conduct longitudinal research to track changes in work-related stress over time and its long-term effects on job performance.

2. Comparative Studies: Compare stress levels across different hospital departments or between various healthcare institutions within the Kingdom to identify specific stressors.
3. Interventional Research: Investigate the effectiveness of stress-reduction programs and interventions tailored to the healthcare sector.

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