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Experiences of Critical Care Nurse Managers in Addressing Nurses' Work-Related Stress

Mariana Tsucuneli
Walden University

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Walden University

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Mariana Tsucuneli

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Dr. Maria Ojeda, Committee Member, Nursing Faculty

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Chief Academic Officer and Provost
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Walden University
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Abstract

Experiences of Critical Care Nurse Managers in Addressing Nurses' Work-Related Stress

by

Mariana Tsucuneli

MA, Walden University, 2018

BS, Davenport University, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Nurses who work in the critical care unit are more likely to experience work-related stress, fatigue, understaffing, undesirable performance outcomes, and compromised workplace safety than general care nurses. Nurse managers in these units possess insights into nurses' stress-inducing challenges, in addition to managerial and administrative perspectives. Yet there is a lack of available knowledge about the experiences of critical care nurse managers in addressing nurses' work-related stress. The purpose of this study was to explore critical care nurse managers' experiences of potential strategies to effectively address work-related stress among nurses. The job-demand resource model was the theoretical framework for the study. A qualitative phenomenological design was used. Purposive sampling was used to select 13 critical care nurse managers from health care facilities in the U.S. Midwest. Data were gathered by conducting interviews. Thematic analysis of interview data yielded four themes: Job demand, physical resources, mental resources, and emotional resources. Seven subthemes were identified: Prevalence of problem, influence of stressors, self-care practices, social support, journaling, stress management and resilience training, and healthy work environment. The study's implications for positive social change include the identification strategies that nursing leaders can apply to mitigate work-related stress among critical care nurses, which may bolster these health care providers' physical and mental wellness and ability to deliver quality care to patients.

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Chapter 1: Introduction to the Study

Work-related stress is prevalent among nurses, who are responsible for providing bedside care, a process that can be stressful. Nurses' roles in providing first-line patient care services with mixed outcomes, quick-decision-making, and long-working hours are stress triggers (Chegini, 2019). Moreover, nurses working in critical care units or intensive care units are more likely to experience work-related stress than those working in general care; more than 80% of the population in the United States, specifically suffers from burnout syndrome, research shows (Costa & Moss, 2018). Numerous studies have established the negative effects of work-related stress on clinicians' well-being and patient outcomes (Aslan et al., 2021; Chegini, 2019; Costa & Moss, 2018). Additionally, work-related stress has been associated with staff burnout and high turnover, which are the top challenges currently experienced by nurse managers (Feddeh & Darawad, 2020). Therefore, managing work-related stress is essential for nurse managers to avoid negative effects on patient outcomes and hospital processes.

In this study, I explored the experiences of critical care nurse managers in managing work-related stress for nurses. The study may result in the identification of effective strategies for managing work-related stress among nurses, which is currently a significant challenge facing the global and United States health care system (Aslan et al., 2021; Chegini, 2019; Costa & Moss, 2018). In addition, identifying work-stress management strategies may provide insight that nursing leaders and other stakeholders can use to mitigate the nurse staffing challenges resulting from high turnover.

This chapter comprises an introduction to the study; a presentation of the background; and statements of the problem, purpose, and research questions. I also discuss the conceptual and theoretical frameworks for the study and the study's nature. I also define key terms and discuss the limitations, scope and delimitations, assumptions, and significance of the study.

Background

Nurses have reported numerous stress causes, such as fatigue, poor patient outcomes, staffing and turnover issues, care burden, and workplace safety related to their work setting (Allah et al., 2020). Furthermore, the exposure to various stressors escalates work-related stress for nurses and nurse leaders, which further affects the clinicians' performance and patient outcomes, resulting in a vicious cycle (Muhamad et al., 2021). As a result, nurses working in environments characterized by high employee turnover, poor patient outcomes such as in the critical care units, and management-related stress have reported a higher prevalence of work-related stress, burnout, and mental health illnesses (Aslan et al., 2021; Chegini, 2019; Costa & Moss, 2018).

Some successful interventions for reducing work-related stress for nurses involve improving organizational factors related to workload, staffing, and intra and interprofessional relationships (Allah et al., 2020). Additionally, interventions related to improving employee welfare, such as promoting work-life balance, improved workplace safety, and physical and mental wellness programs, have a higher probability of succeeding (Allah et al., 2020; Kendall-Raynor & Cunningham, 2020). Facilitating

nurses' safety through the provision of tools for identifying and managing potential aggression in patients and obtaining psychological support enhances satisfaction outcomes, which are negatively correlated with work-related stress (Nurmeksela et al., 2021).

Mitigating work-related stress for nurses requires a thorough understanding of the challenges they face and an ability to recognize the causes (Allah et al., 2020). Nurse leaders understand the work obligations, environment, challenges, and available resources for nurses in different units (Chegini, 2019). Nurse managers also have jurisdiction over the nursing staff's workload and the resources that can influence their satisfaction and wellness outcomes (Feddeh & Darawad, 2020). For nurses in critical care, their leaders and managers are aware of the challenges they face and can address and mitigate them with the appropriate changes in policy and resources.

Researchers have addressed the challenges associated with work-related stress for nurses and, to some extent, nurse managers' awareness of them (Allah et al., 2020; Chegini, 2019; Feddeh & Darawad, 2020; Kendall-Raynor & Cunningham, 2020). However, there is a gap in knowledge of nurse managers' experiences related to managing work-related stress for nurses. This gap is more apparent in nurses working in critical care units, who are 80% more likely to experience work-related stress than their colleagues in general care units (Costa & Moss, 2018). Therefore, this study is necessary to understand how nurse managers perceive the management of work-related stress among their nursing staff. In addition, understanding nurse managers' experiences of

these strategies can help identify the interventions with efficient outcomes and the factors influencing the success or failure of the strategies.

Problem Statement

The problem studied was the lack of available knowledge about the experiences of critical care nurse managers regarding managing work-related stress for nurses. Nursing is considered stressful, and nurse managers possess unique insights into the specific stress-inducing profession challenges (Allah et al., 2020). Addressing the challenges related to the work environment, such as workload, staffing, inter- and intradepartment relationships, and employee safety, has led to successful outcomes in managing stress for nurses, research indicates (Allah et al., 2020). However, nurse managers' perspectives regarding the efficient strategies for managing work-related stress for nurses are not known.

The findings from Allah et al. (2020) indicate that nurse managers are aware of the challenges nurses face, such as workplace violence, conflict, employee turnover, lack of motivation, and poor performance. Additionally, Chegini (2019) posited that nurse managers and other clinical leaders could mitigate or influence some of the challenges affecting nurses that result in work-related stress. However, nurse managers' experiences regarding these challenge mitigation strategies and stress management for nurses have not been explored.

Work-related stress remains a major challenge for the health care industry because of the cycle of stress, burnout, and turnover among nurses (Feddeh & Darawad,

2020). However, successful mitigation of these factors is determined by various factors, among them the involvement of nurse managers (Allah et al., 2020). Therefore, exploring nurse managers' awareness, experiences, and preferences regarding stress management strategies for nurses may yield knowledge that informs the future implementation and success of similar interventions.

Purpose of the Study

The purpose of this study was to explore critical care nurse managers' experiences of potential strategies used to effectively address work-related stress among nurses. Little is known about what coping strategies are effective for nurses and others who work in critical care, where the role demands and needs are more complex than in other units (Costa & Moss, 2018). I examined nurse managers' awareness, understanding, and experiences related to managing work-related stress for nurses in critical care units. Nurse managers assign nurses their roles in addition to other managerial tasks, such as handling staff employment matters and overseeing relationships in the workplace. Therefore, nurse managers hold unique perspectives regarding how to address the challenges nurses face in the workplace. Therefore, the aim was to understand how critical care nurse managers perceive stress management strategies for nurses. The study findings may yield strategies and other recommendations that nurse managers can use to manage nurses' work-related stress.

Research Questions

I sought to answer a primary research question and two supporting questions. The primary research question addressed in the study was, What are the experiences of critical care nurse managers on work-related stress for nurses? The supporting interview questions were:

Sub Research Question 1: How do critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on critical care nurses?

Sub Research Question 2: How do critical care nurse leaders describe effective stress management strategies for improving job resources among critical care nurses?

Theoretical Framework of the Study

I applied the job demands-resources (JD-R) model in the qualitative study. Bakker and Demerouti (2011) developed the framework to explain how the organizational environment impacts employees' well-being and performance. In addition, the model is used to explain occupational stress, and the theorists suggest that imbalances in demands and resources cause stress in employees

The JD-R framework stipulates job characteristics as demands or resources (Bakker & Demerouti, 2011). Job demands are the facets of employment that require physical or psychological effort, cost, and skill set to perform and maintain. Conversely, job resources refer to the aspects of employment that focus on growth, learning, personal development, and work to reduce demands and the associated physiological and

psychological costs (Bakker & Demerouti, 2011). Job demands and resources can take a physical, psychosocial, or organizational facet (Tummers & Bakker, 2021). Although job demands are taxing on the employee and can affect their well-being, job resources motivate the workers and lead to improved productivity and engagement (Tummers & Bakker, 2021).

The JD-R model frames the causes of work-related stress as the imbalance between job demands and resources, which can be considered the case for nurses working in critical care and other demanding units (Bakker & Demerouti, 2011). Therefore, strategies for managing work-related stress should incorporate increasing job resources to balance or outweigh demands leading to improved well-being. Nurse managers hold leadership roles and can change the flow of resources to nurses in their units; therefore, they can take actions to mitigate the imbalance in job demands versus job resources to address work-related stress in nurses (Feddeh & Darawad, 2020). If nurses are aware of the imbalances causing work-related stress, they may be able to address the challenge. The JD-R model aligned with the study's purpose and research questions; hence, I applied it to explore nurse managers' perspectives on work-stress management. The model informed the framing of the interview questions regarding understanding of work-stress management. The research questions address the understanding and experiences of nurse managers with stress management strategies, which revealed their awareness of the relationship between job demands and job resources based on their responses. Additional discussion of the theoretical framework is included in Chapter 2.

Nature of the Study

I adopted a qualitative methodology and phenomenological design to address the research questions in this study. Use of a qualitative methodology facilitates the collection of descriptive and conceptual data useful for investigating the study participants' experiences and attitudes (Creswell & Creswell, 2017; Liu et al., 2020; Savic et al., 2019). In addition, the qualitative approach was selected because the phenomenological methodology aligned with the study's objective, which was to investigate the experiences of nurse managers regarding managing work-related stress in nurses.

I used a phenomenological design to explore nurse managers' perspectives regarding work stress management strategies for nurses. A phenomenological design is suitable for understanding experiences from the interviewees' context (Creswell & Creswell, 2017; Liu et al., 2020). I composed the study's two sub research questions to explore the thoughts of the study participants as well as their experiences with managing work-related stress.

The qualitative methodology and phenomenological design are an appropriate interpretive paradigm to explore critical care nurse managers' subjective experiences in managing work-related stress (Alharahsheh & Pius, 2020; Savic et al., 2019). An interpretive paradigm was relevant in this study because it helped me interpret the participants' experiences to derive meaning from the responses to answer the research questions. Therefore, in this study, the emphasis was on understanding the critical care

nurse managers and their experiences of work-related stress (see Alharahsheh & Pius, 2020; Kivunja & Kuyini, 2017).

The concept explored was the experiences of critical care nurse managers about managing work-related stress for nurses. The phenomenological method was used to explore nurse managers' experiences of approaches and ways to cope to effectively reduce work-related stress among nurses in the critical care unit. Based on the JD-R model, nurse managers must identify measures to support nurses' well-being and performance in critical care as they comprise higher-order resources (Alharahsheh & Pius, 2020).

The study methods progressed from participant selection and recruitment to data collection and analysis. I used purposive sampling to identify the potential participants from nurse managers working in critical care units. Next, participants were recruited from the sampled cohort of nurse managers working to achieve saturation and minimum sample. The recruited nurse managers were interviewed in one-on-one interviews; in the interviews, I asked semistructured questions. The interviews were recorded, and I took field notes to help with the analysis. After transcribing the interview data, I undertook thematic analysis. In the analysis, I sought to establish the common and different themes emerging from the participants' responses.

Definitions

The following terms and key concepts are used in this study:

Critical care: The health care services provided to sick patients with life-threatening and complex diseases (Morton et al., 2005). I use critical care in combination with terms such as "nurses," "nurse managers," and "units" to represent the type of care needed by patients or provided by health care providers. Critical care nursing is an advanced practice nursing specialty that engages with critically ill or injured patients in pre-and postoperative settings (Morton et al., 2005). Critical care nurses provide direct care to critically ill or injured patients. "Critical care units" refer to departments caring for critically sick or injured patients.

Experiences: In qualitative research, the term *experience* is used to portray an individual's understanding of the reality of a given phenomenon through their senses, leading to the formation of opinions and actions (Korstjens & Moser, 2018). In the study, the term is used to convey how nurse managers understand stress management through learning or job performance.

Job demands: Facets of employment that require physical, social, or psychological effort; cost; and/or skills to perform a certain task (Bakker & Demerouti, 2011).

Job resources: Physical, social, psychological, or organizational aspects of work that are essential in fostering growth, learning, and personal development to reduce job

demands on employees and enable them to successfully perform a task (Bakker & Demerouti, 2011).

Nurse managers: Supervisory staff who are assigned to the nursing staff within a hospital setting (Allah et al., 2020). Nurse managers are RNs themselves, and their roles range from overseeing patient care and nursing staff work to budgeting (Blok et al., 2021). In this study, the term *nurse manager* refers to any RN holding a managerial role and whose duties include supervising or overseeing the work of nursing staff.

Work/job-related stress: The response of employees when their work demands exceed and overwhelm their abilities and knowledge, leading to challenges in coping (World Health Organization, 2020). In this study, I focused on work-related stress in nurses, which is rampant and a top challenge facing the health care industry (Blok et al., 2021). In this study, *work-related stress* is used to depict any type of distress or emotional tension experienced by nurses.

Assumptions

The study's assumptions relate to the qualitative methodology and phenomenology design used to address the research question. Like other qualitative researchers, I assumed that the participating nurse managers had multiple perspectives (Aspers & Corte, 2019; Busetto et al., 2020). Therefore, I assumed that the findings portrayed more than one perspective of management strategies for work-related stress for nurses. Additionally, I assumed that the participating nurse managers were aware of or

had experience with stress management strategies, putting them in a position to share their perspectives.

A key aim of phenomenological studies is to establish the universal essence of the phenomenon. However, as Creswell and Creswell (2017) posited, phenomenological researchers assume that people use a universal essence to interpret their experiences. Therefore, the participants' interpretation of their experience and knowledge of managing work-related stress may not have allowed for the identification of common themes. Nevertheless, the assumption is necessary for phenomenological studies such as the current one and can be mitigated by recruiting more participants.

Scope and Delimitations

The research problem was how work-related stress affects nurses. This focus was important because work-related stress is a significant problem facing the nursing profession (Allah et al., 2020). Work-related stress can escalate to burnout, poor mental health outcomes, and nurse turnover, worsening the challenges facing the nursing profession (Blok et al., 2021). Therefore, the aim of the study was to investigate critical nurse manager experiences regarding work-related stress management for nurses. The population of interest was critical care managers. I focused on their experiences of stress management strategies.

The focus on critical care nurse managers (vs. other nursing leaders) was a delimitation to the study and affects the transferability of the results. Critical care nurse managers are professionally trained as advanced nurse practitioners (Lee et al., 2018).

Their education and training may influence their management skills and capabilities. Applying the JD-R model, I focused on the stress management strategies and resources that nurse managers provide their nursing staff to balance workplace demands, which may also vary from unit to unit and from one professional training to another. Therefore, the transferability of the findings to different units is not guaranteed.

Limitations

The study's limitations are related to methodological procedures such as sampling and data collection. I used purposive sampling to recruit a sample to provide information to answer the study questions. However, purposive sampling does not always yield a sample that is the most representative of the study population; therefore, the study results may not be generalizable (Creswell & Creswell, 2017). A limitation in the data collection was the lack of opportunities to verify the respondents' responses. Given the study topic, there was a likelihood that the participants responded in a way they thought would appease me as the researcher, resulting in study bias.

Significance

Nurses are considered the backbone of the health care industry for their participation in all levels of patient care (Chegini, 2019). The nursing profession is stressful and characterized by various challenges, such as staff shortages and poor well-being of workers (Feddeh & Darawad, 2020). Therefore, this study is significant because I sought to understand the experiences of critical care nurse managers in managing nurses' work-related stress.

Amid the ongoing COVID-19 pandemic, nurses and other health care providers working in critical care have had to work extra hard, long hours and be exposed to more risk (Arnetz et al., 2020; Fernández-Castillo et al., 2021). The circumstances exacerbate the existing challenges, including work-related stress, facing nurses. This study is further significant because, by providing insight on the shared experiences of work-related stress among nurses, it may help newly appointed first-line nurse managers to better understand their managerial roles. This may help to ease the transition period for future nurse managers.

The study findings can be a helpful resource for nurses in different administrative positions as an evidence-based tool to address workplace-related stress (see Worringer et al., 2020a). The findings may contribute to positive social change related to improved interactions between nurse managers and nursing staff. Understanding the unmet needs and challenges related to work-related stress in nurses could likely promote managers' capacity to identify systemic and administrative strategies for combating the problem. Stress management strategies may improve the frequency and quality of interactions between inter and intradepartmental staff, including managers and the nurses.

Summary

Nurses working in critical care units experience higher stress levels than their colleagues in general departments (Costa & Moss, 2018). Nurse managers hold unique insights into the nursing profession and their capacity to influence hospital policies and budgets. Their understanding of strategies for addressing one of the major challenges of

the profession, work-related stress, may allow them to improve the quality of nurses' work environment (Muhamad et al., 2021). However, there is no available research, based on my review of the literature, on nurse managers' perspectives on managing work-related stress for nurses. Thus, the purpose of the study was to explore critical care nurse managers' experiences of potential strategies used to effectively address work-related stress among nurses.

I sought to answer the primary research question, What are the experiences of critical care nurse managers in managing work-related stress for nurses? The JD-R model underpinned the study investigation; I framed the interviews that I conducted for data collection within the framework's concepts. I used a qualitative method, phenomenological design, and interpretive paradigm to guide the study. The assumptions and limitations of the study are related to the approach and design used. The study can potentially help identify effective strategies for managing work-related stress for nurses, which is a significant problem currently affecting the health care sector.

In this first chapter, I introduced the study and addressed the background, problem, significance, theoretical framework, nature, and the problem examined. These topics are explained in detail in the subsequent chapters. The next chapter, Chapter 2, contains a detailed presentation of the theoretical framework, the background of the study, and a synthesis of the available literature.

Chapter 2: Literature Review

Introduction

Nurses have a core role as first-line health care services providers, a responsibility that often can be physically, emotionally, and psychologically demanding, particularly for those who work in the intensive care unit. Critical care nurses experience ethical dilemmas, end-of-life issues, persistent human suffering, demanding patients, and the increasingly technical nature of the intensive care unit environment (van Mol et al., 2018). Other factors attributed to work-related stress include lack of support from leadership and colleagues, understaffing, and long work hours (Allah et al., 2020). These concepts require critical care nurses to be lifelong learners and acquire new competencies to efficiently deliver evidence-based care and fulfill the patients' needs (Eldin et al., 2021; Howeri & ALBashtawy, 2020).

Accordingly, the increased patient and professional-related demands are associated with increased work-related stress. Therefore, occupational stress among nurses is a significant problem because it negatively impacts the health care providers' ability to deliver quality care, as the psychological phenomenon is associated with decreased productivity and job satisfaction (Nurmeksela et al., 2021). In addition, the reduced productivity and job satisfaction resulting in absenteeism and burnout factors attributed to nurses leaving their professions negatively impact society (Nurmeksela et al., 2021; O'Donnell & Andrews, 2021). Hence, the focus problem in the phenomenological qualitative study was work-related stress among critical care nurses.

Stress is prevalent among critical care nurses and has detrimental impacts on the health care providers' psychological wellness (Arnetz et al., 2020; Shah et al., 2021). Findings from a study with a nationally representative sample of 50,237 nurses in the United States showed that 59.5% of the health care providers left the profession because of a stressful work environment (Shah et al., 2021). Work-related stress among critical care nurses has particularly been elevated during the COVID-19 pandemic (Arnetz et al., 2020; Fernández-Castillo et al., 2021). Despite the significance of the problem, work-related stress is not effectively managed. For this reason, the purpose of the study was to explore critical care nurse managers' experiences of potential strategies used to effectively address work-related stress among nurses.

Chapter 2 contains overviews of the literature search strategy and theoretical foundation, followed by a review of the literature. In the Literature Search Strategy section, I explain the databases searched, inclusion-exclusion criteria applied, the articles yielded, and the studies used in the literature review section. In the theoretical foundation section, I explain the JD-R model, specifically its application, rationale for its selection, and relevance to the study. The study's core variables and concepts are discussed in the literature review. A concise summary of the major themes, what is known or not known based on assessed literature, and a transition to Chapter 3 are included in the final section.

Literature Search Strategy

I performed a comprehensive literature search in two electronic databases: PubMed and the Cumulated Index to Nursing and Allied Health Literature (CINAHL).

Also, a search of Google Scholar was performed, ensuring that the literature search was detailed and extensive. Additionally, I reviewed the reference lists of the retrieved articles, which facilitated in identifying studies relevant to the phenomenon of focus.

I used the following keywords, in alignment with the topic, purpose statement, theoretical framework, and research questions, in the literature search; *critical care managers, work-related stress, job demands, job resources, stress, occupational stress, nurses, experience, management, performance, work environment, roles, adaptive approaches, self-destructive techniques, and coping strategies*. Search phrases were developed by combining the keywords using Boolean operators AND/OR. The formulated search phrases were (a) critical care managers AND work-related stress OR job demands OR occupational stress, (b) nurses AND job resources AND work-related stress, (c) critical care managers AND experience AND work-related stress, (d) work-related stress AND nurses AND coping strategies OR management, (e) work environment AND stress AND nurses, (f) nurses AND performance AND roles AND stress, (g) adaptive approaches AND nurses AND work-related stress, and (h) critical care AND self-destructive techniques AND nurses (see Table 1).

Table 1*Search Yield*

Search Phrase	Yield
Critical care managers AND work-related stress OR job demands OR occupational stress	PubMed: 43,134 CINAHL: 4,957 Google Scholar: 17,100
Nurses AND job resources AND work-related stress	PubMed: 398 CINAHL: 4,363 Google Scholar: 17,600
Critical care managers AND experience AND work-related stress	PubMed: 7,727 CINAHL: 2,514 Google Scholar: 17,600
Work-related stress AND nurses AND coping strategies OR management	PubMed: 1,676,031 CINAHL: 526 Google Scholar: 15,500
Work environment AND stress AND nurses	PubMed: 2,525 CINAHL: 71 Google Scholar: 60,300
Nurses AND performance AND roles AND stress	PubMed: 490 CINAHL: 11 Google Scholar: 16,500
Adaptive approaches AND nurses AND work-related stress	PubMed: 173 CINAHL: 3,426 Google Scholar: 17,100
Self-destructive techniques AND nurses	PubMed: 0 CINAHL: 1,864 Google Scholar: 8,500

Subsequently, I applied inclusion-exclusion criteria to decrease the search yield into manageable figures. I considered studies eligible for inclusion in the literature review if they were (a) published between 2018 and 2021, (b) available in full text, (c) relevant to the study's variables and constructs, and (d) written in English. Articles that fulfilled the inclusion criteria were excluded if they were (a) not peer reviewed and (b) published in predatory journals. Applying the inclusion-exclusion criteria decreased the search yield

to 123 studies. Also, reviewing the titles and abstracts allowed me to identify the most relevant studies. After the review, 27 studies were selected and synthesized in the literature review section.

Theoretical Foundation

I used the JD-R model, a theoretical framework focused on integrating stress and motivation, to anchor the study. Demerouti et al. (2001) created the model. A core assumption associated with the model is that each occupation has specific peril factors associated with job-related stress (Demerouti et al., 2001, Demerouti & Bakker, 2011; see Figure 1). The job-specific risk factors can be classified as job demands and job resources. Job demands are the physical, societal, mental, or firm-based aspects that require workers' skills or efforts (Demerouti et al., 2001; Demerouti & Bakker, 2011).

Consequently, job demands are associated with certain psychological or physiological consequences (Castner, 2019; Demerouti et al., 2001; Demerouti & Bakker, 2011). Arguably, job demands are not predominantly negative; however, they may become stressors, especially if significant efforts are needed to achieve them. For instance, nursing is a high-pressure and complex profession characterized by irregular working hours, dealing with ethical dilemmas, handling end-of-life issues, and experiencing persistent human suffering, all of which require the nurses' physical, emotional, and psychological input (Allah et al., 2020). Additionally, in the nursing profession, the risk factors that are associated with job-related stress include long work hours, lack of adequate staffing, exposure to death, handling of critically ill patients, the

emotional demand associated with the job, and exposure to diseases or infections (Arnetz et al., 2020; Wazqar, 2019).

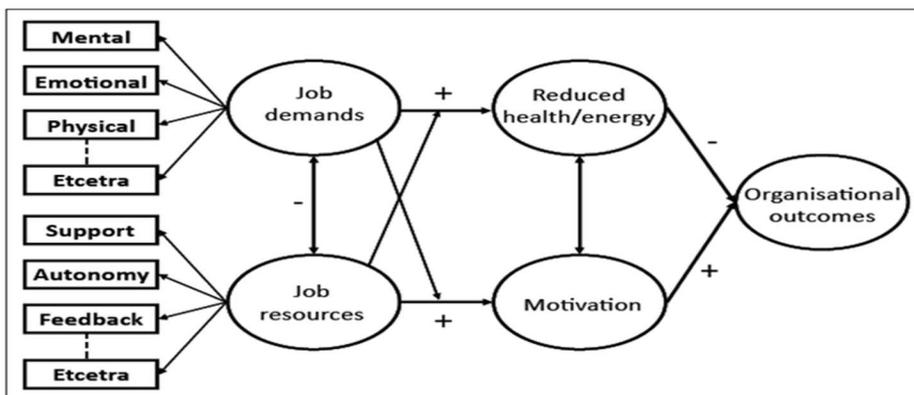
In contrast, job resources are the physical, social, psychological, or organizational aspects that are essential in fulfilling the work goals, decreasing the demands associated with a role, or fostering an employee's growth and development (Castner, 2019; Demerouti et al., 2001; Demerouti & Bakker, 2011). As a result, job resources are essential in helping employees fulfill their demands. The resources can be at an organizational, interpersonal, job, and task level. Accordingly, the job resources at the organizational level include salaries, job security, and career growth opportunities. At the interpersonal level, they include support from coworkers or supervisors and team collaboration. The job-specific resource examples are role clarity and involvement in core decision-making. Job resource examples at the task level are autonomy, recognition, and feedback (Castner, 2019; Demerouti et al., 2001; Demerouti & Bakker, 2011). In essence, the study focused on interpersonal, job, and task level factors that critical care nurse managers can influence. For example, in the published works of literature, the establishment of a healthy working environment, social support, team collaboration, self-care/self-management, autonomy, scheduling, staffing, and increased engagement has been supported as job resources that help manage work-related stress (Alharbi & Alshehry, 2019).

The other assumption associated with the JD-R model is that health impairment and motivation are two underlying psychological processes that influence job stress

(Demerouti et al., 2001; Demerouti & Bakker, 2011; see Figure 1). Hence, the health impairment indicates that demanding jobs exhaust the employees' physical and mental resources, resulting in energy depletion, stress, and health problems. On the contrary, the motivational processes result in increased job engagement. Hence, job resources are a significant motivational factor because they underpin the employees' growth, development, and learning. Creating a healthy working environment that promotes the nurses' autonomy, recognition, social support, appropriate staffing, and improved engagement can promote the nurses' job motivation and, thus, decrease work-related stress (Alharbi & Alshehry, 2019).

Figure 1

Job Demands-Resources Model



Note. The JD-R model illustrates the job demands and resources that influence work-related stress. From “The JD-R Model: Challenges for Future Research,” by E.

Demerouti and A. B. Bakker, 2011, *SA Journal of Industrial Psychology*, 37(2), p. 3

(<https://doi.org/10.4102/sajip.v37i2.974>). CC BY 4.0.

Previous Application of the Job Demands-Resources Model

In the existing literature, the above-discussed assumptions have been proven to be true. For instance, Bakker and de Vries (2021) applied the JD-R model that was supported in explaining that when employees experience work-related stress, they are more likely to use adaptive or maladaptive self-regulation approaches. Hence, appropriate leadership strategies are needed to help employees overcome the factors that result in stress, which advances to burnout or fatigue (Bakker & de Vries, 2021).

Tummers and Bakker (2021) applied the JD-R model to assess how leaders can influence employees. The scholars identified that leaders could affect employees by impacting job demands and resources, influencing their wellness and organizational performance. For example, in nursing, Broetje et al. (2020) based their study on the JD-R model, identifying three and six job demands and resources, respectively. The job demands included increased workload, lack of recognition/rewards, and interruptions in the work-life balance. In contrast, the identified job resources were autonomy, transformational leadership, professional materials, supervisor support, interpersonal relations, and authentic management (Broetje et al., 2020). Additionally, Kaiser et al. (2020) applied the JD-R model, identifying that job demands are positively associated with burnout. Also, job resources were positively correlated with engagement but negatively associated with burnout. Overall, job demands and resources influence nurses' wellness and performance (Broetje et al., 2020).

Rationale for the Selected Model

Three rationales provided the basis for the section of the JD-R model. The theory is focused on integrating two research traditions, stress, and motivation (Demerouti et al., 2001). Based on the theorist, job demands can cause health impairment. On the contrary, job resources promote motivation among employees. Accordingly, applying the model will help specify how demands and resources interact and influence the nurses' jobs. Additionally, using the model will help formulate interactions between job demands and resources in comprehensively understanding the factors that motivate the nurses and those that result in stress. The comprehension could help foster job resources and reduce job demands.

Other theories used in the literature, such as the allostatic load theory and transactional model of stress and coping, explain occupational stress. Conversely, although the allostatic load theory is based on the premise that stress occurs when environmental challenges exceed a person's capability to cope, it is more appropriate to understand the psychosocial determinants of the phenomenon (Doan, 2021). Also, even though Kellogg et al. (2018) applied the transactional model of stress and coping, the framework was not selected for this study because of its limited application in the nursing context. Another rationale is the applicability of the JD-R model in different professions, including nursing, which supported the development of the three research questions that will guide the study

Relevance of the Model to the Study and Research Questions

The theory is relevant to the study and research questions because it will help understand how the individual, work environment, job characteristics, and professional resources are attributed to work-related stress for nurses from the perspective of critical care nurse managers. In particular, the first research questions are what are the experiences of critical care nurse managers on managing work-related stress for nurses? The research questions are related to JD-R's job demand construct, which will help understand the factors that result in work-related stress from the critical care nurse managers' perspective. The second and third research questions are How do critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on critical care nurses? How do critical care nurse leaders describe effective stress management strategies for improving job resources among critical care nurses? The two research questions are related to the job resources construct, which will help understand the strategies adopted to enhance the nurses' motivation and decrease work-related stress.

Literature Review Related to Key Variables and/or Concepts

I synthesized the retrieved articles into four in this main literature review section. The sections include (a) constructs of interest, methodology, and scope of the study; (b) approaches to the problem and the strengths and weakness; (c) rationale for selection of the variables; and (d) studies related to the key concepts and research questions. As a

rule, the concepts discussed in the literature review were based on the topic, study's purpose, problem statement, and research questions.

Constructs of Interest, Methodology, and Scope of the Study

Only studies related to the constructs of interest, work-related stress and its management were synthesized in this literature review. The retrieved pieces of literature that fulfilled the inclusion-exclusion criteria were conducted using the quantitative, qualitative, or mixed-methods methodologies. Despite the variance in methodology and scope, the studies were synthesized because I provided insightful information on the constructs of interest.

For example, Liu et al. (2020) applied a qualitative phenomenological approach, which supported in obtaining a detailed explanation of the participants' lived experiences. In a different qualitative study, Savic et al. (2019) collected the nurses' lived experiences on the impact of work and the strategies applied by health care providers to manage their roles. Similarly, Worringer et al. (2020a) focused on assessing experiences, which was achieved by collecting data using semistructured interviews. The researchers incorporated MAXQDA to facilitate the thematic analysis, supporting an understanding of nurse managers' experiences. Likewise, Genrich et al. (2020) incorporated MAXQDA to facilitate the analysis, supporting deriving meaning from the participants' statements.

Qualitative studies that the researchers used designs other than the phenomenological approach were included because the constructs discussed, data collection approaches, methodology, and analysis techniques were within this study's

scope. For instance, Ross et al. (2018) applied an institutional ethnographic design that allowed the researcher to conduct one-on-one interviews for 60 to 90 minutes, resulting in an in-depth data collection. Differently, Arnetz et al. (2020) applied a qualitative methodology to assess the most salient sources of stress among nurses in the United States during the early stages of COVID-19. A qualitative analysis of the participants' interview responses helped the researchers understand the nurses' experiences of stress causes (Arnetz et al., 2020). Likewise, Wazqar (2019) conducted a qualitative descriptive study and used semistructured interviews to collect data, effectively exploring and understanding work stress and its origin among nurses. Like Arnetz et al. (2020) and Wazqar (2019), Hancock et al. (2020) applied a qualitative methodology. Differently, Hancock et al. (2020) collected data using focus groups involving registered intensive care nurses, physicians, and respiratory therapists. A thematic analysis of the collected data facilitated using Quirkos enabled the researchers to see how nurses cope with workplace stress (Hancock et al., 2020).

In a different study, Blok et al. (2021) collected data using semistructured interviews, underpinning an understanding of the nurse leaders' and managers' perspectives on nurses' engagement. O'Donnell and Andrews (2021) performed interviews lasting from 30 to 60 minutes, a data collection practice that enabled them to retrieve data from 32 nurses. In their grounded theory-based publication, the researchers add to the relevance of semistructured interviews in facilitating the collection of

sufficient data because a thematic analysis of the responses resulted in the development of a grounded theory (O'Donnell & Andrews, 2021).

Congruent to O'Donnell and Andrews (2021), Jackson et al. (2018) also used a qualitative grounded theory and collected data using open-ended interviews, resulting in retrieving sufficient responses for answering the research questions. In their qualitative descriptive study, Yoo et al. (2020) used interviews and focus groups for nurses and managers as data sources. Notably, the researchers applied a phenomenological analysis, resulting in understanding and describing the construct of the study. Like Yoo et al. (2020), Furunes et al. (2019) used a qualitative methodology, supporting data collection from 12 experienced registered nurses using open-ended interview queries.

In their qualitative case study, Aspinall et al. (2021) collected data from 31 managers and nurses inductively and deductively analyzed. The researchers reported that the design supported their capacity to assess nursing leadership in-depth and its influence on the work culture and employee engagement, complex issues (Aspinall et al., 2021). Evidently, there is a lack of current qualitative studies conducted using a qualitative methodology and phenomenological design to assess the critical care nurse managers' lived experience in managing work-related stress for nurses. Hence, the study was conducted to fill the literature gap.

Different from the above studies, pieces of literature conducted using the quantitative methodology were assessed. For instance, Allah et al. (2020) conducted a quantitative study to analyze the work-related issues experienced by nurses from the

managers' perspective. Although the methodology and use of a validated tool to collect data are beyond the scope of the study, the research was included because the results provide insight into work-related stress and the possible strategies for mitigating the problem (Allah et al., 2020). Like Alharbi and Alshehry (2019), Allah et al. (2020), Kellogg et al. (2018), Mohebbi et al. (2019), Nurmeksela et al. (2021), Pinho et al. (2021), Robat et al. (2021), and Saruan et al. (2020) also used reliable and validated tools, resulting in the statistical analysis of the collected data. The researchers presented their statistically significant findings, supporting the results' credibility. Conversely, a core limitation of quantitative studies is that the methodology hinders the researchers from collecting in-depth qualitative data on concepts.

Only one study conducted using the mixed-methods approach was assessed. In their article, Crowe et al. (2021) used a mixed-methods methodology that enabled them to collect qualitative and quantitative data using validated tools and face-to-face semistructured interviews. However, despite the objectivity associated with the approach conducting a mixed-methods study would have been beyond this study's scope because it requires the collection of quantitative data to establish causality, which is incongruous with the purpose statement and research questions (Crowe et al., 2021).

Approaches to the Problem and the Strengths and Weakness

In the reviewed literature, different approaches have been recommended for managing stress. The strategies can be categorized as either adaptive or self-destructive

approaches. In this section, the strengths and weaknesses associated with the approaches adopted by nurses to cope with work-related stress were discussed.

Self-Care Practices

Different self-care practices ranging from exercise to mindfulness have been supported as effective interventions in published literature. Conversely, before adopting the practices, Allah et al. (2020) acknowledge the importance of identifying the source of stress. An advantage associated with identifying the source of stress is that it results in the proactive management of the recognized issues. Conversely, a weakness is the lack of capacity among nurses to overcome the problem. For this reason, there is a need to engage in self-care practices. Accordingly, Allah et al. (2020) found that nurse managers recommended taking a break and engaging in exercise. Also, Hancock et al. (2020) supported exercise as a self-constructive behavior that promotes work-related stress management.

Self-management strategies such as watching films, resting, eating a healthy diet, showering, and reading promote relaxation and a good mood that helps avoid stress (Liu et al., 2020). Savic et al. (2019) expounded on self-management strategies and argued that the approaches could be categorized as health, social and leisure, and cognitive coping practices. The health-related self-care practices include sleep and relaxation, physical activities and exercise, diet, and healthy eating. Comparably, the social and leisure self-care approaches are social support and engaging in hobbies. Also, cognitive

coping strategies are practicing mindfulness, planning, effective time management, and having positive attitudes towards work (Savic et al., 2019).

Congruent with Savic et al. (2019), another researcher, Pinho et al. (2021), asserted that relaxation activities, physical exercise, recreational actions, a healthy diet, adequate water intake, and going for breaks between shifts could help nurses cope with stress. For physical activity, Mohebbi et al. (2019) indicated that aerobic exercise significantly decreases nurses' occupational stress. An outlier self-care practice was the use of religion which one researcher recommended. Alharbi and Alshehry (2019) identified that nurses use religion as a strategy for coping with job-related stress. However, the findings' generalizability is limited because the study was conducted in Saudi Arabia. Overall, the strengths associated with self-care practices are that they are easy to adopt, inexpensive, and within the nurses' capability. However, a limitation is that self-care practices alone cannot help nurses overcome work-related stress; thus, bundled approaches are needed.

Creation of a Healthy Work Environment

Based on the assessed data, it was identified that establishing a healthy work environment involves the use of authentic leadership that supports the nurses' engagement, a factor supported by meaningful recognition, team collaboration, scheduling, and appropriate staffing (Allah et al., 2020). In addition, Allah et al. (2020) found that the nurse leaders recommended the essence of developing a supportive climate to promote trust and openness, underpinning the nurses' ability to discuss issues causing

stress among them (Allah et al., 2020). In addition, a healthy work environment allows nurses to take breaks and effectively manage their workload, which is achieved through effective scheduling (Savic et al., 2019).

Blok et al. (2021) explained that nurse managers and leaders could either promote or hamper the development of a healthy work environment through the staff engagement initiatives adopted. For example, nurse managers/leaders can establish a healthy work environment by providing the staff time, resources, and support to effectively perform their duties (Blok et al., 2021). Also, nurse managers can establish an environment that promotes professional development and progression in their field, enhancing the health care providers' competencies to deliver quality care (Blok et al., 2021). Similarly, effective supervision and debriefing are work-related strategies that could help nurses overcome stress (Savic et al., 2019).

Congruent with Blok et al.'s (2021) and Savic et al.'s (2019) findings, Furunes et al. (2019) identified that nurse leaders have a responsibility to promote a healthy working environment that is characterized by autonomy, involvement of the nurses in decision making, and skill development. Therefore, nurse leaders/managers should be attentive and perform actions to facilitate health promotion among nurses. In a different study, Nurmeksela et al. (2021) posited that nurse managers' actions are significantly related to job satisfaction. In addition, an important component of a healthy work environment is recognizing nurses for excellence because failure to reward desirable behavior could result in stress (Allah et al., 2020). The managers should enhance nursing practices by

organizing the health care providers' work, so they feel motivated, supported, and secure. Nurse managers should also promote workplace equity, supporting the professionals' empowerment (Aspinall et al., 2021). Conversely, the nurse managers' initiatives to enhance the work environment are limited by the lack of time and challenges in formulating flexible schedules because of a deficient staffing level (Blok et al., 2021).

Social Support

Enhancing professional collaboration can promote teamwork and foster emotional support, effectively managing work-related stress (Alharbi & Alshehry, 2019; Allah et al., 2020). In another study, Liu et al. (2020) explained that during the stressful COVID-19, social support was of essence because the strategy provides health care providers access to peers who listen to them and offer the required solace. Kellogg et al. (2018) identified that nurses with higher emotional support experience significantly lesser stress. Also, Pinho et al. (2021) noted that maintaining social contact, verbalizing emotions, and expressing feelings can help decrease stress among nurses. In essence, social support is an attribute of a healthy work environment (Furunes et al., 2019). A strength of social support as a strategy is that it allows nurses to depend on each other, promoting teamwork and collaborative resolution of issues that result in stressors. However, a limitation of the approach is that the nurses might lack the capability to be their peers' social support, specifically if they are experiencing work-related stress that they cannot overcome.

Self-Destructive Coping Strategies

Different self-destructive or maladaptive coping strategies have been reported in the published literature. For example, Savic et al. (2019) and other researchers, Hancock et al. (2020) identified that nurses often use self-destructive strategies such as excessive alcohol consumption and substance use. Similarly, some nurses often use denial and behavioral disengagement as coping approaches, resulting in them experiencing more stress (Kellogg et al., 2018). Ross et al. (2018) focused on substance use among nurses as a coping strategy for coping with work-related stress. In the study, the researchers identified that the nurses perceived alcohol as an acceptable coping approach to manage emotional distress emanating from work-related stressors (Ross et al., 2018). Notably, the researchers found that the nurses' education did not adequately prepare them to manage the emotional burden associated with the profession.

In addition to substance abuse, denial, and disengagement, Iharbi and Alshehry (2019) identified that some nurses result in self-blame, exacerbating the problem. Similarly, Jackson et al. (2018) advanced the discussion by explaining that nurses often practice emotional detachment and depersonalization as coping strategies. However, the strategies are only associated with weaknesses because engaging in maladaptive practices such as denial and behavioral disengagement as coping approaches results in higher stress (Kellogg et al., 2018). As a result, nurse leaders should intervene to decrease the negative factors in the workplace by promoting the health care providers' resilience (Jackson et al., 2018).

Rationale for Selection of the Variables

The rationale for selecting job demands, job resources, work-related stress, and management strategies as variables in this qualitative study is based on different factors. One is that work-related stress among nurses has been supported as a prevalent problem that should be mitigated (Allah et al., 2020; Wazqar, 2019). Robot et al. (2021) argued that workplace stressors, specifically dealing with death, handling difficult patients, extended working hours, limited personnel, and possible exposure to infections, rationalize the essence of additional attention to the phenomena. In their publication, Arnetz et al. (2020) identified that nurses' stress sources include exposure to infection and feelings of helplessness/inadequacy.

Other sources of stress among nurses include workload, disproportionate nurse-to-patient ratios, emotional demands associated with the job, lack of social support, and disrespect from patients and their families (Wazqar, 2019). Likewise, Yoo et al. (2020) advance the discussion on nurse-patient interactions by indicating that the professionals experience unexpected communication challenges, which often negatively impact the quality of care delivered. Other researchers, Crowe et al. (2021), also provided a different perspective that the clinical environment can adversely impact the nurse's psychological well-being by causing depression and anxiety. In addition to the above-identified sources of stress, others, which can only be generalized during the COVID-19 period, were lack of personal protective equipment, fear of exposure to the infection, and the risk of death (Arnetz et al., 2020).

Another is work-related stress is associated with adverse patient outcomes.

Nurmeksela et al. (2021) posited that nurse managers' actions are significantly related to medication errors. As a result, nurse managers should ensure that their leadership practices foster safe and patient-centered care. Also, it is not adequately understood how critical care nurse managers how stress can be managed. Illustratively, in their study, van Mol et al. (2018) recommended the need to understand the specific factors that result in a successful and healthy work-life among critical care nurses.

Additionally, work-related stress is associated with societal impact. The societal impact could occur because of different factors. For instance, Constant and prolonged work-related stress harms the nurses' wellness, resulting in organizational inefficacy and can be attributed to staff turnovers (Isa et al., 2019). In addition, work-related stress increases the nurses' willingness to leave their current job or the nursing profession in its entirety (Moore et al., 2021). Similarly, O'Donnell and Andrews (2021) identified resigning as a problem that emerges from stressors within the nurses' work environment; the researchers theorized the approach as a coping mechanism. The identified work stressors included a lack of resources and limited staffing levels. Another societal impact can be attributed to the nurses' unplanned absenteeism, which disrupts the teams' work performance, negatively impacting the quality of services delivered (Saruan et al., 2020). Hence, the complexity of the adverse outcomes associated with the critical care nurses' work environment supported the need to focus on work-related stress and stress management strategies as core variables in the study.

Studies Related to the Key Concepts and Research Questions

The key concepts that provided the foundation of the research questions are the critical care nurses' experiences of work-related stress and their experiences in managing the phenomena. Although empirical studies on the key concepts exist, there is limited United States-based literature on critical care nurse managers' experiences. However, in the assessed literature, the researchers support that nurse managers acknowledge job stress as one of the common issues experienced by the nursing staff at work (Allah et al., 2020; Worringer et al., 2020a).

Worringer et al. (2020a) explained that in addition to nurse managers being aware of the fatigue experienced by nurses, they understand its consequences, which include team atmosphere deterioration, reduced quality, and an increased feeling of injustice among the health care providers. Additionally, nurse managers perceive that work stress caused by staff shortage results in increased sickness absences. Likewise, the continued strain on employees results in psychometric stress symptoms among the nurses that manifest in depression, burnout, and sleep disturbance (Worringer et al., 2020a). In their study, Worringer et al. (2020b) found that nurse managers perceived the work environment, tasks, and social support as mental stressors in addition to staff shortages.

In their study, Blok et al. (2021) identified that nurse managers experience individual, unit/workplace, or organizational level facilitators and barriers when promoting staff engagement, which can result in a healthy work environment. The individual barriers included the nurses' negative attitude and resistance to change. On the

contrary, the barriers included a lack of nurses' motivation to change (Blok et al., 2021). Unit-level barriers related to negative attitudes among nurses could result in intrapersonal conflict and cause miscommunication. Conversely, the lack of the barriers could result in an increased engagement at the unit level, underpinning effective communication and supporting the transfer of workload in less-engaged units. On the organizational level, the nurse leaders acknowledged a lack of time, insufficient staffing, and excessive workloads as challenges hindering staff engagement, and hampering a healthy working environment (Blok et al., 2021).

In another study, Worringer et al. (2020b) found that nurse managers perceive a core source of work-related stress as an attribute of the emotionally demanding profession. Hence, the managers recommended that health promotion and an appropriate work environment could be effective strategies for mitigating the stressors related to work processes, tasks, and social factors. Social support by leaders and peers was reported as an intervention that the managers have experienced in decreasing stressors. Nevertheless, social support alone cannot effectively counter stressors that result in work-related issues (Worringer et al., 2020b).

Genrich et al. (2020) advanced the above discussion on the significant role of nurse managers by indicating that the leaders' active support is indispensable in promoting the implementation of sustainable and healthy design interventions within the clinical setting. The researchers also identified that nurse managers acknowledged the essence of promoting the nurses' mental health and value using individual and team-

based interventions (Genrich et al., 2020). The individual-based interventions that the managers indicated experiencing include professional development, support, and performing appraisal interviews. In contrast, the team-level interventions were regular team meetings and fair work schedules (Genrich et al., 2020).

Summary and Conclusions

Applying the JR-R model was anticipated to help me understand how job demands and resources influence nurses' work-related stress (Castner, 2019; Demerouti et al., 2001; Demerouti & Bakker, 2011). Researchers have assessed the phenomenon of focus using qualitative, quantitative, and mixed methods approaches in the published literature. The approaches to mitigating work-related stress include self-care practices, establishing a healthy work environment, social support, and self-destructive coping strategies (Allah et al., 2020). The rationale for selecting job demands, job resources, work-related stress, and management strategies as variables was that occupational-related is a significant problem that should be resolved (Allah et al., 2020; Wazqar, 2019). In addition, nurse managers acknowledge that job-related stress is a prevalent and complex problem, making them core in providing the job resources needed to help nurses fulfill the job demands (Allah et al., 2020; Worringer et al., 2020a).

Two main gaps in the published pieces of literature were recognized. First, there is a deficit of qualitative studies conducted using a phenomenological design on the focus topic. Most of the identified qualitative studies were conducted using other approaches, such as case studies or descriptive qualitative designs (Aspinall et al., 2021; Wazqar,

2019). Additionally, to the researcher's knowledge, no United States-based-qualitative study using a phenomenological design has been conducted assessing the experiences of critical care nurse managers in mitigating work-related stress. Most of the identified qualitative studies focus on how nurses cope with workloads from their perspective (Furunes et al., 2019). Hence, the study was conducted to fill the above-stated gaps in the literature. Chapter 3 contains an explanation of the qualitative methodology and phenomenological design was used to guide the study.

Chapter 3: Research Method

Introduction

The purpose of the study was to explore critical care nurse managers' experiences of potential strategies to effectively address work-related stress among nurses. I conducted the study to investigate how critical care nurse managers perceive various stress-management strategies applicable to nurses. Critical care nurses experience significantly higher levels of work-related stress than their colleagues (Chegini, 2019). Critical care nurse managers are privy to the nurses' challenges and some of the required interventions for reducing work-related stress, making them compatible subjects for the study (Allah et al., 2020).

In this chapter, I present the procedures for conducting the study. The design selected, the rationale supporting the choice, and my role as the researcher are discussed in the chapter's first part. The methods for selecting and recruiting participants, data collection, and data analysis are also discussed in detail in the chapter. Next, the potential issues for trustworthiness are presented, and mitigation strategies are discussed. The chapter concludes with a summary of key points.

Research Design and Rationale

I sought to answer the following central research question: What are the experiences of critical care nurse managers in managing work-related stress for nurses? The sub research questions were (a) How do critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on

critical care nurses? and (b) How do nurse leaders describe effective work-related stress management strategies for improving job resources among critical care nurses?

The central concept explored in the study was critical care nurse managers' experiences of work-related stress management for nurses. The World Health Organization (2020) defined work-related stress as employees' responses when work demands and pressures challenge their coping abilities. The challenges in coping can be associated with unmatched job demands with employee skills or capabilities. Management strategies for work-related stress could include coping mechanisms or implementing standards or policies at the management level that ease the nurses' working experiences (Allah et al., 2020). The concepts of the JD-R model posit that organizations can provide additional resources to support employees experiencing demanding roles and work-related stress (Tummers & Bakker, 2021). The study focused on critical care nurse managers because they can influence the resources provided to nurses.

I used qualitative methodology in the study. A qualitative approach allows for the investigation of individual beliefs, attitudes, and lived experiences (Creswell & Creswell, 2017). Using the qualitative approach facilitated the establishment of the study participants' lived experiences of work-stress management strategies for nurses. I used a phenomenological design for the data collection. Researchers who conduct phenomenological qualitative studies seek to establish the common principle of a phenomenon (Polit & Beck, 2012). A phenomenological design allows a review of the study participants' experiences, beliefs, feelings, and attitudes to identify the common

essence of the phenomena (Creswell & Creswell, 2017). The phenomenological approach was based on Heidegger's philosophy, which considers phenomenology a reflective exploration of the essential laws of consciousness as experienced or introspection (Gutland, 2018; Heidegger, 2005).

Heidegger's phenomenological approach allows introspection of one's experience of phenomena, in which the essential features, as experienced by different individuals, can be generalized (Gutland, 2018). By using a phenomenological approach, I was able to establish the universal concepts of work-stress management for nurses from nurse managers' experiences. The other qualitative study approaches, such as grounded theory and ethnography, were not appropriate to address the research questions based on nurse managers' descriptions of their experiences with nurse work-stress management. In an ethnography, a researcher seeks to study the culture of the study participants, whereas in a grounded theory study, they seek to develop theories for explaining the phenomena under study (Polit & Beck, 2012). Hence, the phenomenological design was the most appropriate for answering the research questions.

Role of the Researcher

I assumed the role of the researcher in conducting the study. I was involved in all the stages of the study, including participant selection and recruitment, data collection, and data analysis. I did not involve any participants with whom I had personal relationships. The study participants were critical care nurse managers who had worked in the profession; as such, there was a possibility that I might have had working

relationships with some of them. I have been an intensive critical care unit nurse for the past 8 years. However, the anticipated working relationship did not involve me being in a more powerful position than the participants because I recruited nurse managers with 2 or more years of work experience.

The work experience criterion helped prevent potential bias originating from participants' feeling compelled to respond to interview questions in certain ways. Additionally, by using recruitment criteria, I was able to identify suitable participants. Another potential issue originating from the working relationship between me and participants included nurse managers feeling compelled to participate outside their will. Therefore, the recruitment process was purely based on the managers meeting the criteria, understanding the study's objectives, and deciding to participate without coercion.

Methodology

For this study, I used a qualitative methodology because it supported me in collecting textual data to understand the experiences of the sampled participants (see Aspers & Corte, 2019; Busetto et al., 2020). As such, I anticipated that applying a qualitative methodology in this study would help me to understand the participating critical care nurse managers' experiences of work-related stress, underpinning the identification of approaches to decrease the impact of the job demands and improve the job resources. There are other approaches, such as the quantitative and mixed-methods methodologies. A mixed-methods methodology involves applying both quantitative and qualitative approaches. Both approaches require collecting numerical data that are

statistically analyzed to determine causation (Matovic & Ovesni, 2021), which was not within the scope of the study. Hence, a qualitative methodology was the most suitable of the three approaches.

Also, a qualitative methodology is suitable for understanding concepts with limited evidence by collecting data using semistructured interview protocols (Aspers & Corte, 2019; Busetto et al., 2020; Matovic & Ovesni, 2021). Applying a qualitative methodology enabled me to develop a few open-ended, semistructured interview questions to collect participants' experiences managing work-related stress. I anticipated that the use of open-ended interview questions with probing and follow-up prompts would contribute to an in-depth understanding of the phenomenon.

Furthermore, use of a qualitative methodology allowed me to apply inductive logic congruent with the interpretive paradigm to perform the thematic analysis (Alharahsheh & Pius, 2020; Aspers & Corte, 2019; Busetto et al., 2020). Inductive logic involved deriving findings from the critical care nurse managers' specific responses. By using inductive logic, I was able to identify codes and categories, which I combined to develop themes and subthemes to answer the main and sub research questions. Additionally, inductive coding helped promote the findings' trustworthiness because the answers to the research questions were based on the participants' responses. In particular, the themes were retrieved directly of the critical care nurse managers' interview responses. Also, the verbatim responses were used to explain the themes.

Participant Selection Logic

The study participants comprised critical care nurse managers, specifically directors and a deputy director of the critical care unit, critical care unit nurse managers, and assistant critical care unit nurse managers, who work in health care facilities in the Midwest region of the United States. To identify research participants, I used LinkedIn and visited the hospitals' websites to identify critical care nurse managers whose emails were publicly available, then sent the identified individuals a recruitment email (see Appendices A and B) requesting them to be part of the study. I sent at least 24 recruitment emails or LinkedIn messages. I attached a recruitment flyer (see Appendix C) to the LinkedIn messages.

I used a purposive sampling strategy to select the potential study participants. Purposive sampling involves selecting study participants based on their specific attributes or characteristic that make them suitable to be involved in the research (Etikan et al., 2016). By using this technique, I was able to determine whether the participants met the recruitment criteria based on the principles of a phenomenological qualitative approach. Furthermore, I anticipated that applying a purposive sampling approach would save time, financial resources, and effort (Etikan et al., 2016).

The critical care nurse managers were eligible to participate in this qualitative study if they met the following inclusion criteria: (a) led a critical care unit in a hospital in Michigan; (b) held leadership positions for at least 2 years; and (c) were a director of critical care unit, deputy director of the critical care unit, critical care unit nurse manager,

or assistant critical care unit nurse manager. I used an inclusion screening tool to determine the eligibility to participate in this study (see Appendix D). In addition, the prospective participants had to fulfill all the criteria to proceed to the next stage of informed consent signing.

Once a potential participant was screened, and identified that they fulfilled the inclusion criteria, they were informed about subsequent stages. In addition, the screening tool helped recruit a convenient sample suitable for answering the research questions. Participants who did not fulfill any inclusion criteria were thanked and informed why I did not interview them.

After sending the recruitment emails and LinkedIn flyers, I anticipated that the prospective interviewees would express their interest in being part of the study. Therefore, I called or emailed the critical care managers who expressed their interest in being interviewed to explain the consent form, its purpose, and the actions required from them. All participants were sent the consent form required by the Institutional Review Board and given 7 days to read and send it back after signing it and writing "I understand and consent." From the prospective participants who did send the consent forms back, I followed up via a call or email. Also, if participants sent the consent forms without signing, I assumed they were unwilling to participate in the study. Then I called all the critical care nurse managers who consented to schedule the interviews.

Relationship Between Saturation and Sample Size

Vasileiou et al. (2018) posited that selecting an appropriate sample size in qualitative research is associated with practical uncertainties and conceptual debates. Conversely, the guideline is that the qualitative sample size be small, with three to 15 participants (Vasileiou et al., 2018). I applied this guideline to recruit an adequate sample size. I anticipated a sufficient sample size of 12 critical care nurse managers. However, to ensure an adequate sample I sought to recruit at least 15 participants. Data collection occurred until saturation was achieved.

Instrumentation

A semistructured interview protocol containing open-ended questions was used to collect textual data. The interview was comprised of semistructured questions that I developed (see Appendix E). The researcher-developed interview questions were based on the research topic, purpose statement, research questions, and JD-R model's job resources and job demand principles. As a result, I did not use legal or historical documents as data sources. Instead, primary data were collected from critical care nurse managers.

I perceived that the semistructured interview questions supported collecting sufficient data to answer the research questions and address the problem statement. Moreover, in the published literature, researchers have supported semistructured interview protocols as suitable data collection tools (Arnetz et al., 2020; Liu et al., 2020;

Ross et al., 2018; Savic et al., 2019; Wazqar, 2019; Worringer et al., 2020a). Specifically, when the purpose is to gain an in-depth understanding of the phenomenon.

I expected the interviews to last between 30 to 60 minutes, which is ample time to collect sufficient data to answer the research questions. Accordingly, the anticipated data collection duration supports the interview guide's sufficiency because it is congruent with the time other researchers take to collect responses using semistructured interviews (Arnetz et al., 2020; Ross et al., 2018; Savic et al., 2019; Wazqar, 2019). In addition to the duration, McGrath et al. (2019) recommended having five to 15 predetermined semistructured probing interview questions.

Procedures for Recruitment, Participation, and Data Collection

Data from the sampled critical care nurse managers were collected. In the interview guide, I included probing questions that were used based on the participants' responses. I conducted the interviews via Zoom because of the COVID-19 social-distancing directive and for convenience purposes. Using Zoom sessions provided me and respondents flexibility to schedule the interviews at any time of the day or night, depending on availability. Once the individual Zoom sessions were scheduled, initiated the call.

Each Zoom call was anticipated to last between 30 to 60 minutes and only happened once unless a technical error occurred, and I lost the recorded audio during the session. Interviewing the participant individually provided the respondents' privacy when

they used a safe and quiet room. In addition, Zoom premium was used, which allowed recording the audio sessions and access to the responses in text format.

Once the participant joined the Zoom call, I greeted them, read an introductory paragraph, and began by collecting demographic data (see Appendix F). Once the demographic data were collected, I transitioned into the open-ended semistructured one main research question asking them to share their experiences, and probed if they initiated the conversation on job demands, job resources, and closing remarks. Once each interview was completed, I downloaded the transcripts from Zoom, and listened to the audio to confirm the content. Only the participants' audio data were collected.

I anticipated that saturation would be achieved with five to 12 participants. If too few participants were recruited, I would have extended the recruitment duration. However, the issue did not occur. The Zoom interviews were voluntary, and each participant was reminded that they could opt to answer any of the questions. Also, I informed the participants that they could end the Zoom call at any time if they did not wish to continue with the interview. Finally, for the participants who completed the interview, I thanked them then ended the Zoom call. Therefore, participating in the study was not associated with any compensation.

Data Analysis Plan

Braun and Clarke's (2008, 2021) qualitative thematic procedure was applied in the study. I read and re-read each interview transcript at least twice to comprehensively understand the critical care nurse managers' responses. Then, I imported the transcripts

into MAXQDA to support in organizing the data. The initial and inductive coding process involved reducing the text into manageable chunks that contain meaningful information. The process helped identify the codes summarizing important participants' responses. The MAXQDA process involved me organizing a code system where the I subsequently developed sub-themes and themes.

Then I retrieved the themes for the developed codes (Braun & Clarke, 2008, 2021). The themes and patterns derived from the participants' responses were core in answering the research questions. I assessed and modified the created themes to ensure they were relevant to answering the research questions. I then defined the retrieved themes by applying the interpretive paradigm. The definitions were retrieved from the participants' verbatim responses (Braun & Clarke, 2008, 2021). I disregarded all interviews with incomplete data. Incomplete data was considered as interviews where participants ended the Zoom call before the process is completed or interviewees did not respond to the research questions.

Issues of Trustworthiness

In this study, trustworthiness was promoted through credibility, transferability, dependability, confirmability, and reflexivity criteria (Korstjens & Moser, 2018). Fulfilling the trustworthiness criteria was essential in promoting the qualitative findings rigor. Furthermore, it was anticipated that promoting trustworthiness ensured that the data interpretation was credible, and conclusions were unbiased and plausible.

Credibility

The credibility of the findings were promoted through saturation. Interview data from the critical care nurse managers were collected until no new information were retrieved from the participants. Achieving saturation was anticipated to ensure that the research findings were congruent with reality.

Transferability

Only the readers of this document can determine whether the results are applicable in their settings. Hence, transferability was promoted by providing detailed explanations about the participants, ensuring a sufficient sample size, and collecting data up to saturation. For example, in Chapter 4, I included information about the participants' age, gender, race/ethnicity, highest educational level, and experience. Additionally, recruiting an adequate sample size to ensure that saturation is achieved helped the readers determine the results' applicability in their context or settings.

Dependability

The interpretive paradigm promoted the study's dependability. I ensured that all the results and recommendations were directly based on the participants' responses. Additionally, I systematically discussed the data collection and analysis process, ensuring that that process was concise, logical, and replicable. Finally, performing an audit trail helped me maintain a chronological order of how the data collection and analysis were performed.

Confirmability

Confirmability was promoted by including verbatim from the participants' recorded transcripts in the presentation of the results section. During data analysis, the codes were retrieved from the transcribed data, ensuring that the findings were accurate as recorded. Also, confirmability was supported by constant comparative where the results were based on the published literature and the theoretical framework.

Reflexivity

Reflexibility enabled me to perform a self-evaluation of the influence of possible bias, experiences, or preference on the results that was achieved through journaling. For example, maintaining a journal helped me assess how nurses' experiences of work-related stress influenced the results' interpretation. Additionally, maintaining a diary helped me rationalize the core decisions related to the design, methodology, data collection, sampling, analysis, and interpretation.

Ethical Procedures

Before commencing the study, I submitted an application to the Walden University Institutional Review Board for review of the study procedures. No actual study procedures were conducted without the Board's approval (no. 10-13-22-0436950) to ensure that all handling of the participants met the criteria for the respectful and ethical treatment of human subjects in research. I also completed the Collaborative Institutional Training Initiative program to ensure that all the study procedures adhered to ethics requirements.

The critical care nurses were considered autonomous individuals; hence, only participants' who contacted me expressing their interest in participating in the study were considered; hence the study was free of coercion. Additionally, the interested participants were requested to sign the consent form, which indicated their willingness to be interviewed. The participants had the liberty to withdraw their consent at any time without any consequence or providing a reason.

The study was conducted per the principles of respect for humans, benevolence, dignity, and fairness to ensure that critical care nurse managers do not experience harm or risk beyond the minimum. In this study, I did not collect data from any groups categorized as vulnerable cohorts. The collected personally identifiable demographic data on the participants' age, gender, education, race/ethnicity, and experience were reported in aggregate to promote privacy. Additionally, personally identifiable data such as names, social security numbers, or employee numbers were not collected; rather, the participants were issued pseudonyms to promote their confidentiality. Therefore, the verbatim responses that were included in the presentation of the findings cannot be used to deidentify the respondents.

The qualitative study was not associated with any risk beyond the minimum. Notably, participating in the interviews could have been stressful because it required the participants to sacrifice their time and recall past experiences. However, the stress was decreased by (a) informing the respondents that the answers should be based on their experiences; hence there was no wrong or correct answer and (b) scheduling the

interviews based on the participants' convenience. In addition, I did not have any conflict of interest, bias, or authority over the participants. Also, the study did not expose participants to legal, professional, or relationship risks.

All the collected data were maintained in soft copies and handled with confidentiality. Hence, only I and possibly the dissertation committee had access to the raw data. The data was stored in an encrypted folder on a secure and password-protected personal computer, stored in a lockable drawer in a secure home office free from water or excessive heat. Back-up copies of the data were stored in a personal Cloud account that required login details. All the data was used for the purpose of this study and will be destroyed through permanent deletion 5 years after the study is completed.

Summary

The purpose of the study was to explore critical care nurse managers' experiences of potential strategies to effectively address work-related stress among nurses. A qualitative methodology and a phenomenological design was used to collect and explore the study data. I collected the data using semistructured, open-ended interviews critical care nurse managers. The interviews from the conveniently sampled participants were also be recorded to facilitate organization of the data using MAXQDA. Thematic analysis of the interview responses helped identify the common themes addressing the research question. This study was conducted in adherence to ethical principles. The results of the data analysis were presented in the next chapter

Chapter 4: Results

Introduction

Health care professionals experience many stressful situations on daily basis because of their nature of their work. In the United States, an estimated 93% of nurses had significant stress levels in 2019 (Bardhan et al., 2019). The lack of physical, mental, and emotional competencies to fulfill the job demands associated with working in the critical care unit department is among the factors that result in work-related stress, which makes the phenomenon complex to study (Tsegaw et al., 2022). Likewise, the mismatch between critical care nurses' skills, knowledge, and competencies is exacerbated by unexpected challenges. During COVID-19, changes have occurred in the care process, impacting nurses' psychological and physiological status (Babapour et al., 2022; Dimino et al., 2021; Moghaddam et al., 2022).

As such, this study's purpose was to explore critical care nurse managers' experiences of potential strategies to effectively address work-related stress among nurses. The primary research question addressed in the study was as follows: What are the experiences of critical care nurse managers on work-related stress for nurses? The supporting research questions were (a) How do critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on critical care nurses? and (b) How do critical care nurse leaders describe effective stress management strategies for improving job resources among critical care nurses? In this chapter, I discuss the research setting, present participant demographics,

discuss the data collection and analysis, present evidence of trustworthiness and the study results, and provide a summary.

Setting

I performed the interviews for this study during the COVID-19 pandemic. COVID-19 is associated with more critical care patients, which has resulted in increased workload, creating a shortage of health care workers (Arnetz et al., 2020; Fernández□ Castillo et al., 2021). Hence, the time frame of the study could have affected participants' responses. Other than the COVID-19, there were no other known personal or organizational factors that could have influenced the participants' experiences when the study was being conducted. The factors are unknown because the participants were recruited from different hospitals and health care facilities. Also, the critical care nurses' data about their employer or organization of practice were not collected.

Demographics

The demographic information collected from the participants included their age, gender, highest education qualification, and years as a critical care nurse manager (see Table 2). Most of the participants were between the ages of 41 to 40 years ($n = 9$) and female ($n = 9$) and had doctoral degrees ($n = 7$) and between 5 and 7 years of critical care experience ($n = 5$).

Table 2*Participant Demographics*

Characteristic	<i>f</i>	%
Age (years)		
31-40	1	7.7
41-50	9	69
51-60	3	23
Gender		
Female	9	69
Male	4	31
Highest education qualification		
Associate degree	1	7.7
Bachelor's degree	0	0
Master's degree	5	38.5
Doctorate	7	53.8
Years as a critical care nurse manager		
2-4	4	30.8
5-7	5	38.5
8-10	3	23
11-13	1	7.7

Data Collection

I sent the study invitation messages (see Appendix A) to 25 critical care managers via LinkedIn. Out of the 25 individuals, 21 agreed to be part of the study and were sent the informed consent to sign. However, six potential participants did not return their consent forms, even after follow-up; hence, they were automatically disqualified from being part of the study. In this study, 15 participants were recruited, but data saturation was achieved at the 13th participant. Thus, data were collected from 13 participants, which was within the anticipated range. Two types of data were collected from the participants, who were issued pseudonyms (P1 through P13). The first data set was the

participants' demographic information. Collecting the demographic data took approximately 1 minute for each participant.

To collect the second data set on participants' experiences of potential strategies used to effectively address work-related stress among nurses, I used semistructured open-ended interview questions. The semistructured open-ended interview questions were used to collect data on work-related stress experiences and strategies to mitigate the stressors. The second data set was collected via Zoom for convenience and as a COVID-19 precaution. In addition, conducting in-person interviews would have been inconvenient because the respondents were from different areas of a city in the Northeast region of the United States. However, in the published literature, researchers have supported that the benefits of conducting interviews include decreased recruitment costs because it eliminates the need to travel and increases inclusivity (Oliffe et al., 2021).

Additionally, Archibald et al. (2019) supported the suitability of Zoom as a data collection tool because of its ease to use, data management capability, and security features. The individual virtual interviews were conducted over 10 days, with the interviews lasting between 40 and 55 minutes. On average, one interview session took approximately 45.9 minutes.

I recorded the interviews via Zoom, which allowed me to write field notes as I asked probing questions. Once I had conducted all the interviews, I transcribed them. The data collection process performed was congruent with the procedure discussed in Chapter 3. The one minor variance was in the number of participants. The variation was that

saturation was anticipated between five to 12 participants. In contrast, saturation was achieved at the 13th participant.

The two unusual circumstances I experienced when collecting the data were technical issues. The first technical issue was that P5's microphone functionality ceased working during the interview. Hence, the participant had to switch to an iPhone to complete the interview. The loss of microphone functionality has been reported in published literature (Archibald et al., 2019). The second technical issue was related to my computer when it automatically restarted to install a pending software update. The prompt restart resulted in the disruption of an interview with P10. I called P10 to explain what happened and requested that we reschedule the interview for the following day. I performed the interview the following day, commencing from where we had stopped the previous day because the transcript had been saved automatically on the Zoom platform.

Data Analysis

The initial step of the data analysis process involved reading and rereading the 13 transcripts that were imported into MAXQDA for effective data management. When reading the transcripts, I identified the concepts provided by different participants adding to the field notes recorded during data collection. Subsequently, the second step was performing the initial coding, which involved categorizing the data into phrases and words from the participants. The *in vivo* codes developed included COVID-19, jogging, cycling, eating a healthy diet, yoga, meditation, deep breathing, aerobics, brisk walking, peers, stress, work environment, communication, social support, journal, stressors,

education, competencies, training, nurses, patients, quality care, job satisfaction, and workload (see Table 3).

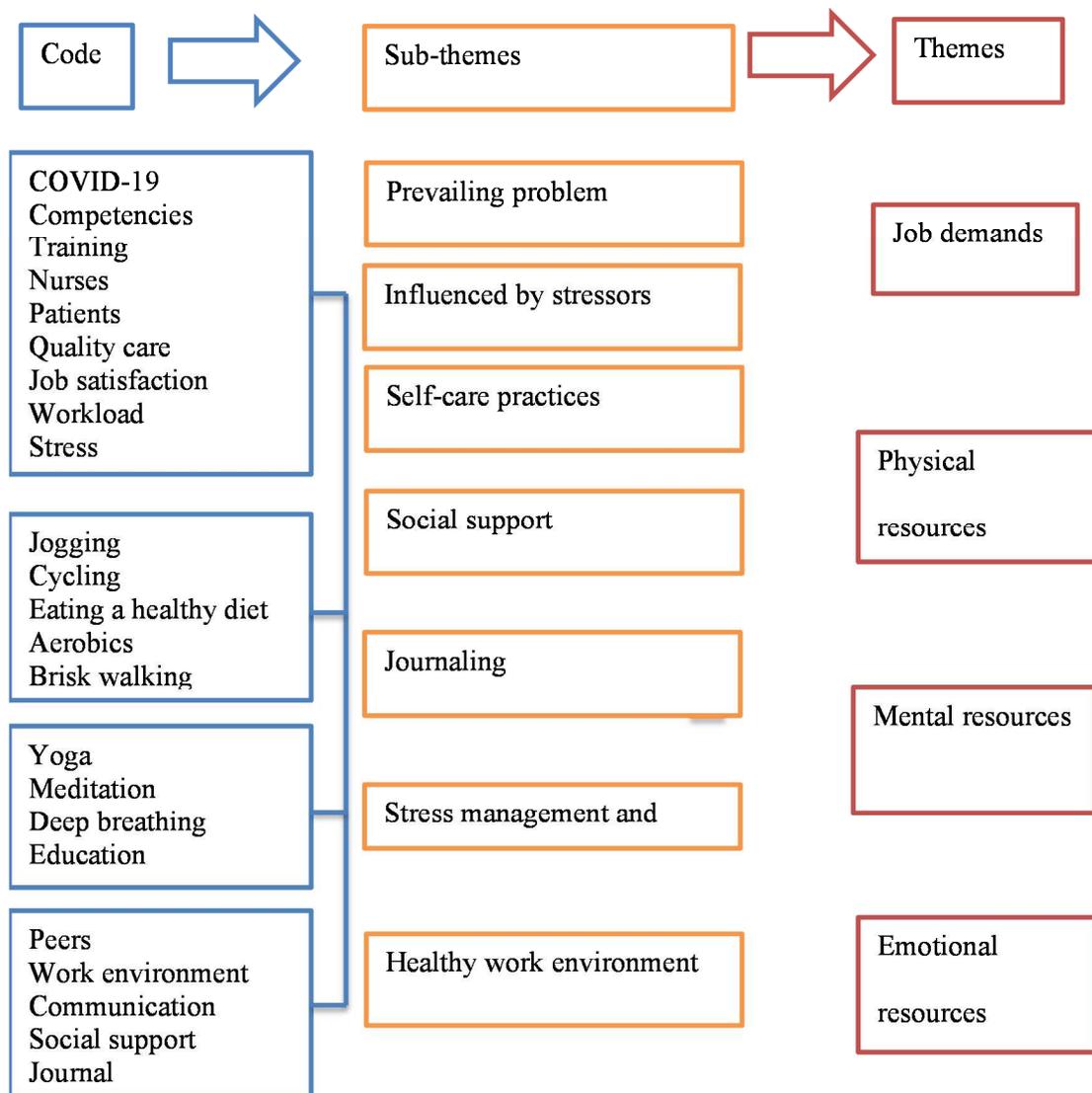
Table 3

Codes and Respective Frequencies

Code	<i>f</i>
Nurses	32
Stressors	30
COVID-19	24
Jogging	12
Yoga	11
Peers	11
Stress	11
Training	10
Meditation	9
Patients	9
Work environment	8
Competencies	8
Job satisfaction	8
Eating a healthy diet	7
Aerobics	7
Social support	7
Workload	7
Cycling	6
Communication	6
Journal	6
Quality care	6
Deep breathing	5
Education	5
Brisk walking	4

The third step involved the identification of seven subthemes from the codes: prevailing problems influenced by stressors, self-care practices, social support, journaling, stress management and resilience training, and a healthy work environment. Fourth, I combined the subthemes, formulating four themes: job demand, physical

resources, mental resources, and emotional resources (see Figure 2). Fifth, I assigned the participants' verbatim responses to the specific themes and sub-themes, ensuring that the findings were based on the critical care nurse leaders' words. Sixth, I reviewed the themes and subthemes to ensure sufficiency of the data to adequately support the findings. Finally, I did not identify any case that was clearly and distinctly different from the participants' responses.

Figure 2*Codes, Subthemes, and Themes*

Evidence of Trustworthiness

In this qualitative study, trustworthiness was ensured to promote the findings' accuracy and quality (Korstjens & Moser, 2018). Trustworthiness was promoted through credibility, transferability, dependability, and confirmability. Each piece of evidence of trustworthiness was discussed in the subsequent sections.

Credibility

I promoted credibility by verifying the transcripts and achieving saturation. The process involved comparing the transcribed responses with those recordings. I listened to each recording, while reading each transcript. As such, verifying the accuracy of the transcribed responses. I also promoted credibility by collecting data up to the point of saturation.

Transferability

I promoted transferability by comprehensively describing the sampled critical care nurses, the data collection process, and the analysis approach. In the demographic section discussed earlier, I provided the participants' descriptive information to help the reader determine the findings' applicability to their setting or situation. In Chapter 3, I included a discussion of the data collection process to help the readers understand the approach applied and its relevance to their organization. In Chapters 3 and 4, I included a description of the data collection process to help the readers determine whether they can replicate the procedure in their setting.

Dependability

I enhanced dependability by applying the interpretive paradigm. I ensured that the study findings and recommendations were retrieved directly from the participants' verbatim responses. Also, I compared the participants' transcribed responses with the recordings, ensuring accuracy. Also, I systematically discussed all the core activities, specifically data collection, and analysis. Performing an audit trail enabled me to recollect procedures concisely and logically.

Confirmability

I promoted the findings' confirmability by including the participants' verbatim responses from the recordings when presenting the results. During the data analysis, I retrieved the codes from the respondents' *in vivo* terms, which I subsequently combined to develop themes and sub-themes. In addition, using the constant-comparative method, I compared the retrieved codes with the recordings ensuring that they were consistent. In Chapter 5, I also based the findings' interpretation on published literature and the JD-R model.

Results

The performed thematic analysis and interpretive paradigm supported the identification of seven sub-themes derived from the four themes noted above; prevailing problems, influenced by stressors, self-care practices, social support, journaling, stress management and resilience training, and a healthy work environment. The themes are based on the participants' verbatim responses and align with the study's research question

and sub research questions, as shown in Table 4. I have organized the presentation of results according to the research question, sub/probing questions, and subthemes derived from the codes.

Table 4

Research Questions and Respective Subthemes

Research question	Subtheme
What are the experiences of critical care nurse managers on work-related stress for nurses?	Prevailing problem Influence of stressors
How do critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on critical care nurses? (Sub Research Question 1)	Self-care practices Social support Journaling
How do critical care nurse leaders describe effective stress management strategies for improving job resources among critical care nurses? (Sub Research Question 2)	Stress management and resilience training program Healthy work environment

Experiences Related to Work-Related Stress

The central research question in this study was: What are the experiences of critical care nurse managers on work-related stress for nurses? The purpose of the research question was to explore the experiences of critical care nurse managers regarding work-related stress for nurses. Based on the thematic data analysis, I identified two sub-themes derived from the theme job demands; prevailing problem and influenced by stressors.

Theme 1: Job Demands

The sub-theme, prevailing problem in this study was used to mean that the critical care nurse managers' experience with work-related stress was that it is a persistent issue in the profession. The experience of work-related stress is a prevalent issue, specifically in the critical care unit, which supports the essence of its effective management. For instance, P5 indicated that "work-related stress is a prevalent issue among the nurses, which makes the problem's management essential." P4 added to the context by indicating that work-related stress is common among health care professions and has been accepted as the norm that ought to change. The respondent indicated that "when working in the critical care unit, nurses often experience feelings of worry, fear, sadness, anger, frustration, and numbness, which are signs of distress." P4 added that the persistence of work-related stress could be associated with the fact that in the health care system, individuals deal with life, which is delicate and precious.

P2 provided more evidence on work-related stress being a prevalent problem among nurses, particularly because of the increasing reports of nurses leaving the profession or committing suicide when they cannot cope with the job demands. The respondent posited that "work-related stress is a norm in my profession, especially in the past 2 years as a result of COVID-19, which significantly increased the nurses' workload." P10 elaborated that nurses in the critical care unit experience work-related stress when they cannot fulfill the job demands. In particular, he said that "nurses experience work-related stress when they cannot fulfill the job's demand, particularly the

emotional and physical requirements." According to P11, work-related stress is associated with burnout and other negative factors, such as loss of professional fulfillment and the desire to leave.

Sub-theme, influenced by stressors, meant that critical care nurses' experience work-related stress as a result of different factors. Hence, the other critical care nurse managers' experiences were that the problem is influenced by stressors such as understaffing, COVID-19, and the lack of skills or competencies to fulfill the job's demands. For example, P11 posited that although critical care nurses had some stress management and resilient competencies, COVID-19 was a significant stressor. In particular, the respondent indicated, "before the COVID-19 pandemic, I thought we were adequately prepared to fulfill all the demands of working in the critical care unit; however, it was challenging during the period." The pandemic as a stressor was elaborated by P12, who indicated that

COVID-19 was a novel disease that none knew what was required to provide our patients with the best care. In addition to the lack of knowledge, we did not have enough personal protective equipment (PPEs) and ventilators. Thus, the stressor was the lack of competencies to provide the needed services.

Another respondent, P10, added that "the work-related stress was particularly significant during the COVID-19 when we had numerous critical care unit patients. The increased workload was a stressor." P6 responded that COVID-19 was a stressor among the nurses because of the increased patient admissions to the critical care unit. She

explained that "during the COVID-19, the workload and mortality increased, causing stress. The increased deaths and limited understanding of the disease had significant mental, emotional, and physical impact, resulting in burnout." P1 said that "during the COVID-19 pandemic, there was increased anxiety and stress, which affected the professionals' daily activities, such as sleeping."

In addition to COVID-19 being a source of exhaustion, uncertainty, fear, pressure, and emotional trauma, P3 indicated that being a novice nurse is also associated with work-related stress. She explained that "novice nurses are usually anxious about transitioning into the profession because of the perception of a lack of enough competencies, which creates self-doubt." P9's response adds to the influence of being a novice nurse on work-related stress. She said, "when I was newly employed, I experienced work-related stress when transitioning into the workforce. My stressors were because I felt that I lacked adequate competencies to provide care in the real setting." Another stressor was the workload, which occurs because of understaffing. P12 explained that "when the intensive care unit is at full capacity, it can be a stressor especially when we are understaffed." P1 added to the concept of understaffing being a stressor, especially because the nurses deliver care to patients with severe illnesses in the critical care unit.

Job Demand Strategies

The first sub research/probing question was, How do critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on critical care nurses? The aim was to explore the effective strategies used

by critical care nurses in managing their work-related stress. Based on the thematic analysis, self-care practices, social support, and journaling were identified.

The subtheme, self-care practices, in this study refers to critical care nurses' engagement in activities such as jogging, cycling, walking, aerobics, yoga, meditation, deep breathing, and adequate sleep to cope with job demands. For example, P6 indicated that "before COVID-19, I would jog around my neighborhood. However, I would jog at home on a treadmill during the pandemic." The respondent added that she adopted new self-care practices during COVID-19 to cope with the pandemic. She said, "I started meditating and deep breathing during the COVID-19 pandemic. Whenever I felt anxious or worried, I either meditate or do deep breathing, which helped me manage my stress and maintain health." In addition, the participant posited that jogging as a self-care strategy improves resilience. Hence, individuals can fulfill the physical job demands associated with working in the critical care unit, which requires constant moving and standing. Notably, P3 stated, "I identified that standing and moving for too long were a significant stressor when working in the critical care unit. Hence, to increase my resilience, I started exercising, which helped because my endurance improved."

Also, P6 argued that meditation and deep breathing help manage anxiety or worrying, improving critical care nurses' mental capability to fulfill the job's demands. Another respondent, P4, indicated, "I ensure to engage in at least 45 minutes of cycling and jogging daily. Also, meditating during work breaks helps me calm and handle my anxiety. Additionally, I avoid alcohol or other unprescribed medication." Self-care

practices helped critical care nurses manage the physical and emotional demands associated with the job. Accordingly, P5 indicated that "the self-care practices I use include exercising, doing some meditation, and eating a healthy diet." In addition, P5's self-care practices added eight hours of sleep as an additional effective strategy for fulfilling the job demands of working in the critical care unit. P11 added to the discussion by positing that "my self-care practices usually involve performing aerobics exercises and meditating."

P2 provided an elaborate discussion on the self-care practices applied by indicating that "my moderate physical exercise involves walking briskly or cycling through my neighborhood." She explained her healthy eating practices by saying, "I ensure to eat fruits, whole grains, vegetables, and low-fat products." P2 emphasized the importance of self-care practices because they helped her manage stress. She said that

Were it not for the stress management strategies; I would not be a critical care nurse leader. I know of friends and acquaintances who left the profession because of emotional exhaustion and burnout. Were it not for the advice I received from my mentor on the importance of engaging in the activities I discussed earlier; I would have left the profession because I think the burnout would have negatively impacted my job fulfillment and capability to deliver quality patient care.

Based on the critical care nurse managers' responses, it was identified that the participants' applied a combination of at least two self-care practices. For example, P10 said, "I perform yoga, meditate, and do aerobic exercises." P13 explained, "I usually

engage in physical exercise, which involves jogging or cycling. I also do yoga and meditate, which helps me remain calm. Self-care helps me maintain my emotional, mental, and physical reserves." Another respondent, P1, said, "I jog every morning and do deep breathing exercises whenever I feel anxious." P1 elaborated on the meaning of deep breathing. She spoke

Deep-breathing involves taking extended breaths into the belly to avoid short chest breaths, which can trigger fatigue and anxiety. There are different techniques, but I use the 4-7-8 approach. The approach involves breathing in through the nose for four seconds, holding the breath for seven seconds, and breathing out through the mouth for eight seconds.

Theme 2: Physician Resources

Sub-theme social support, based on the responses in this study, was used to mean the physical, emotional, and physiological assistance provided to critical care nurses to help them overcome work-related stress. Social support among critical care nurses was promoted as an effective work-related stress management strategy. In particular, critical care nurse managers indicated that team support, especially during COVID-19, was essential because the nurses find solace in each other. An example of a response was by P1, who indicated that "support from colleagues has particularly been beneficial to me because we console each other and collaborate in overcoming some of the stressors associated with working in the ICU." Another respondent, P11, indicated that "social support involves having meaningful conversations with peers and helping each other with

the stressor factors, which was particularly useful during the COVID-19 period." P13 explained that "support from colleagues was impactful during the COVID-19 because we shared experiences and knowledge." Knowledge sharing was also supported by P8, who posited that

During COVID-19, my colleagues and I had an online discussion group forum where we would share our daily experiences and the approaches, we were applying to overcome the emotional distress associated with the pandemic. Also, in the discussions, we would share information from credible sources on how to care for COVID-19 patients effectively. The information sharing was particularly helpful because it kept us UpToDate with the most current COVID-19-related prevention and management approaches.

Additionally, P5 indicated that

Support from peers usually occurs in different forms. For instance, if you experience feelings of anger, worry, or sadness, talking to a colleague usually helps. Also, the support can be in the form of assistance with the workload. For example, I witnessed such support during COVID-19, where nurses from other units requested to be posted in the critical care department to assist with the workload.

The sub-theme of journaling as a physical resource, was another effective approach for managing work-related stress in the critical care unit. In this study, journaling was used to mean the process of recording one's feelings and emotions to

identify stressors. Different critical care nurses indicated that journaling is an effective strategy for managing work-related stress because the process enables them to reflect on their professional activities. For example, P7 said, "I have a personal notebook where I write down feelings. The process helps me organize my thoughts and formulate a solution to stressful situations." In addition, the critical care nurse leader added, "in some cases, I draw calming images such as flowers, which helps me release the pent-up frustrations."

P3 responded, "keeping a journal helps mitigate work-related stress because it provides the basis for identifying the physical, mental, and emotional stressors." P3 elaborated by providing an example that "when journaling, a nurse could identify that their stressor is a deficiency in communication skills. Hence, the nurse can continuously learn to improve the deficiency." Additionally, P12 considered journaling as an approach for identifying work-related stress. She indicated, "I usually maintain a journal because I believe that understanding the course of the problem is the initial step towards managing work-related stress."

Job and Mental Resource Strategies

The second sub research question was, How do critical care nurse leaders describe effective stress management strategies for improving job and mental resource among critical care nurses? I developed the research question to explore effective strategies. A thematic analysis of the participants' responses helped identify two strategies: the sub-themes of stress management and resilience training program and a healthy work environment.

Theme 3: Mental Resources

A subtheme of stress management and resilience training program were used as a mental and job resource for improving the nurses' competencies in handling work-related stress. The critical care nurse managers supported the program's essence in helping health care providers gain the competencies to overcome work-related stress. For example, P9 recommended the need for "introducing educational programs at the departments to improve the nurses' stress management levels and resilience." Another participant, P10, posited that:

Our facility introduced a program to improve the health care providers' stress management competencies and resilience. The program was introduced because of the significant stress experienced by professionals during the pandemic. It is anticipated that the program will increase our ability to meet the job demands, even in the most adverse situations such as the COVID-19.

The respondents supported the program's efficacy by indicating that it could improve the nurses' understanding of the self-care practices they can apply to help them overcome daily stress, decreasing their emotional and physical vulnerability. P13 posited that "a program could ensure that all nurses have the skills and capacity to fulfill the mental, physical, and emotional demands of working in the critical care unit." P7 added to the discussion by positing that "a program at the unit level would help nurses understand how to identify stressors, apply the appropriate strategies to develop resilience, and incorporate the practices into their daily lives." Similarly, P5 explained

that "an employer-provided occupational health safety program can be the foundation for nurses gaining the skills to manage stress and develop resilience." Another critical care nurse manager, P6, explained that

After witnessing the significant stress caused by COVID-19, I started advocating for the implementation of stress management and resilient training sessions. I am convinced that implementing the strategies could help decrease the impact of stress among the nurses, improving their professional fulfillment.

Theme 4: Emotional Resources

The subtheme, healthy work environment, in this study means the process of introducing different approaches for improving the critical care unit work environment. The first approach was supporting critical care nurses' continuous education initiatives. P9 argued that nurses should be supported to pursue continuous education. She said that "studying for a master's or doctorate is expensive, discouraging some nurses from enrolling." She continued by proposing that the introduction of funding programs at the organizational level could incentivize nurses to study, improving their competencies to fulfill the job demands. P4 was of a similar opinion and indicated that "engaging in life-long learning, which involves pursuing a master's and doctorate, keeping up-to-date with evidence-based nursing practices, and attending conferences should be encouraged."

The second was hiring more critical care nurses, ensuring an appropriate nurse-to-patient ratio. P9 stated, "maintaining the nurse-patient ratio at the appropriate level, ensuring that the workload does not overburden the health professionals." Accordingly,

P1 added, "if the stressor is the workload, then the most appropriate solution is hiring more health care providers to ensure that the nurse-patient ratio is within the recommended figure." Notably, the participant was not ignorant that improving the nurse-patient ratio is significantly influenced by the funds accessible and qualified professionals' availability.

The third approach was implementing a standardized communication approach. P1 recommended, "if the stressors are ineffective communication among the health care providers, the most suitable approach for mitigating the work-related stress is implementing a standardized communication plan." P8 also indicated, "I proposed a standardized communication procedure because the activity is a core stressor among the nurses, especially the novice health care providers."

A fourth strategy was introducing a system that allows critical care nurses to report any experienced stressors. For instance, P13 stated, "the introduction of a platform that the nurses can use to report any stressors could be helpful in timely mitigating the issues, preventing stress." P10 added, "once the stressors are reported, the necessary actions can be performed depending on whether they are at a personal or organizational level." A fifth strategy for creating a healthy work environment was introducing a structured approach for promoting social support. P11 explained that

I want a structured support system where newly employed nurses are assigned, mentors. The strategy could help decrease the number of nurses who leave the profession at the beginning of their careers because of challenges transitioning

into the workforce. In addition, the mentors could share some of the practices they have learned about stress management and resilience development. The younger generation of critical care nurses needs guidance, especially with the increasing diversity of populations who need health care services.

Summary

The purpose of the study was to explore critical care nurse managers' experiences of potential strategies to address work-related stress among nurses effectively. After performing coding and thematic analysis, seven subthemes (prevailing problem, influenced by stressors, self-care practices, social support, journaling, stress management and resilience training, and a healthy work environment) and four themes (job demand, physical resources, mental resources, and emotional resources) were derived. As such, to answer the central research question, it was identified that the experiences of critical care nurse managers related to work-related stress for nurses were that the issue is a prevailing problem influenced by stressors.

The answers to the one of the key questions was that critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on critical care nurses as self-care practices, social support, and journaling. Additionally, critical care nurse leaders describe effective stress management strategies for improving job resources as implementing stress management and resilience training and establishing a healthy work environment. Chapter 5 contains the discussion,

alignment with theoretical constructs discussed in Chapter 2, conclusions, and recommendations.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Work-related stress is associated with adverse impacts on nurses and health care organizations. In particular, work-related stress results in job dissatisfaction, reduced motivation, psychological distress, insomnia, depression, anxiety, lack of confidence, and decreased concentration, which increases nurses' likelihood of committing medication errors (Tsegaw et al., 2022). The purpose of this study was to explore critical care nurse managers' experiences of strategies for effectively addressing work-related stress among nurses. The rationale for conducting this qualitative phenomenological study was the increased prevalence of work-related stress among critical care nurses in comparison to other nurses and/or during the pandemic and the limited understanding of the effective strategies for mitigating the phenomenon (Arnetz et al., 2020).

The central research question was, What are the experiences of critical care nurse managers on work-related stress for nurses? The sub research questions were (a) How do critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on critical care nurses? and (b) How do critical care nurse leaders describe effective stress management strategies for improving job resources among critical care nurses? Analysis of study data indicates that work-related stress is a prevailing issue that is influenced by different stressors. Self-care practices, social support, and journaling were reported as effective strategies for fulfilling the job's demands. Accordingly, introducing stress management and resilience training and

creating a healthy work environment could improve critical care nurses' job resources. In this chapter, I interpret the findings, discuss the limitations of the study, offer recommendations, consider the implications of the research, and provide a conclusion to the study.

Interpretation of the Findings

By performing the constant-comparative method and thematic analysis, I derived four themes: job demand, physical resources, mental resources, and emotional resources. The four themes were derived from seven subthemes: (a) prevailing problems, (b) influenced by stressors, (c) self-care practices, (d) social support, (e) journaling, (f) stress management and resilience training, and (g) a healthy work environment. I interpret the findings related to each question and explain how they confirm, disconfirm, and extend published pieces of literature.

The central question answered in this study was, What are the experiences of critical care nurse managers on work-related stress for nurses? From the theme, job demands, I identified two subthemes: prevailing problems and influenced by stressors. The issue is a prevailing problem that is influenced by stressors. The research findings in this study are confirmed in the published literature found in Chapter 2. For instance, Blok et al. (2021) posited that work-related stress is a prevalent issue at an individual, unit, and organizational level. Work-related stress is a common issue in the critical-care unit because of the emotional demand associated with working in the intensive care department (Worringer et al., 2020b). According to Robat et al. (2021), workplace

stressors include exposure to death, a limited workforce, increased working hours, care of difficult patients, and possible exposure to infections. Similarly, in this qualitative phenomenological study I identified that the core stressors among critical care nurses were understaffing, limited competencies or skills for achieving the job demands, and fear of contracting COVID-19.

Arnetz et al. (2020) indicated that exposure to infections, particularly COVID-19, is a core stressor among nurses. Accordingly, in this qualitative phenomenological study, the participating critical care nurse managers reported that COVID-19 was a stressor, especially in the early stages when PPE and knowledge about the condition were limited. Wazqar (2019) posited that workload and disproportionality in the nurse-to-patient ratios resulted in work-related stress. Wazqar's results are congruent with the participants' responses that the lack of a proper nurse-to-patient ratio and increased workload are a source of stressors among nurses. In this study, the critical care nurse managers supported that work-related stress was particularly significant during COVID-19 when most patients were admitted to the unit.

Congruent with Yoo et al. (2020), participants indicated that ineffective communication could be a stressor, especially among novice nurses transitioning into the workforce. The critical care nurse managers' experiences that work-related stress is a prevalent problem caused by various stressors are sufficiently supported in the published literature (Chegini, 2019). The findings may support the need for tailored interventions for each work-related stressor.

The first probing sub research question was, How do critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on critical care nurses? Further coding and thematic analysis of job demands and physical resources yielded three subthemes: self-care practices, social support, and journaling. Accordingly, the suggestion is that critical care nurse leaders should consider engaging in self-care practices, having social support, and performing journaling as effective strategies for reducing the impact of job demands. The findings are consistent with those in the published literature regarding self-care practices and social support (Alharbi & Alshehry, 2019; Allah et al., 2020). Also, the findings are congruent with the JD-R model because, based on the participating critical care nurse managers' responses, applying self-care practices, social support, and journaling helps the professionals gain the competencies to fulfill the job demands.

The participants in this qualitative phenomenological study supported self-care practices, specifically aerobics, jogging, cycling, walking, meditation, yoga, deep breathing, eating a healthy diet, and adequate sleep as effective strategies. Similarly, Allah et al. (2020) and Hancock et al. (2020) acknowledged that exercise is a self-constructive behavior that could help critical care nurses overcome the prevailing issues associated with work-related stress. In another study, Liu et al. (2020) acknowledged the essence of eating a healthy diet as a stress management approach. Congruent with this study's findings, Pinho et al. (2021) and Savic et al. (2019) acknowledged the effectiveness of sleep, eating healthy, and relaxing physical activities such as yoga. In

addition, Mohebbi et al. (2019) acknowledged that engaging in aerobics exercise is associated with decreased occupational stress.

The findings of the present study show that social support is an indispensable strategy in the unit because it helps nurses overcome the emotional job demands associated with the profession. Similarly, Alharbi and Alshehry (2019) and Worringer et al. (2020b) argued for the efficacy of social support from fellow nurses and leaders in helping nurses manage work-related stress. In addition, the critical care nurse managers in this study indicated that social support was particularly essential during the beginning of COVID-19 pandemic. Similarly, Liu et al. (2020) confirmed the finding by indicating that social support was a source of solace for the nurses.

Worringer et al. (2020b) noted that social support alone could not be used to resolve work-related stress. As such, in this study, the critical care nurse managers supported the essence of combining different strategies, ensuring that all the job demands were addressed. Accordingly, the findings in this qualitative phenomenological study added to existing evidence by supporting that combining self-care practices, social support, and journaling could create a comprehensive approach for mitigating work-related stress among critical care nurses. In the reviewed literature, there was no mention of journaling as a work-related stress management strategy. Hence, the findings supporting journaling advance the published literature by proposing a possible approach that critical care nurses should consider to manage their stress.

The second sub research question was, How do critical care nurse leaders describe effective stress management strategies for improving job resources among critical care nurses? Further analysis of the themes mental and emotional resources, the two sub-themes, stress management and resilience training, and a healthy work environment, were derived from the participants' findings. The findings in this study supporting the need to implement stress management and resilience training were not identified in any of the published literature. Hence, the findings in this study extend knowledge in practice by proposing stress management and resilience training as an effective strategy for helping nurses access the needed job resources.

In contrast, the essence of establishing a healthy work environment has been supported in the published literature; for example, Genrich et al. (2020) supported the essence of critical care nurse managers developing a healthy work environment that provides nurses with social support. In particular, Genrich et al. (2020) explained that a healthy work environment should be developed to support the implementation of individual-based interventions such as support and professional development.

In this study, the critical care nurse managers posited that the job support nurses can provide creates a healthy work environment. In particular, a healthy work environment can be created by (a) supporting life-long learning or continuous education, (b) hiring more nurses, (c) standardizing communication, (d) implementing a formal social support program, and (e) introducing a system for nurses to report their stressors. Some of the findings confirmed in the published literature include social support,

adequate staffing, and enhancing the nurses' competencies (Allah et al., 2020; Aspinall et al., 2021). As such, the findings in this qualitative phenomenological study supports and advances the evidence in published literature by proposing that strategies such as supporting life-long learning or continuous education, standardizing communication, and implementing a system for nurses to report their stressors could provide the nurses with the job resources needed in working in the critical care unit, reducing work-related stress.

Limitations of the Study

In this study, there were two limitations. The first limitation of the qualitative methodology is the small sample size of 13 participants. Using a small sample size in qualitative studies is permissible because the researchers must collect in-depth data and continue until saturation is achieved. (Vasileiou et al., 2018). The second limitation is associated with the possible respondents' bias. For example, the critical care nurse managers could have provided the responses they thought I needed. Hence, the responses could not accurately represent their experiences.

Recommendations

The first recommendation for future researchers is to use validated and reliable data collection instruments to measure work-related stress and efficacy of the introduced interventions to mitigate the problem. Using reliable and validated tools could help eliminate the respondents' potential bias associated with collecting data using semistructured open-ended interview questions. The second recommendation for future researchers is to assess the efficacy of the identified strategies. For instance, future

researchers can decide to conduct a mixed-methods study, where the stress management and resilience training program would be implemented. The methodology would allow the researchers to collect pre and post-intervention quantitative data, supporting in analyzing the impact of the stress management and resilience training program on work-related stress. Additionally, qualitative data can be collected to understand the critical care nurses' perceptions of the implemented intervention.

Implications

An explanation of the study findings' implications for social change was included. Also, a discussion of the methodological, theoretical, and implications were included. All the implications were founded on the study findings to help prevent them from exceeding the research's scope.

Implications for Social Change

In this study, the critical care nurse managers acknowledged that work-related stress is a prevalent problem caused by different stressors. Hence, the first implication for social change is that this study findings' increase awareness of the persistence of work-related stress, which can have a negative impact of the nurses' physical and mental wellness. Additionally, the negative impact can adversely affect the critical care nurses' ability to deliver quality care, which is associated with negative patient outcomes. According to the research in Chapter 2, the increased awareness that work-related stress is a prevailing problem rationalizes the need to mitigate the issue using the identified and proposed solutions.

In this study, the critical care nurse managers indicated that the persistence of work-related stress results in increased number of nurses leaving the profession as a result of burnout and lack of fulfilment. When critical care nurses leave the profession it creates a shortage, which limits the community members access to health care services. Further, the effective strategies to help critical care nurses cope with the job demands were identified. Arguably, applying the strategies could help decrease the number of nurses who leave the profession as a result of work-related stress. A decrease in the number of nurses leaving the profession would save the societal costs associated with staff turnover.

The participants noted that providing the nurses with the proposed job resources could help decrease the professional constant and prolonged exposure to work-related stress adversely impacts their wellness. The decreased adversely impact on the nurses' wellness could help save the societal costs associated with the nurses' absenteeism and cost of treating their work-related physical or mental illnesses. Overall, the findings in this study focused on providing the nurses with the job resources to help them achieve the job demands. These could help mitigate the adverse outcomes associated with work-related stress. In particular, the use of self-care practices, social support, journaling, stress management and resilience training, and a healthy work environment could help decrease work-related stress, promoting critical care nurses' professional fulfillment and ability to deliver quality care.

Theoretical, Empirical, and Methodological Implications

The theoretical implication is that the findings in this study support the relevance of the JD-R model in understanding work-related stress. According to the JD-R model, work-related stress occurs when there is an imbalance between job demands and job resources (Bakker & Demerouti, 2011). In particular, the findings in this qualitative phenomenological study helped confirm that mental, emotional, and physical demands result in work-related stress, particularly when critical care nurses lack the job resources, such as social support and self-care practices, to perform their required roles. Additionally, the study findings advanced the application of the model in nursing, underpinning the conceptualization of job resources as self-care practices, social support, journaling, stress management and resilience training, and a healthy work environment (see Table 5). This study adds to the number of existing phenomenological studies on the experiences of critical care nurse managers in handling work-related stress. In addition, applying qualitative data organization software, MAXQDA, adds to the literature on the tool's efficacy in data management.

Two core methodological implications are associated with this study. First, the findings in this study support the appropriateness of a qualitative methodology and interpretative phenomenology design in exploring experiences. The second methodological implication is that the approach allowed the use of a semistructured open-ended question to collect the participants' experiences. Using a semistructured open-

ended interview guide can help and allowed the researcher to ask probing questions, collecting detailed data.

Table 5

Job Demands-Resources (JD-R) Model Constructs and Themes

JD-R model construct	Definition	Subtheme
Job demands	Job demands are the facets of employment that require physical, social, or psychological effort, cost, and/or skills to perform a certain task	Prevailing problem Influenced by stressors
Job resources	Job resources are the physical, social, psychological, or organizational aspects that are essential in fostering growth, learning, personal development, and development of sense work to reduce job demands and successfully perform a task	Self-care practices, Social support Journaling Stress management and resilience training Healthy work environment

Practice Recommendations

As discussed in this study, it is evident that work-related stress is a prevailing problem in nursing and critical care units because of the numerous stressors associated with the profession. As such, self-care practices, social support, and journaling are essential among critical care nurses. Based on this study's findings, two recommendations were derived. First, critical care nurse managers should advocate for implementing stress management and resilience training programs. Implementing the program could be beneficial because it would help nurses develop the competencies to manage stress and resilience to handle the job demands. Critical care nurses can be educated in the program

on adaptive strategies such as self-care practices. Accordingly, implementing the program could be an essential addition to the practice.

The second recommendation is for critical care nurse leaders to focus on creating a healthy work environment. The leaders can create such an environment by providing nurses with initiatives to pursue continuous education, advocating for the hiring of more nurses, implementing a standardized communication protocol, creating a formal social support program, and developing a system that nurses can use to report their stressors. It is expected that introducing the strategies could help create a balance between the job demands and job resources, mitigating work-related stress.

Conclusion

In this study, applying a qualitative methodology and phenomenological design helped explore the experiences of critical care nurse managers in managing work-related stress for nurses. Based on the critical care nurse leaders' responses, work-related stress is a prevailing problem. Also, the phenomena are influenced by different stressors, which occur when disequilibrium occurs between the job demand and job resources. The effective strategies that can be applied to cope with the job demands include self-care practices, social support, and journaling. Additionally, providing nurses with stress management and resilience training and creating a healthy work environment could provide nurses with adequate job resources to fulfill the physical, mental, and emotional demands associated with working in the critical care unit.

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Appendix A: LinkedIn Recruitment Message

Critical Care Nurse Manager's Name

Address

Dear Critical Care Nurse Manager,

My name is Mariana Tsucuneli, and I am a student at Walden University studying for a Ph.D. in management. I am conducting a study, *Experiences of Critical Care Nurse Managers on Managing Work-Related Stress for Nurses*. The purpose of the proposed study is to explore critical care nurse managers' experiences work-related stress among nurses. I am emailing you to seek your voluntary participation in the study; I am looking for critical care nurse managers. The study is Zoom-interview based and only requires approximately 30 to 60 minutes. The process will involve answering possibly 10 semistructured questions based on your experience that will help me answer one main and possibly additional three research questions: (1) What are the experiences of critical care nurse managers on managing work-related stress for nurses? (2) How do critical care nurse leaders describe effective work-related stress management strategies for decreasing the impact of job demands on critical care nurses? (3) How do critical care nurse leaders describe effective work-related stress management strategies for improving job resources among critical care nurses? The study results will be reported in the aggregate, and confidentiality will be promoted.

If you need additional information, you may contact me at [email address redacted].

Sincerely,

Mariana Tsucuneli

Appendix B: Invitation Email

Subject line:

Critical Care Nurse Manager's Interviews

Email message:

My name is Mariana Tsucuneli, and I am a student at Walden University studying for a Ph.D. in management. I am conducting a study, Experiences of Critical Care Nurse Managers on Managing Work-Related Stress for Nurses. The purpose of the proposed study is to explore critical care nurse managers' experiences work-related stress among nurses. I am emailing you to seek your voluntary participation in the study; I am looking for critical care nurse managers.

About the study:

- Zoom-interview based and only requires approximately 30 to 60 minutes
- Results will be reported in the aggregate, and confidentiality will be promoted
- To protect your privacy, the published study would use fake names

Volunteers must meet these requirements:

- Lead a critical care unit in a hospital in Michigan
- Have held leadership positions for at least two years
- Are a director of critical care unit, deputy director of the critical care unit, critical care unit nurse manager, or critical care unit assistant nurse manager

This interview is part of the doctoral study for Mariana Tsucuneli, a Ph.D. student at Walden University. Interviews will take place during October 2022.

Please respond to this email to let the researcher know of your interest. You are welcome to forward it to others who might be interested. If you need additional information, you may contact me at [email address redacted].

Sincerely,

Mariana Tsucuneli

Appendix C: Recruitment Flyer

Study Participants Request

**Project's Title: Experiences of Critical Care
Nurse Managers on Managing Work-
Related Stress for Nurses**



Eligibility: You can part of the qualitative study if you:

- (a) Lead a critical care unit in a hospital in Michigan
- (b) Have held leadership positions for at least two years
- (c) Are a director of critical care unit, deputy director of the critical care unit, critical care unit nurse manager, or critical care unit assistant nurse manager.

Sample Interview Questions

1. Have you ever experienced work-related stress?
2. You said your experience handling work-related stress is xxx, tell me more about.....

If you answered *YES* to these questions, you are eligible to participate in this study.

Note: Participation is voluntary. Confidentiality and privacy will be guaranteed.

Please share this flyer with others who might be

interested

Duration?

Approximately 30-60 minutes interview over Zoom.

Researcher's Information

Please contact me through [email address redacted]- if you are interested in participating or have any questions regarding the study.

Appendix D: Screening Tool

Criteria	Yes	No
Do you lead a critical care unit in a hospital in Michigan?		
Have you held a leadership position for at least two years?		
Are you a director of the critical care unit, deputy director of the critical care unit, critical care unit nurse manager, or critical care unit assistant nurse manager?		

Appendix E: Open-Ended, Semistructured Interview Guide

Experience with work-related stress

1. Have you ever experienced work-related stress? If so, tell me about your experiences regarding work-related stress particularly those in the critical care unit?
2. Please describe your experience handling work-related stress?
3. You said your experience handling work-related stress is xxx, tell me more about....

Additional probing questions - Job-Demand

4. Please explain the above indicated work-related stress?
5. **Ask based on responses to question 4:** You said.....is an [emotional/physical/cognitive] stressor, which strategies have been adopted to mitigate the issue?
6. **Ask based on response to question 5:** You said.... is a [emotional/physical/cognitive] consequence of work-related stress, what strategies have been adopted to manage the issue?

Job-Resources

7. Can you tell me about any resources you have to help nurses to achieve growth and development or perform their work?
8. **Ask based on response to question 7:** You said you have....
[interpersonal/organizational/ job-specific] ...resources tell me more about them.
9. Are there resources you would like introduces?

Closing Remarks

10. Is there anything related to work-related stress you would like to add?

Appendix F: Demographic Data Collection Tool

Thank you for agreeing to participate in my study. The interview will last for approximately 30-60 minutes. First, we will begin with demographic data and then proceed to the interviews.

1. How old are you?

20-30

31-40

41-50

51-60

Older than 60

2. What is your highest educational qualification?

3. Are you male, female, others, or prefer not to say?

4. What position do you hold at your organization?

5. How long have you been a critical care nurse manager?