



Psychological Well-Being, Resilience and Work Productivity of Emergency Nurses in Selected Specialty Hospitals in Anhui Province, China

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ABSTRACT

Introduction: This study determined the psychological well-being, resilience, and work productivity among emergency care nurses in selected specialty hospitals in Anhui Province, China with the end goal of proposing a nursing framework that describes inter-professional emergency team collaboration.

Methodology: The study utilized descriptive-correlational research design to emergency care nurse respondents (n=206) working in selected specialty hospitals in Anhui Province, China. who were randomly selected. Data were obtained using open-access, validated and self-administered survey questionnaires adopted from Ryff's Psychological Well-Being Questionnaire; Connor-Davidson Resilience Scale; and Dulewicz and Higgs Work Productivity Scale. Psychological Well-Being questionnaire has got 42 items focused on six domains including autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. Meanwhile, Resilience has got 25 items focused on five areas including active coping, cognitive flexibility, positive emotion, optimism, and spirituality. Furthermore, Work Productivity has got 30 items focused on three domains including work engagement, work attitude, and work performance. Descriptive statistics were used to describe and analyze gathered information.

Results: Assessment of nurses' psychological well-being depicted that they always stand firm with their decision and do not get influenced by others' strong opinion; they remain strong in coping with the demands of everyday life; they believe life has been a continuous process of learning, changing, and growth; they have always considered positive direction and important goals through life; they feel grateful in many ways about their achievements in life; and they are being described as a giving person and always willing to share their time with others. Moreover, in terms of resilience, they are able to adapt when changes occur; they stay focused and think clearly under pressure; they make their best effort no matter what; they believe they can achieve their goals even if there are obstacles; and they think of themselves as strong person when praying with life's challenges and difficulties. Furthermore, in terms of work productivity, they work hard to achieve established goals; they efficiently utilize all necessary resources to perform their job well; and they maintain positive attitude at work.

Conclusion: Statistical analysis showed high positive correlation between psychological well-being and resilience; between psychological well-being and work productivity; and between resilience and work productivity. The outcome of the standard multiple regression analysis revealed that all dimensions of psychological well-being predicted 76.6% of the variance in work productivity while all dimensions of resilience predicted 78.2% of the variance in work productivity.

Keywords: *psychological well-being; resilience; work productivity; nurses; emergency care; specialty hospital*

THE PROBLEM AND ITS BACKGROUND

1. Introduction

The uncertainty and challenges in this new normal may pose a further threat to nurses' psychological wellbeing. Nurses are placed in stressful situations, fulfilling their roles on the front line while risking their lives to save others. Hospital emergency departments deal with every kind of medical emergency involving life-threatening conditions. Emergency care is available 24 hours a day, every day of the year and has special equipment and a highly qualified team of emergency care nurses including nurses to respond to every kind of medical emergency. Emergency response is a complex activity and emergency care nurses are like circus performers as they attend to simultaneous demands from various and multiple stakeholders such as administrators, patients, and colleagues. In addition to the time-bound interventions and parallel tasks required and it can be thought of no less than being chaotic in which their psychological well-being and resilience are critical factors of work performance among emergency care nurses.

Over the decades, Emergency Department (ED) has evolved in many ways, increasing work demands and placing extra pressure. Nurses have intrinsic exposure to psychological distress because they frequently encounter multiple ethical challenges and deaths while providing emergency care. The unique milieu and task complexity in emergency care settings pose a challenge to the analytic approach, particularly when confronted with a critically ill patient who requires immediate action (Moresky et al., 2019). Improving psychological well-being plays a significant role in maintaining the quality of care and clinical performance for emergency care nurses. Lifestyle changes often result in increased stress and affect resilience. In these conditions, emergency care nurses must take all necessary precautions to protect themselves, against feelings of emotional exhaustion which can have negative effects on their psychological well-being. Because psychological well-being is the foundation of emergency care nurses, day-to-day practice factors or potential factors will lead to stress and burnout resulting in unprofessional behavior, and more difficulty focusing on work than others (Haidari et al., 2021).

Emergency care nurses working in emergency department regularly attend to potentially traumatic incidents and regularly treat people who are in life-threatening conditions. Exposure to such experiences has been linked to adverse psychological conditions. The most prevalent factors related to psychological well-

being issues include fear, anxiety, sadness, psychological symptoms, and post-traumatic symptoms. These events may have a short and long-term influence on emergency care nurses in psychological well-being along with their resilience.

While emergency care nurses, along with other healthcare practitioners, continue to provide care and fulfill their job roles, the question of how resilient they are in coping with difficulties during hospital emergencies remains important. Resilience enables emergency care nurses to maintain healthy levels of psychological and physical functioning during exposure to emergency events thus enhance their capacity for generative experiences and positive emotions. Individual resilience is an important skill and understanding can help to be strong in the face of emergency events. Resilience is regarded as a protective factor for psychological well-being of emergency care nurses involved in emergency medical response. If emergency care nurses are resilient, they are more likely to work well in their jobs and stay productive with their profession. Work productivity in emergency medical response service is a learning outcome for which healthcare professionals assume great responsibility and accountability (Kafetsios, 2018).

Work productivity is at the heart of every profession. Productivity entails a combination of skills, knowledge, attitudes, values and abilities that underpin effective work performance. The productivity of emergency care nurses is of great significance in determining their work performance since competency can be equated to standards of practice, and professionalism in the job.

The emergency medical response service in specialty hospitals has been expected to become better. It is actually not unexpected that the emergency response in the country is far behind what other countries practice and provide, especially those who belong in the first world. The emergency care nurses maintain a coordinated system that provides emergency care when patients arrive in the hospital. The stressors and emotions involved in the emergency environment are immense based on what emergency care nurses encounter on most difficult moments in the job.

Today, emergency care system faces an epidemic of crowded emergency departments, patients boarding in hallways waiting to be admitted, and daily ambulance diversions. Hospital-based emergency care addresses the difficulty of balancing the roles of emergency care, safety net care for patients, disaster response, and adjunct care. The services emergency care nurses fill in the gap between the scene of increasing patient volume and limited resources, hence this study will explore the influence of psychological well-being and

resilience on the work productivity of emergency care nurses in selected emergency department of specialty hospitals in Anhui Province, China.

There is no question that the impact of the emergency department within the larger specialty hospitals and the efficiency of emergency care nurses are both demanding. There is also no question, however, that those challenges bring their own rewards. Undoubtedly hospital-based emergency care nurses are strongly impacted by the situations they encounter, and certainly those impacts yield meaning and strength more often than they engender psychological well-being, resilience and work productivity.

As exposed to emergency care situations, the researcher considers that emergency events require members of emergency medical response team to be flexible. Emergency care nurses working in the emergency department need to maintain the valuable characteristics of psychological well-being, resilience, and work productivity to successfully overcome the challenges of the job functions, increase the preparedness and quality of care to serve patients.

1.2 Background of the Study

Psychological well-being necessarily recounts on the ability to withstand and cope with occupational stress adaptively. Resilience refers to includes overall physical and psychological health which always relates to nurse's ability to enjoy work, and create a balance between life activities and efforts to achieve resilience and productivity. Nurse's well-being highlights normal functioning despite stressful events or circumstances, disruptions, or changes in demands. In many emergency department of specialty hospitals in Anhui province, nurses are short-staffed and have to undertake additional work hours which leads to greater occupational stress and turnover tendency in which their resilience and productivity get challenged. In recent years, well-being of Chinese nurses in the emergency department has been a big concern for many specialty hospitals which deserves a wide range of attention since they are associated with resilience and productivity.

Moreover, the researcher personally believes that emergency care nurses are essential to the health care system of a country. The researcher also experienced that when an emergency medical attention is provided to the patient upon arrival at the hospital, the survival rate becomes much higher. The researcher also realized that the chain of survival among acute trauma victims becomes better when the roles of emergency care services are given. The researcher further believes that in order for emergency care nurses in the Anhui province to improve and remain productive in the job, they should have strengthened psychological well-being and resilience.

The researcher asserts that emergency departments are the front line of health care systems and play a critical role in ensuring an efficient and high-quality response for patients in distress or crisis situations. While a growing demand for emergency care might however reduce patients' satisfaction through waiting times, psychological well-being and resilience of emergency care nurses may be equated to increased work productivity. Although nurses are more prone to psychological distress during emergency response, there is a paucity of data examining whether an association between psychological well-being, resilience, and work productivity exists among nurses in the Emergency Department. Characterizing this association could inform the development of psychosocial interventions to improve coping, increase resilience against psychological distress, and improve work productivity among emergency care nurses. Finding measures to improve psychological functioning in emergency care nurses is important because quality nursing care is linked to better patient care and outcomes.

Given the importance of psychological well-being to work productivity, this study aims to investigate the mediating role of resilience between psychological well-being and work productivity. This research is focused on fostering psychological well-being among emergency care providers which may be advantageous for improved patient care. However, if resilience aimed is not enhanced, it may result in adverse work-related attitudes and behaviors. For years, a plethora of research has examined the impact of psychological well-being on work productivity, however, what is less understood is how emergency care professional's psychological well-being impacts resilience and work productivity. Psychological well-being and resilience are among the most critical factors for professional success and work productivity. Resilience buffers people from the challenges in their lives, which leads them to believe that they have developed environmental mastery, positive relationships and growth, and self-determination, which are principal elements of psychological well-being. As such, there are positive relationships between resilience and psychological well-being.

One important gap remains in research about work productivity of emergency care nurses – namely, the role of psychological well-being and resilience in work productivity. Although previous research has found happy workers to be more productive than less happy or unhappy workers, a search of the literature revealed few studies on psychological well-being, resilience, and work productivity. Also, very little is known about the processes that link psychological well-being to work productivity in out-of-hospital setting. Only a narrow spectrum of resilience related antecedents of work productivity has been considered, especially in terms of

psychological well-being. Enriching the understanding of the consequences and processes of psychological well-being in the emergency care setting, the present study examines the interplay between psychological well-being, resilience and work productivity in the emergency care setting. Such knowledge will not only help nurse administrators to attain higher organizational performance during the uncertain times but will uncover how to keep emergency care happy and satisfied.

The associated work stress in emergency care practice could serve as motivation up to a certain limit. However, when it crosses boundaries, it has major impact on the psychological well-being of emergency care nurses and as a result, their work productivity decreases. Crucially, to advance work productivity research among emergency care nurses, more study is needed to examine the relationship between psychological well-being and work productivity. Considering how emergency care nurses' psychological well-being affects resilience, the present study seeks to advance work productivity research by linking ones' psychological well-being and resilience in terms of hedonic and eudaimonic well-being to work productivity. Hedonic well-being refers to the happiness achieved through experiences of pleasure and enjoyment, while eudaimonic well-being refers to the happiness achieved through experiences of meaning and purpose. It can be argued that employees with high levels of psychological well-being will be more resilient and perform much better as compared to those having lower levels of psychological well-being. It can be inferred that psychological well-being-work productivity process through resilience of emergency care nurses by treating it as a mediating variable between psychological well-being and work productivity relationship.

1.3 Statement of the Problem

This study aims to determine the psychological well-being, resilience, and work productivity among emergency care nurses in selected specialty hospitals in Anhui Province, China with the end goal of proposing a nursing framework that describes inter-professional emergency team collaboration. More specifically, the research sought answers to the following:

1. What is the assessment of the emergency care nurses on their psychological well-being in selected specialty hospitals in Anhui province, China in terms of:
 - 1.1 autonomy;
 - 1.2 environmental mastery;
 - 1.3 personal growth;
 - 1.4 positive relationship with others;
 - 1.5 purpose in life; and

1.6 self-acceptance?

2. What is the assessment of the emergency care nurses on their resilience in selected specialty hospitals in

Anhui Province, China in terms of:

2.1 active coping;

2.2 cognitive flexibility;

2.3 positive outcomes;

2.4 optimism; and

2.5 spirituality?

3. What is the assessment of the emergency care nurses on their work productivity in selected specialty

hospitals in Anhui Province, China in terms of:

3.1 work engagement;

3.2 work attitude; and

3.3 work performance?

4. Is there a significant relationship between the emergency care nurses' psychological well-being and their resilience?

5. Is there a significant relationship between the emergency care nurses' psychological well-being and their work productivity?

6. Is there a significant relationship between the emergency care nurses' resilience and their work productivity?

7. Is there a significant relationship between the emergency care nurses' psychological well-being, resilience and their work productivity?

8. Based on the results of the study, what inter-professional emergency team collaboration framework can be developed to describe emergency nurses' psychological well-being in relation to their resilience and work productivity?

1.4 Research Hypotheses

1. There is no significant relationship between the emergency care nurses' psychological well-being and their resilience?

2. There is no significant relationship between the emergency care nurses' psychological well-being and their work productivity?

3. There is no significant relationship between the emergency care nurses' resilience and their work productivity?
4. There is no significant relationship between the emergency care nurses' psychological well-being, resilience and their work productivity.

1.5 Significance of the Study

The result of this study expected to be beneficial to the following:

Emergency Care Nurses - This study will inform care nurses as to their competence on the impact of their well-being, resilience and work productivity in the emergency department. Results may provide substantial information on necessary changes that need to be done in order to enhance to their competence in providing emergency care service. Determining the emotion regulation strategies that are used by emergency care nurses and their impact on their psychological wellbeing is a crucial important. Nurses who prioritize their psychological well-being would decrease physical health risks, increase job satisfaction, and tend to have more meaningful career.

Emergency Department - This can serve as a guide in terms of program implementation in the acute setting thereby improving the practices of emergency care nurses in the organization.

Emergency Care Education - Findings of this study will present a wider dimension in terms of knowledge about the well-being, resilience and work productivity of emergency care nurses in hospital settings.

Department of Health - research will provide understanding of the well-being, resilience, and work productivity of hospital-based emergency care nurses. Findings can be part of administrative support on strengthening their role competency and work engagement. Moreover, findings of this study may be used to recommend activities for improving the role competency of emergency care workforce in the hospital.

Hospital Administrators - Findings of the study will serve as reference for policy development towards improving the emergency care workforce as part of improved administrative support to hospital-based emergency care workforce.

Patients - Findings of the study would be beneficial in strengthening their understanding on the well-being, resilience and work productivity of emergency care nurses.

Future Researchers - Findings of this study may be used as reference in developing or replicating previous studies that are in line with the well-being, resilience and work productivity of emergency care nurses in hospital settings.

1.6 Scope and Limitation

This study focused on the well-being, resilience and work productivity of emergency care nurses assigned in the emergency department in selected specialty hospitals in Anhui Province, China. Total enumeration of emergency care nurses who met the inclusion and exclusion criteria was considered in selecting the respondents in this study. Furthermore, the study adopted open access and validated survey questionnaires for data gathering. The study adhered to all ethical considerations with emphasis on voluntary participation of the respondents. All potential identifiers were eliminated to maintain anonymity of the respondents. Data privacy was observed to preserve confidentiality and privacy of all gathered information in the survey. Data collection took place between November and December 2024.

Chapter 2

REVIEW OF RELATED LITERATURE

This chapter presents the supporting literature for the study, theoretical framework, conceptual framework, and operational definition of terms. Included in this section are literature and related studies about psychological well-being, resilience, and work productivity gathered from electronic sources as well as from different books, journals, and other related articles that support the analysis of the findings.

2.1 Psychological Well – Being

2.1.1 Autonomy

Results of the study affirm the study of Azadnajafabad (2020) which delineates care professional's autonomy versus their obligations during an emergency is a controversial issue. Autonomy is one of the human rights to make decisions regarding the performance of healthcare-related tasks or to refuse to provide care. Incidentally, during emergency situations, care professionals join the front line to respond to patients in distress. Emergency care nurses have been present everywhere such as in hospitals, clinics, and treat patients. At times, emergency care nurses struggle with a shortage of equipment but they still must actively participate in combating the challenges of emergency medical response. Given the risk and challenges of emergency,

there are also the concerns that cannot be ignored. Furthermore, if emergency care nurses are in a healthy state, they can also provide highly effective health care services to the patients (Zhang et al., 2020).

Meanwhile, emergency medical responders have the knowledge and skills to provide the health care services which are needed for all stages of illness. On the other hand, emergency care nurses also provide psychological support, such as reassurance, information for patients, and support for people outside the community who are living in fear and anxiety during an emergency. Therefore, a right to maintain safety must be respected whenever a care professional is threatened. However, there are still scary things that care professionals must be in frontline of an emergency, especially when they struggle with time to maintain the patients alive. Despite actively participating in the fight against time, emergency care nurses are experiencing fears of the unknown and anxiety for what lies ahead for themselves and colleagues. In addition to performing their roles at the emergency medical services, care professionals also must shoulder the additional responsibility of supporting and protecting themselves which is a psychological burden for care professionals during emergency situations. (Ruiz-Fernández et al., 2020).

2.1.2 Environmental mastery

According to Zhang (2020) environmental mastery is important during an emergency crisis as it can be associated with becoming more flexible with physical constraints on maintaining disruption of professional functioning, relationships and roles; increased social isolation and dependence; and deterioration of work prospects resulting in increased financial strain. Improved environmental mastery can reduce adverse emotional responses such as fear, anxiety, vulnerability, guilt, loss of confidence, anger, stress and self-perception issues. Catton (2020) explained that environmental mastery in healthcare practice allows emergency professionals to hurdle the social impact of an emergency crisis which entails alteration in work productivity and work relationships.

A state of discomfort or fear caused by events or situations that threaten cognition, environmental mastery is common among care professionals directly involved in emergency care and management of distressed patients. Emergency medical respondents are one of the key experts outside hospital settings. Care professionals must be ready to face the pain and death of patients. These situations increase fear, anxiety and present a challenge in providing quality care to patients (Sim, 2020). In emergency cases, the workload increases, the working process may change from usual, and the lack of resources may lead to incorrect arrangement. The efficient use of resources is necessary and urgent. The scientific arrangement of shifts and

reasonable workforce allocation will also optimize the delivery of supplements, reduce the workload, improve the quality of care, and promote the psychological well-being during emergency situations.

Emergency care nurses have always played a significant role in public health and become one of the main healthcare providers for patients in the battle. In this case, emergency responders have required the ability to control the environment to maintain critical functionality and improve the quality of service. Working with the increased workloads can lead to work stress, reduced emergency performance, and quality of life (2019).

2.1.3 Personal growth

In 2019, Maunder and colleagues studied that there is personal growth about emergency professionals enduring longer shifts and higher stress levels which are more likely to occur during emergency situations. When fighting against a critical emergency, managing stress and avoiding burnout becomes a top priority in which a lot of personal growth is discovered along the way. Therefore, emergency professionals must keep their opportunities open and take all the necessary precautions to protect themselves both physically and psychologically. The role of emergency professionals in an emergency situation begins even before a patient's condition provides an opportunity for new learning, new experience, and new innovation (Lee et.al., 2021).

Lu et al. (2020) described healthcare professionals having a unique perspective of personal growth which strengthens their credibility in emergency conversations. Emergency professionals improve their communication by being an information broker, supporter, and advocate. Their role spans from translating technical medical details to advocating the patient and family's goals with the wider healthcare team through navigating across the intricacies of the health system, and clarifying the need to prevent futile overtreatment.

The emergency situations have created difficult and challenging issues for care professionals. As a large group of emergency healthcare workers, on the front lines of the system, the emergency care nurses along with other healthcare practitioners, instead of choosing to run away from this challenge, have acknowledged it as a growth and change. The emergency care nurses who had directly taken care of patients in close physical and mental care tend to learn through experience. In addition, they are also called and challenged during unexpected emergencies (Raven et al., 2020). During an emergency crisis, care professionals have matured psychologically under the pressure of dealing with medical response. On the other hand, care professionals outside hospital settings can also re-evaluate their own worth and find the motivation to develop themselves by being grateful for the support of institutions, friends, and colleagues. A survey by

Nahidi et al (2021) showed that most emergency care nurses had a "good" to "extremely good" level of knowledge, receiving information about accidents in terms of the resources and time in which everyone must be fully prepared and receive specific education and guidance (Nahidi et al., 2021).

Life-long learning is essential for career growth in the emergency medical response profession and enhancing the effectiveness of health care services. Life-long learning is even more urgent during emergency situations when care professionals often must deal with a frequency in patient's deaths. Researchers also suggest that lifelong learning and personal and professional development are also reflected in membership in professional organizations (Liu et al., 2020).

2.1.4 Purpose in Life

Enhancing purpose in life requires critical thinking in order to evaluate facts and come to rational conclusions objectively. A disciplined and self-directed way of looking at things allows the emergency professionals to prioritize patient needs and troubleshoot difficult clinical issues quickly and accurately. The ability to think critically is an important quality because while emergency professionals most often function in collaboration with other healthcare practitioners, their practice is autonomous, and their professional decisions are their sole responsibility (Brooks et.al., 2019).

The extreme experiences during emergency medical response can make care professionals afraid, losing the normality in life. In these situations, emergency medical staff, including nurses, are ready to stem the tide of an emergency crisis. Care professionals must be prepared for the role of determining health system policies, preparedness, and recovery efforts to maintain health care services for patients, cooperation, and information sharing. This means that care professionals outside hospitals are present in every position to save lives. According to Ji et al (2020), emergency responders have faced the challenge of saving lives. Emergency care nurses are the ideal people for critical tasks because of their training and experience (Ji et al., 2020). When challenges during critical times, emergency care nurses not only directly treat and take care of vulnerable people but also provide psychological support, quelling the fear of the patients and the community, and addressing concerns. According to Lehmann et al (2020), care professionals around the world were taking a supporting role in the response to emergency crisis. The emergency care nurses as part of the health care system have played a significant role in emergency preparedness, prevention, and response.

2.1.5 Self-Acceptance

In the midst of emergencies, emergency care nurses are risking their lives to save the lives of others. Lee et.al., (2021) explained on the significance of self-acceptance for missed opportunities, misguided leadership, and missing supplies which all have led to balancing emergency care nurses' sense of duty with the increasing risks of the job. During medical emergencies, emergency care nurses can expect to work longer shifts, especially as the pathogens spread and healthcare workers themselves fall ill, leaving gaps in the workforce. The emergency care nurses must teach others everything they practice, from symptom awareness and sanitation to disease prevention. As the frontline of healthcare emergency, emergency professionals bear the additional responsibility of caring for their patients and the general public. The emergency professionals have a strong command when it comes to saving lives during medical emergencies (Lara et.al, 2021).

In emergency cases outside hospitals, the care professionals expose their lives to save the patients' lives. The lack of opportunity, misleading leadership, and the lack of supportive programs have caused emergency care to make more time for the job, the issues of shortage of human resources have revealed (Denning et.al., 2021). Although there have been management improvements, supportive resources, and process compliance, care professionals were still at risk when performing their tasks. Emergency care nurses must accept challenges for their interests and society. Stress situations can lead to exhaustion, so when dealing with emergencies, the care providers must prioritize stress control and avoid exhaustion. Therefore, the care professionals engaged in emergency response must take the necessary precautions to protect themselves in terms of physical and mental health. Emergency care nurses can use emotional and compassionate strategies to reduce the risk of psychological damage, Practicing self-acceptance will help nurture to develop greater awareness about healthcare career.

Psychological well-being, healthcare management systems should advocate in using mental health services, such as psychological first aid, crisis interventions, and access to social media (Kang et al., 2020). Care professionals play a significant role in preparation for a crisis and fighting against, so that their role in emergency situations begins even before serious adverse events may occur (2020). Despite the difficulty and risk factors during an emergency, care professionals should remain steady and consistent, and use strategies such as clinical performance and self-esteem to improve psychological well-being during difficult situations.

2.1.6 Relations with Others

Collegiality in the emergency profession means a lot in collaborative endeavors. Collaboration makes more sense in emergency care practice in so far as continuity of care is essential in healthcare. Care must be properly coordinated between emergency care nurses in order to ensure quality patient care. Interpersonal relationships also extend not just with colleagues but also with their patients. Emergency crisis may, unsurprisingly, make emergency professionals vulnerable to stress and can lead to feelings of compassion fatigue with the duties they perform. Relations with others allow emergency care nurses to cope with one's everyday environment which may lead to increased levels of resilience and decreased burnout, resulting in an overall good quality of life, both personally and professionally (Liu et al., 2020).

Many emergency care nurses are working on the front lines. Although not the largest sector of the healthcare workforce, they are the backbone and lifeblood of emergency care. In hospitals, emergency professionals are sacrificing a great deal for the good of the whole, with some falling ill or even giving their very lives. Relations with others helps diminish workplace stress for any healthcare professional directly assigned in medical emergencies. Many emergency care nurses are accustomed to facing mortality and suffering on a daily basis, yet the scope of this emergency care is staggering in which keeping up the communication and stronger collaboration with colleagues makes a difference (Hong et.al., 2020).

Emergency care nurses continual exposure to rescues to accidents had the potential to threaten physical and psychological health. This can affect psychological well-being and reduce compliance with technical procedures, increasing stress and efficiency of healthcare services. In addition, care professionals may experience the effects of stress during emergency response, fear of negative outcomes and post-traumatic stress disorder symptoms (Zammitti et al., 2021). Zang et al (2020) showed that the emergency and disaster crisis and its effects are related to depression, increased isolation, and social dependence; poor job progress can affect their finances (Zhang et al., 2020). Exposure to emergency situations increases anxiety about maintaining psychological well-being or feeling burdened (Jiambo et al., 2020).

2.2 Resilience

2.2.1 Active Coping

According to Flesia and colleagues (2020), there are two different types of resilience: ‘One that is a protection from stress or pressure so that individuals can build their stress tolerance, and the second allows them to bounce back after difficulty so that they recover to their normal state of functioning more quickly. It is different from mental toughness in that resilience allows for adaptability when pressures arise, whereas mental toughness implies a level of single-mindedness and dogged determination. Odessa and colleagues (2020) explained that there is a certain amount of emotional awareness in resilience that allows for noticing the impact of stressful situations before they become critical, impact upon functioning and possibly lead to burnout.

Active environments and coping styles are characterized by problem-solving, seeking information-social support-professional help, changing environments, and planning for activities. Raven et al. (2020) suggested that active coping as an adaptive stress response improves outcomes in medical and neuropsychiatric diseases. Because a positive attitude is the strongest protective factor against distress (Raven et al., 2020), the higher the positive attitude, the lower distress levels (Babore et al., 2020). The positive coping strategy had a significant role in the management of negative states such as anxiety during an emergency crisis (Lara et al., 2021), because of the moderate associations among race-related stress, rumination, and depressive symptoms. Active-coping strategies and greater perceived control are associated with improved pain-related outcomes; and allows individuals to positively reinterpret negative situations, as it is related to self-efficacy, greater psychological well-being, and better quality of life (Flesia et al., 2020). On the other hand, active coping and perceived social support mediate the relationship between physical health and resilience (Swanson et al., 2021).

Healthcare workers who had positive coping strategies used active coping and help-seeking, related to high psychological well-being; and negative coping strategies, such as avoidance, related to low psychological well-being (McFadden et al., 2021). Previous studies also investigated the relationship between stress and coping strategies (Cai et al., 2020), and interacted with behavioral and cognitive efforts to reduce the pressure of a stressful situation. Thus, it can be deduced that active coping is a condition that is vital in sustaining resilience, and that the content of resilience evaluation cannot be devoid of active coping (Watson (2019).

2.2.2 Cognitive Flexibility

According to Babore and colleagues (2020), an awareness of alternative options to a problem and taking time to see things from novel perspectives can help build resilience. The study asserted to listen to your internal voice (self-talk) and spot whether it is helpful or hindering. Moreover, the findings pointed to ask whether the voice is logical and true. Being aware of all the different aspects of life and knowing how times the things being loved get neglected without being realized, hence taking time for self-care is an important part of resilience as it allows fast recovery. While emergency professionals have mastered the art of caring for the physical and emotional needs of injured patients, they tend to forget to care for themselves and each other. Today it is common to find emergency professionals describe their lives as being stuck in 24/7 work mode. It is not only difficult for them to unplug from work but even more difficult to find opportunities to recharge physical and emotional banks.

During an emergency crisis, care professionals are perceived as the first-line health provider, having a public awareness role, and providing care for injured or distressed patients. Besides being responsible for their daily activities, care professionals have roles in ensuring the safety and contentment of their patients outside hospital. When emergency care nurses identify patient care needs, workload management, and reflecting on missed care opportunities; emergency medical respondents present several barriers to their decision-making (Anton et al., 2021). However, the public support and acknowledgment of care provider's role during emergencies positively influenced feelings of being valued (Ashley et al., 2021). This may cause most emergency care providers to remain positive about their roles and career decisions.

Emergency care response and health policy need to prepare well for any unpredicted emerging healthcare emergencies in the future. Preparation to respond to emergencies requires multilateral measures. First, care professionals must be provided adequate equipment and a competent team should be the highest priority for healthcare policymakers around the world to combat emergency situations successfully. Second, care professionals outside hospitals should have cognition and prepare for their role in emergency medical response. Because the preparation can reduce the damages to this group and maximize their efforts to protect the patients. Thus, emergency medical response services should try to promote the care professional's awareness and preparedness (Sharififar et al., 2021).

Measuring the care professional's preparedness can clarify the challenges in emergency measures taken to respond to the crisis. Evaluating the care professional, determining the challenges and priorities, and finding solutions to resolve them also improve performance in providing emergency health care services. On the other hand, the cognitive emotion regulation strategies of acceptance and positive refocusing contribute to reducing anxiety or depression. These strategies should be considered when implementing psychotherapeutic interventions to improve care professional's adverse emotional symptoms. The need to assess cognitive emotion regulation strategies used in screening for anxiety and depression should develop psychosocial interventions including appropriate strategies to help with adverse emotions during emergency care (Wang et al., 2021).

2.2.3 Positive Emotions

While some studies have documented poor physical and psychological health among emergency professionals, Saks (2020) emphasized that there is evidence that emergency professionals also experience high satisfaction and positive returns from responding to emergencies. This disparity between observations across studies may be explained by other factors that could influence patient outcomes, such as resilience and social support.

Zang and colleagues (2020) defined resilience as "positive adaptation to face adversity, flexibility, psychological well-being, strength, healthy life, burden, social network, and satisfaction with social support". They described emergency professionals who have high resilience would experience low burden even when they experience high care demand. This perceived low burden could be attributed to effective coping strategies where resilience was associated with problem- and emotion-focused coping strategies and a sense of self-efficacy. Therefore, resilience might be a key variable that explains the ability of some emergency care nurses to 'bounce back' and deal with the challenges of caring for their loved ones.

Care professionals can develop personal resilience in several ways, such as finding a meaningful purpose in life, believing that they can influence their surroundings and the outcome of events, and believing they can learn and grow from life experiences. Bright noted that "emotional awareness and self-care are important in developing resilience in emergency response, in addition to optimism, autonomy and empowerment" is essential (Duncan et.al., 2020). During emergency response, positive emotions, and laughter promote resilience. Care professionals working in emergency care develop resilience through self-nurturing, which includes being self-aware, coping adaptively, and accepting limitations. Care professionals can support their

own mental and spiritual well-being by sharing their experiences of vulnerability and resilience through reflective journals and debriefing.

2.2.4 Optimism

According to Swanson and colleagues (2021), resilience is generally understood as an optimistic outcome despite exposure to adversity or risk, and focuses on strengths rather than weaknesses. The emergency professionals draw on individual resources and interact with their environment by drawing on community and societal resources which may facilitate or hinder resilience. Sacristan (2021) identified the absence of resources may lead to poor outcomes or further caring challenges. Resilience can be described as ‘the process of negotiating, managing and adapting to significant sources of stress or trauma. Assets and resources within the individual, their life and environment facilitate this capacity for adaptation and “bouncing back” in the face of adversity.

Optimism is one factor in predicting preventive behaviors, and its effects on the beliefs, actions, and behaviors of care professionals while caring for the patients, especially during emergencies. Studies that investigated care professional’s optimism during emergency crisis showed that care professionals had a high optimism level. For instance, Mishra et al (2021) conducted research on the optimism of emergency care responders in India, the result showed that more than half of the participants had high optimism. On the other hand, HCW’s confidence level against the length of service showed significantly better confidence than others in terms of confidence in performing high-quality chest compression and handling medical equipment; care professionals also confident in resuscitating, leading the resuscitation, managing the airway, and intubation attempt (Abd Samat et al., 2020). A sample of 120 care providers who participated in the research showed that there was a moderate level of self-confidence, and positive relationships were found between carers’ self-confidence with self-efficacy ($r=0.81$) and carer-patient interaction ($r = 0.79$). The results also indicated that there was a significant difference in self-confidence and carer-patient interaction (Abu Sharour et al., 2021). These results were proof that emergency medical response services should develop further strategies, such as training, organizational support, and preparing the availability of protective measures to increase self-confidence and the interaction with distressed patients.

2.2.5 Spirituality

Spirituality provides emergency professionals a framework that guides them through painful and joyful events, often facilitating positive discoveries amidst negative experiences. Consequently, spirituality is a powerful resource in late life providing emergency professionals with the ability to adapt to changing individual needs. Ram K. and Prabhakar (2020) describe this as an aspect of resilience where spirituality has the potential to be a major resource for emergency professionals as they age and as they expand their consciousness. Spirituality as conceptualized as a “realm of human experience, encapsulates an intense awareness of the present; transcendence of the personal self; and/or a feeling of connection with all of life, the universe or a “Supreme Being” (Swanson et.al., 2021).

Spirituality is considered a fundamental aspect of an emergency medical response team. Previous studies identified benefits of spiritual care, including supporting emotional well-being and strengthening relationships between care professionals and patients. For instance, to explore the effective spirituality affecting the resilience of care professionals, Rajabipoor et.al. (2021) conducted research, and the results showed that spirituality affecting the resilience of emergency responders were religious values, morality, self-awareness, patience and hope, wisdom, voluntary activities, and the otherworld belief. Atarhim et al (2019) also found that there was a positive relationship between perception of spirituality and spiritual care among the respondents. However, most care professionals during emergencies felt that they required more education and training about spiritual aspects of care (Wais, 2019). These results were a demonstration that providing adequate curriculum and on-job training to equip emergency medical responders with knowledge and competence of spiritual care is urgent in a healthcare environment because the program has positive effects on the spiritual and resilience of care professionals.

2.3 Work Productivity

2.3.1 Work Engagement

According to Zimmerman (2020), engaged emergency professionals are typically thorough and responsive in their roles and responsibilities, they have a habit of producing quality output. Engaged emergency professionals are more committed to, and enthusiastic about working for the institution. They will go the extra mile to provide great quality innovations, while disengaged ones may do the bare minimum just to get through the day.

As care providers perform incredible work in the face of adversity, clinical work engagement in professional emergency medical response practice is critically important to consider when addressing key challenges of having the required clinical training purposely to increase demands for quality healthcare and positive patient outcomes. Getting all the necessary training to improve clinical performance in the emergency setting is often used to describe commitment to and productivity in the job. In reality, these are just two facets of engagement including a care professional's level of commitment to the organization that employs them and their commitment to the emergency medical response profession itself. Because engagement to clinical work correlates directly with quality patient outcomes, understanding the current state of work engagement and its drivers must be a strategic imperative (Foster, 2020).

Work engagement of emergency medical responders to their work duty and to the organization reduces compassion fatigue, burnout, and turnover while improving teamwork, the patient experience, and organizational outcomes across multiple measures: clinically (fewer hospital acquired conditions), operationally (staffing and efficiency), culturally (positive work environment and empowerment), and behaviorally (ability to connect with patients and colleagues). A balanced, healthy and supportive practice environment and psychosocial work environments are all important to sustain stable engagement to work duty and high performance of the workforce (Cruz and Forbes, 2020).

While emergency medical response teams often work in problematic practice environments, characterized with various difficulties and stress-factors, care professionals who have more work engagement, have better performance and are more interested in their job. Moreover, they are more stable when they are faced with difficulties and hardness of work, and this directly affects the success of the health system (Bryson et.al., 2019).

Engaged care professionals are typically thorough and responsive in their care, they have a habit of producing quality output. Engaged care professionals are more committed to, and enthusiastic about working for the institution. They will go the extra mile to provide great quality care, while disengaged employees may do the bare minimum just to get through the day (Foster, 2020).

Emergency care engagement in healthcare is one stabilizing force that helps change adjustment and motivates more efficient performance. When care professionals are highly engaged, it is reflected in the patients' experiences. The commitment and emotional involvement is what enables them to function as the key quality control checkpoint that prevents errors and patient mortality. When care professionals feel engaged

in their work duty, their work will be enhanced by the satisfaction of being good at their jobs and achieving work goals, by excitement about challenges and by appreciation in relationships with colleagues (Wais, 2019).

2.3.2 Work Attitude

Regular interactions with the emergency professionals are necessary to have the opportunity to consider individual needs. It may be that some emergency professionals need extra training in certain technical procedures, or that some emergency professionals need further challenges. Feedback on work done is also important. Positive feedback on work well done is needed, as well as feedback on mistakes made. Collegiality provides a framework in which emergency professionals are expected to hold each other accountable for the assignment that is given, and for its congruence with standards (Odessa et.al., 2020).

The emergency professionals who are engaged with their colleagues are expected to hold each other accountable for the initiative, and for its congruence with local and national standards. Collegial relationships in the healthcare profession are important for several reasons: coordinating innovations across shifts or sites; ensuring quality and safety; and establishing and maintaining the standards of professionalism. Collegiality defines the relationships of colleagues working together. The emergency professionals often work in close physical proximity, share tasks and information, trade programs back and forth across shifts, seek each other out for problem-solving and assistance, and are, more than members of many professions, treated by others as a collective task (Ram and Prabhakar, 2020).

Work attitude is the first line of professional self-regulation. Emergency medical responders much like other healthcare professionals tend to avoid conflict with peers, however, and particularly to avoid discussions of errors and problems. Collaboration with other members of the healthcare team certainly improves quality of care to patients. Work attitude also allows care professionals to gain valuable experience on patient care from other healthcare professionals. Social support from supervisors is an important factor for work engagement, and leaders can support emergency medical responders in several ways (Wang et.al., 2021). Regular interactions with the care professionals in medical emergencies are necessary to have the opportunity to consider individual needs. It may be that some care professionals need extra training in certain procedures, or that some need further challenges. Feedback on work done is also important. Positive feedback on work well done is needed, as well as feedback on mistakes made. Collegiality provides a framework in which professionals are expected to hold each other accountable for the care that is given, and for its congruence with standards (Odessa et.al., 2020).

Emergency medical responders who demonstrate good work attitude to their colleagues are expected to hold each other accountable for the care that is given, and for its congruence with standards. Work attitudes in nursing are important for several reasons: coordinating care across shifts or sites; ensuring quality and safety; and establishing and maintaining the standards of professionalism. Work attitude defines the relationships of colleagues working together. Care professionals often work in close physical proximity, share tasks and information, trade patients back and forth across shifts, seek each other out for problem-solving and assistance, and are, more than members of many professions, treated by others as a collective task (Ram and Prabhakar, 2020).

A more collegial, unified relationship between emergency care responders has the value of enabling everyone to combine their power to improve patient care. A collegial work environment has a sense of belonging, open communication, cooperation and support among staff, effectively managed conflict, a high work satisfaction, and consequently a high staff retention. A combined approach to the challenges of collegiality is good for individual growth, work performance, and can also facilitate cross-cover through increased workforce productivity. Clearly a collegial culture and work attitude have the advantage of improving work productivity among individuals in order to get the optimum benefit from care professional's potential to contribute (Zimmerman, 2019).

2.3.3 Work Performance

According to Saks (2020), creating a culture of work performance with customers invites care professionals to participate in their work in ways that are meaningful to them as individuals. The added benefit is support and respect for achieving their own personal goals and affirming individual values, which could in turn result in greater satisfaction with their healthcare practice. Work productivity helps increase creativity and involvement through active participation. Building a culture that values stakeholders' engagement in all aspects of the initiatives that affect their work performance requires support and enthusiasm from the organizations' leaders at all levels.

Work performance is aimed at improving the patient experience, patient satisfaction and patient outcomes. Communication and education are both important keys to making it easier for patients and families to engage in their care. When appropriate, every patient and family member should be included in patient assessment so that they have the opportunity to ask questions and gain clarification. Emergency care planning

is another great tool for encouraging engagement. Patients and family members should be invited to participate in teaching opportunities to learn how to manage care during emergency situations (Sacristan, 2020).

According to Zammitti and colleagues (2021), creating a culture of quality work performance with patients invites care professionals to participate in their work in ways that are meaningful to them as individuals. The added benefit is support and respect for achieving their own personal goals and affirming individual values, which could in turn result in greater satisfaction with their emergency care practice. Resiliency helps increase creativity and involvement through active participation. Building a culture that values patient engagement in all aspects of the initiatives that affect their clinical care or work environment requires support and enthusiasm from the organizations' leaders at all levels.

Emergency care responders are better able to make good work performance about their care options. They can promote mutual accountability and understanding between the patients and other members of the team. Higher work performance yields improved patient outcomes. Involving patients in the redesign of health care can lead to improved effectiveness, efficiency and quality of health services, improved quality of life, and enhanced quality and accountability of health services (Fletcher and Sarkar, 2021).

Well-being and Resilience

Emergency care nurses have always played a significant role in public health and become one of the main healthcare providers for patients in the battle. In this case, emergency responders have required the ability to control the environment to maintain critical functionality and improve the quality of service. Working with the increased workloads can lead to work stress, reduced emergency performance, and quality of life (Brooks et al., 2019). As the frontline of healthcare emergency, emergency professionals bear the additional responsibility of caring for their patients and the general public. According to Ji et al (2020), emergency responders have faced the challenge of saving lives. Emergency care nurses are the ideal people for critical tasks because of their training and experience (Ji et al., 2020). When challenged during critical times, emergency care nurses not only directly treat and take care of vulnerable people but also provide psychological support, quelling the fear of the patients and the community, and addressing concerns. According to Lehmann et al (2020), emergency care nurses around the world were taking a supporting role in the response to emergency crises. The emergency care nurses which are part of the healthcare system, have played a significant role in emergency preparedness, prevention, and response. Psychological well-being,

healthcare management systems should advocate in using mental health services, such as psychological first aid, crisis interventions, and access to social media (Kang et al., 2020).

According to Babore and colleagues (2020), an awareness of alternative options to a problem and taking time to see things from novel perspectives can help build resilience. According to Rigby and Ryan (2018), resilience is generally understood as an optimistic outcome despite exposure to adversity or risk, and focuses on strengths rather than weaknesses. The emergency professionals draw on individual resources and interact with their environment by drawing on community and societal resources which may facilitate or hinder resilience.

Well-being and Work Productivity

Liu et al. (2020) described healthcare professionals having a unique perspective of personal growth which strengthens their credibility in emergency conversations. The emergency professionals improve their communication by being an information broker, supporter, and advocate. Their role spans from translating technical medical details to advocating the patient and family's goals with the wider healthcare team through navigating across the intricacies of the health system, and clarifying the need to prevent futile overtreatment.

Environmental mastery in healthcare practice allows emergency professionals to hurdle the social impact of an emergency crisis which entails alteration in work productivity and work relationships. Many emergency professionals are accustomed to facing mortality and suffering on a daily basis, yet the scope of this emergency care is staggering in which keeping up the communication and stronger collaboration with colleagues makes a difference (Hong et.al., 2020). A balanced, healthy and supportive practice environment and psychosocial work environments are all important to sustain stable engagement to work duty and high performance of the workforce (Cruz and Forbes, 2020). Clearly a collegial culture and work attitude have the advantage of improving work productivity among individuals in order to get the optimum benefit from care professional's potential to contribute (Zimmerman, 2020). According to Saks (2020), creating a culture of quality work performance with patients invites care professionals to participate in their work in ways that are meaningful to them as individuals.

Emergency care nurses who are psychologically well and resilient are better equipped to provide high-quality, patient-centered care. A culture of well-being and resilience translates into improved communication, empathy, and overall job performance. Similarly, a high level of psychological well-being is linked to increased resilience which in turn, increases work productivity. Fostering a culture of psychological well-

being is not just an ethical responsibility but a strategic imperative for healthcare organizations. By investing in the psychological well-being of emergency care nurses, resilience is nurtured in the workforce and also contributes to the overall health and vibrancy of the emergency care services.

According to Hong et.al. (2020), frontline nurses as those assigned in emergency care units may experience stress and anxiety because they often witness patients' suffering which has a significant impact on their psychological well-being. Resilience is the ability to cope successfully with stressful events and reduces the effects of workplace stressors, so it is an effective way to enhance employees' psychological well-being. High resilience has a close relationship with work productivity. Emergency care nurses play an important role in providing health services and direct patient care. Their psychological well-being and resilience are key components which are critical to ensuring safe patient outcomes (Cai et.al., 2020).

Resilience and Work Productivity

During an emergency crisis, care professionals are perceived as the first-line health provider, having a public awareness role, and providing care for injured or distressed patients. Besides being responsible for their daily activities, care professionals have roles in ensuring the safety and contentment of their patients outside hospital (Amin et al., 2021).

The commitment and emotional involvement is what enables them to function as the key quality control checkpoint that prevents errors and patient mortality. When care professionals feel engaged in their work duty, their work will be enhanced by the satisfaction of being good at their jobs and achieving work goals, by excitement about challenges and by appreciation in relationships with colleagues (Wais, 2019). Zang (2020) defined resilience as "positive adaptation to face adversity, flexibility, psychological well-being, strength, healthy life, burden, social network, and satisfaction with social support". He described emergency professionals who have high resilience would experience low burden even when they experience high care demand. Collegiality provides a framework in which professionals are expected to hold each other accountable for the care that is given, and for its congruence with standards (Odessa et.al., 2019).

According to Fletcher and Sarkar (2021) higher work performance yields improved patient outcomes. Involving patients in the redesign of health care can lead to improved effectiveness, efficiency and quality of health services, improved quality of life, and enhanced quality and accountability of health services.

Synthesis

The gathered review of literatures clearly present studies that warrant nurses often experience psychological well-being issues that hinder their work productivity and their resilience. Investing in nurses' psychological well-being through managerial caring, organizational support, and fostering a supportive work environment are vital strategies for promoting quality patient care and enhancing their resilience and work productivity. The review of literatures for all study domains entails psychological well-being is usually conceptualized as some combination of positive affective states, such as happiness and functioning with optimal effectiveness in individual and social life. It represents an optimal state of positive psychological functioning, facilitating individuals' resilience or adaptive capacity, and work productivity particularly when influenced by workplace factors. Recent literatures have underscored the necessity of recognizing and respecting the importance of social relationships in organizational contexts to promote healthier psychological well-being, resilience, and work productivity.

The review of literature further reflects that nurses continually face high levels of psychological stress and emotional pressure, which directly impacts their resilience and reduces their work productivity. An enormous literatures also suggest both direct and indirect impacts of psychological factors on nurses' resilience and overall work productivity. However, recent research studies comprehensively grasp how specific workplace and individual factors, such as the psychological well-being influence nurses' resilience including their productivity loss.

The literature discussed the attributes of hospital-based emergency care nurses during medical emergencies which are considered as time-sensitive cases because patients need immediate attention since their lives are at stake. With reference to several research studies, many have stated the essentials of time-sensitive medical emergencies which are a major health concern worldwide. Some cases considered as time-sensitive medical emergencies include 1) cardiac arrest, 2) motor countries vehicle accidents, and 3) child and maternal health issues.

Nowadays, hospital-based emergency care nurses have been trained with the capacity to administer immediate treatment right on site. This is what is known as emergency medical services that provide acute care to definitive care, to patients with illnesses and injuries which the patient believes constitute a medical emergency. Emergency care nurses are thus very essential to effectively administer immediate responses. Hospital-based emergency care professional nurses are vital on the following dimensions: a) from receipt of

emergency calls to arrival at the emergency scene (response time), and b) treatment of patients (service time)

if needed. As highlighted in the review of literature, response time is the interval between the call receipt and arrival on scene.

Some studies have shown the various factors associated with psychological well-being of nurses. The association of which to resilience and work productivity provides information on different health problems that could have potential effects of stress on psychological well-being. Emergency care nurses are essential to the health care system of a country. Emergency departments are the front line of health care systems and play a critical role in ensuring an efficient and high-quality response for patients in distress or crisis situations. Therefore, higher work productivity is used as an important indicator of emergency care nurses. This study may offer evidence for the hospital to pay more attention to improve emergency care nurses' psychological well-being and resilience.

The literature is primarily focused on negative aspects of psychological well being, such as stress and burnout, and interventions. The growing concern over the psychological wellbeing of healthcare professionals like nurses showed an urgent need to improve the psychological wellbeing of healthcare staff and thereby patients' care experiences. Incidentally, there is a dearth of literature that have proven the relationship between psychological well-being, resilience, and work productivity of nurses within the context of nurses working in the emergency department. One noticeable gap in the literature on healthcare nurses' psychological well-being in the emergency care practice is the ubiquitous focus on the negative aspects of psychological health such as depression, anxiety, and trauma, among others. Moreover, there is a paucity of studies centered on the positive aspects of nurses' mental health, such as well-being, satisfaction, and happiness, among others. The present study, therefore, aims to address this gap by focusing on the psychological well-being not only by the presence of negative aspects but also by the positive aspect of well-being which is a known indicator of resilience and work productivity among emergency care nurses.

Based on emergency care practice parameters, research literature has examined the effect of psychological well-being of employees on the productivity in the workplace. Taking into consideration happy-productive worker in the emergency care practice, nurses high in well-being show higher performance and creativity which connote work productivity. An increase in one point on psychological well-being is linked to an increase in resilience and work productivity. There are organizational, professional, and personal aspects

that remain unaffected by psychological well-being of emergency care nurses, hence, it is important for hospital institutions to promote the psychological well-being of

its emergency care nurses if they want to benefit from the associated professional gains in the long-run.

Hospital administrators and other supervisors should realize that trust and providing a supportive environment at the workplace positively affects psychological well-being of employees. Those who have a high level of psychological well-being exhibit organizational citizenship behavior and positive emotions. Moreover, nurse administrators need to ensure the psychological well-being of nurses by providing with benevolent, and transformational leadership in order to encourage emergency care nurses to perform extra role behavior which greatly benefits the organization. The notion of resilience also expands from a narrow to a broader conceptualization of full engagement that comprises psychological well-being as well as work productivity.

The included review of literatures and studies entail many personal, interpersonal, environmental, social, and cultural aspects of psychological well-being and resilience. However, there is scant literature on the distinguishing link between psychological well-being, resilience, and work productivity. In the practical sense, their interplay is important because psychological well-being focuses on eudaimonic factors which suggest that resilience and work productivity constructs like job involvement, work engagement, thriving, flow, vigor, dedication absorption, intrinsic motivation and meaning represent the psychological well-being perspective. The literature also explored a few variables in tandem with psychological well-being so as to draw relationship with individual resilience and all other precedents and work outcomes. Literature review reveals the scarcity of emergency care literature on the eudaimonic sense of psychological well-being of nurses, and how psychological well-being, resilience, and work productivity are distinguished on the basis of its philosophical roots and their relationship which are yet to be explored as the focus. The review of literature presents in-depth insights into how resilience, work productivity, and psychological wellbeing are applied in organizations. Emergency care nurses often experience unexpected challenges, such as restructuring or management changes, can create uncertainty which can undermine resilience and work productivity. A mismatch between individual values and organizational culture can lead to psychological well-being problems.

2.4 Theoretical Framework

Anchored on social cognitive theory (SCT), this study examines the relationship between well-being, resilience, and work productivity among of emergency care nurses in selected specialty hospitals in Anhui Province, China. The view of resilience aligns with SCT which explains psychological well-being functioning in terms of the dynamic, reciprocal, and continuous relationships between personal factors, environmental influences, and behavior including active coping, cognitive flexibility, positive emotions, optimism, and spirituality. All the elements interact with and upon one another to determine behavior.

Meanwhile a linchpin of SCT is the concept of work productivity or one's belief in one's own potential to persevere or accomplish goals across challenging situations. The close connection between psychological well-being and resilience suggested that a generalized belief in one's potential is a central component of resilience and work productivity. SCT provides guidelines for equipping people with a resilient sense of efficacy that promotes their psychological well-being and personal productivity and accomplishments. Hence, SCT can serve as a helpful framework for examining resilience of nurses assigned in the emergency department of hospitals.

In the context of emergency care, it is likely that nurses' resilience would interact with their personality and culture to shape their psychological well-being which, in turn, predict their work and relational productivity at work. It has been theorized that resilient nurses have a repertoire of personal resources such as active coping, optimism, positive emotions, optimism, and spirituality) or environmental resources such as autonomy, environmental mastery, personal growth, purpose in life, self-acceptance, and relations with others. Organizational practices and social support can also be utilized to manage and ultimately transcend work challenges of work engagement, work attitude, and work performance.

Resilient nurses possess characteristics such as enthusiasm, hope, a high degree of autonomy, self-awareness, flexibility and adaptability, a sense of confidence, and the ability to find meaning on well-being. SCT also asserts a positive relationship between resilience and work happiness, work performance and productivity. Nurses' psychological well-being and resilience can also be linked with interpersonal counterproductive work behaviors and greater work productivity. Evidently, psychological well-being and resilience are vital for coping with stress and staying in balance amid the multifaceted challenges related to work productivity.

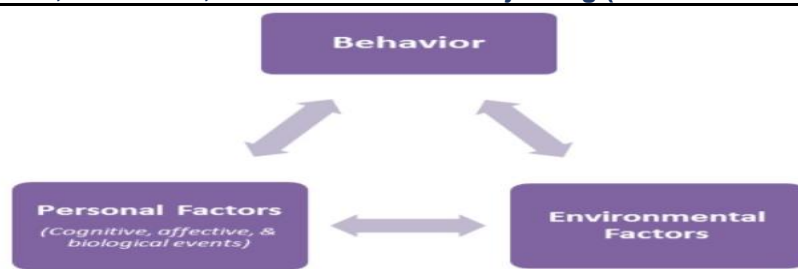


Figure 1. Social Cognitive Theory (Bandura, 1991)

2.5 Conceptual Model

The research paradigm illustrates the interrelationship of psychological well-being, resilience, and work productivity in the research process. The study respondents are nurses working in the emergency department in selected specialty hospitals in Anhui province, China.

Psychological well-being of emergency care nurses are assessed in terms of: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Meanwhile, the resilience of emergency care nurses are assessed on the dimensions of: active coping, cognitive flexibility, positive emotion, optimism, and spirituality. Furthermore, the work productivity of emergency care nurses are assessed on the constructs of: areas of work engagement, work attitude, and work performance. The assessment of the emergency care nurse respondents leads towards development of a nursing framework which describes psychological well-being in relation to their resilience and work productivity.

How each factor reacts to a challenge describes individual's psychological well-being and productive potential. Emergency care nurse resilience includes resistance to a challenge; recovery from a challenge; and rebounding from a challenge. Emergency care nurses can foster resilience through action affecting one or more factors, and each factor may interact with all the other factors. Furthermore, the conceptual framework explains that resilience is both a process and a capacity.

All individuals are in constant adaptation, and the process of adaptation must also be considered a facet of resilience. Emergency care nurses with good psychological well-being and resilience yield good work productivity. These emergency care nurses will exert extra effort and contribute positively to the effectiveness and efficiency of their work performance. Hence, this study is focused to consolidate the conceptual concept about psychological well-being, resilience, and work productivity.

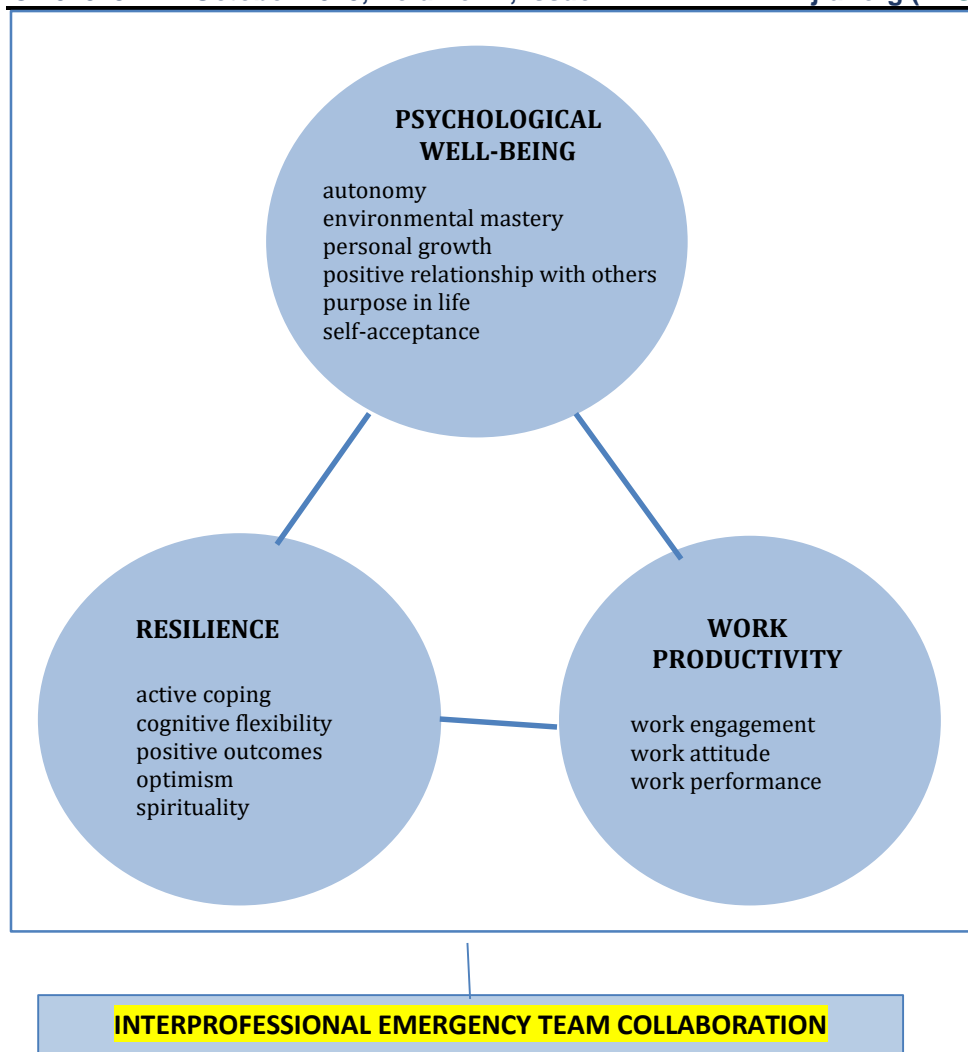


Figure 2. Conceptual Model

2.6 Operational Definition of Terms

To understand the study, the study's important terms are defined by the following:

Psychological Well-Being – refers to wellness that is intrinsically valuable and ultimately good to emergency care nurses that entails primary interest in the profession. Well-being involves the optimal psychological function and experience of life that comprise six distinct aspects including autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance.

Resilience – refers to the ability to positively adapt to difficult and trying situations. Resilience among emergency care nurses serve as a protective factor against negative outcomes related to the job, including burnout, anxiety, and depression, and can improve patient outcomes. Resilience is the ability of emergency care nurses to cope with increasing workforce stress and adverse reactions in terms of active coping, cognitive flexibility, positive emotion, optimism, and spirituality.

Work Productivity – refers to the efficiency in terms of ability to attain quality output that affords achievement of higher level of work satisfaction with service being provided. Work productivity is an element of quality care evaluation of emergency care nurses on the areas of work engagement, work attitude, and work performance.

Emergency Care Nurses – refers to the essential healthcare practitioners involved in the management for an illness or injury which results in symptoms that occur suddenly and unexpectedly, and requires immediate care. Emergency care nurses, who serve as the first point of contact for many medical emergencies, are the target respondents in this study and they are all members of the emergency medical response team assigned in the emergency department of the research locales.

Chapter 3

METHODOLOGY

This chapter discusses the methodologies and procedures that were used to gather and describe the psychological well-being, resilience and work productivity based on the assessment of the emergency care nurses in selected specialty hospitals in Anhui Province, China. The elements that were used in this chapter include the research design, the description of the sample, the sampling technique, the instrument, the data gathering procedure, ethical considerations, and the statistical treatment of data, which by all means, will lead to the accomplishment of the objectives of this study.

3.1 Research Design

This study utilized descriptive-correlational research design which permits understanding of phenomena, meanings and personal values related to assessment of emergency care nurses working in selected specialty hospitals in Anhui Province, China. Structured self-administered survey questionnaire were used to gather quantitative data. This approach affords collection of quantitative data about assessment of care professionals. Quantitative design generates more rounded and objective understanding of a phenomenon (Creswell, 2019). Descriptive correlational design describes and examines variables in a situation that has already occurred or is currently occurring with no attempt to control or manipulate the situation (Stangor & Walinga, 2019).

3.2 Population, Sample and Sampling Technique

The population of the study included hospital-based emergency care nurses assigned in emergency department in selected specialty hospitals in Anhui Province, China. The selected research locales have close resemblance with each other in terms of hospital category, medical services, bed capacity and staffing. These include: Hospital A, a 668-bed capacity specialty hospital with about 65 emergency care nurses; Hospital B, a 680-bed capacity specialty hospital with about 68 emergency care nurses; Hospital C, a 720-bed capacity specialty hospital with about 78 emergency care nurses. Hospital D, a 705-bed capacity specialty hospital with about 72 emergency care nurses; Hospital E, a 750-bed capacity specialty hospital with about 84 emergency care nurses; and Hospital F, a 710-bed capacity specialty hospital with about 75 emergency care nurses

In determining study sample, using Gpower analysis power of 0.80, effect size of 0.50, and significance of 0.05, a minimum of 218 respondents were required for this study which were randomly selected. Using online random number generator, a simple random sample was used to represent the entire data population. Simple random sampling is known for its less chance of sampling bias and allows researcher to make generalizations about a specific population. This technique is meant to be an unbiased representation of a group and considered a fair way to select a sample from a larger population since every member of the population has an equal chance of getting selected. The following inclusion/exclusion criteria were considered in this study.

Inclusion

1. Hospital-based emergency care nurses
2. Currently assigned in the emergency department
3. With at least 6 months experience at the current assignment.
4. Employed full-time
5. Involved in direct patient care or triage care
6. Aged 23-59 y/o

Exclusion

1. Currently on leave (sick leave; maternity leave; vacation leave)
2. On the job training

3.3 Research Instruments

The research did refer to an open-access and validated tools adopted from Ryff's Psychological Well-Being Questionnaire (Duong's Dissertation, 2023); Connor-Davidson Resilience Scale (Duong's Dissertation, 2023); and Dulewicz and Higgs Work Productivity Scale (Ngo's Dissertation, 2023). These instruments had been used in previously completed dissertation at Trinity University of Asia using four-point Likert scale including strongly agree, agree, disagree, and strongly disagree. Moreover, all of these research instruments were subjected to validity and reliability test and presented Cronbach alpha values of 0.96 for Well-Being; 0.94 for Resilience; and 0.92 for Work Productivity. All items in the three questionnaires are positively stated.

Using structured self-administered questionnaires, as the principal medium of gathering data, correlation is possible by assigning numerical values to the variables. Furthermore, they have standardized answers which allow compilation of data simple. Psychological Well-Being questionnaire has got 42 items focused on six domains including autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. Meanwhile, Resilience has got 25 items focused on five areas including active coping, cognitive flexibility, positive emotion, optimism, and spirituality. Furthermore, Work Productivity has got 30 items focused on three domains including work engagement, work attitude, and work performance. Accomplishment of questionnaires will take approximately fifteen (15) minutes.

The 18-item version of psychological well-being comprises original items to assess each dimension. This shortened version's subscales have correlation coefficients ranging from 0.89 to 0.98 with their corresponding subscales in the original 120-item version. Moreover, the study that first examined the 18-item version using Confirmatory Factor Analysis (CFA), supported the six-factor original multidimensional model of psychological wellbeing in a cohort of elderly Canadians. Further studies using samples from different countries, such as Iranian, Portuguese, and Italian have also confirmed, using CFA, the goodness of fit of the 18-item version of Ryff's Psychological Wellbeing Scale. Finally, the short version tool showed that the internal consistency coefficients of Swedish 18-item version were higher than those of the original version, suggesting adequacy of the shortened version in a sample of white-collar Swedish workers. Hence, most studies suggest that the 18-item version is relatively valid and reliable for the measurement of Ryff's multidimensional model of psychological wellbeing.

The Resilience scale was developed as a self-report scale comprising 25 items and five dimensions. The structure of the questionnaire was found stable across social groups, healthcare workers, and cultures. Many attempts to revise the 25-item Resilience scale, to make it shorter and more reliable, have been made. To date, three versions exist: 25-, 10-, and 2-item scales. Resilience scale has been thoroughly investigated across many samples, cultures, and even continents regarding its reliability, structure, and content validity. Thus, it appears to work well in people of different demographics and occupations as well as in the special samples. As far as we know from literature, the translation of the scale's statements into foreign languages did not have any problems, since they were initially formulated very clearly and did not allow for discrepancies or misunderstandings. To date, there are more than 80 translations of different Resilience scale versions. In all versions, the unifactorial structure of the scale was preserved. Cronbach's alpha ranged from 0.88 to 0.96, which demonstrates the reliability of the tool. Content validity, examined by correlations with subjective and behavioral indicators of well- or ill-being, was also very convincing.

For a more defined interpretation of psychological well-being, strongly agree is being interpreted as “highly satisfied” described as being the best an individual can be in which the nurse is highly engaged with self-growth and feeling fulfilled. Agree is being interpreted as “satisfied” described as having important foundations of safety and physiological needs in which the nurse has got a sense of achievement, respected in all roles, and trusted to do things freely. Disagree is being interpreted as “not satisfied” being described as feeling just basic which implies that the nurse does not feel well associated to work functions. Strongly disagree is being interpreted as “highly not satisfied” described as rather fatalistic and the nurse perceives great dissatisfaction with every aspect of the work.

Moreover, for better interpretation of resilience, strongly agree means “highly adaptive” where the nurses are very much flexible and able to withstand and manage stress. Agree means “adaptive” where the nurses are somewhat receptive and able to manage stress. Disagree means “not adaptive” where nurses are not able to adapt and see challenges as irritating episodes. Strongly disagree means “highly not adaptive” where nurses are very much incapable to adjust to any challenges.

Furthermore, for more delineated work productivity, strongly agree refers to “highly performing” which implies that nurses are highly focused on the vital work and achieve their goals. Agree refers to “performing” which implies nurses manage their tasks. Disagree refers to “developing” which implies nurses

are unable to manage their tasks efficiently. Strongly disagree refers to “beginning” which implies nurses are totally out of focus at work and do not care about efficiency.

With regard to the validity and reliability of the adopted research instruments, several studies have utilized the same tools on investigation psychological well-being, resilience, and work productivity among nurses in the hospital setting. Feller et.al. (2020) utilized Ryff’s Psychological Well-Being questionnaire among nurses in one hospital in Brussels. Study showed that psychological well-being improves resilience of nurses and appears to do so via changes in self-motivations that are reflected in flexibility in challenges in the clinical practice. In particular, psychological well-being leads to positive outcomes in emotion, cognition, and behavior which all enhances resilience.

Goyal et.al (2019) also used Ryff’s Psychological Well-Being tool to evaluate the impact of meditation programs for nurses’ psychological stress and well-being in selected hospitals in India. The tool assessed the psychological well-being of nurses whether clinical environments affect achievement of nursing care outcomes, and have an impact on resilience and productivity with the nursing profession. Study showed that there has been some indirect evidence showing that psychological capacity can modulate responses to emotion-related stimuli and influence affective processing. While correlating psychological outcomes and functional resilience is somewhat challenging. Given the modest sample size, some encouraging findings have illustrated that nurses develop resilience that are related to improved psychological well-being outcomes.

Meanwhile, in the study of Weinstein et. al (2019), using Resilience scale, an analytical cross-sectional design was carried out on Over 500 nurses working in Stanford University hospital to investigate the role of resilience to predict the work productivity of nurses. Resilience is a complex construct that concerns optimal productive functioning and experience. Results of the study showed that resilience in nursing practice includes enjoyment, pleasure, meaning and fulfillment. Resilience improves coping, emotion regulation, and healthy problem solving. The elements of resilience include a sense of balance in emotion, thoughts, social relationships, and pursuits which necessitates active engagement of self-control processes such as emotion regulation. Resilience influence nurses’ emotions and experience.

Using the same Resilience questionnaire, Mc Convile et.al. (2023), studied resilience among practicing nurses in hospital setting to assess self-reported major challenges such as common fitting learning issues that are focused on systems-level drivers of stress. Resilience warrants how clinical nursing issues, personal health and wellness, and relationships impact nurses’ coping, performance, and productivity. Findings of the study

suggested that resilience can be enhanced by mindfulness training which shares key components of coping and adaptation such as a systematic training of attention and self-control with an attitude of acceptance and openness to present experiences.

Ding et.al (2021) utilized the work productivity instrument developed by Dulewicz and Higgs Work Productivity Scale to determine the work engagement, work attitude, and work performance of nurses (n=200) in selected private hospital in Saudi Arabia as they went through overwhelming uploads on the challenges of clinical nursing practice. Findings of the study showed that the nurses have good work productivity as they were able to effectively manage the professional demands of nursing practice. Moreover, study findings revealed that mentoring and good management in the hospital improved nurses' work performance and productivity. Another study by Kong et.al (2020) utilized the same instrument to assess the work productivity of nurses in special areas in a selected Irish hospital. Findings suggest to include strategies to enhance interpersonal-relationship levels and working confidence. The work productivity to nursing practice showed to be significantly correlated with creativity and social support. A stepwise regression model showed subjective interpersonal degree, satisfaction with clinical practice and work confidence were significant predictors of work productivity.

Professionally-certified translators, whose mother language is Chinese, a panel of experts who are knowledgeable about the research field and familiar with the target population, and with educational language translation experience were sought to conduct the translation. Brislin's back-translation model was used to guide the translation process of the adopted questionnaires into Chinese. This back-translation model is regarded as a reliable option for translating tools in cross-cultural research and is also appropriate for translating established questionnaires that have long been used in the original source language. Furthermore, Brislin's model emphasized attention to the semantics and technical aspects of translation during the forward and backward translation process, which enhances the conceptual and content equivalence of the translated instrument and the original version. Content validity was performed to ensure clarity and relevance of items in the instrument. Modified tools were piloted to determine their reliability.

3.4 Data Gathering Procedure

The researcher initially secured an approval from the Graduate School and Ethics Review Board to conduct the study. The researcher further sought administrative approval from the head of selected research locales that were included in the study. The researcher considered qualified emergency care nurses assigned

in the emergency department of selected specialty hospitals in Anhui Province, China who are deemed principal participants in the study.

After all approvals and permission had been secured, the researcher did start screening of eligible participants based on the inclusion criteria. The study was carefully explained to all participants. Voluntary participation was clarified among the qualified respondents. Cover letter was attached to the questionnaires to explain the nature and purpose of the study. Consent is implied should the respondent decide to accomplish the questionnaires. Confidentiality of all gathered data was assured. Privacy and anonymity of the study respondents were maintained by eliminating all potential identifiers.

Researchers did facilitate distribution and collection of completed survey questionnaires and did provide mobile phone numbers to answer any clarification from the respondents. The study respondents took approximately fifteen (15) minutes to accomplish the questionnaires. Completed self-administered questionnaires were immediately collected by the researcher which were eventually checked for completeness prior to statistical analysis. Descriptive statistics were used to describe numerical data as well as to analyze significant relationship in the gathered quantitative information on study variables. Data collection was carried out in 2023.

3.5 Ethical Considerations

The research study did ensure voluntary participation of the participants. Anonymity, confidentiality and privacy of all gathered information from this study were maintained until the completion of the study. Moreover, the study completely adhered to all ethical standards and data privacy throughout the conduct of the study. A cover letter was attached to the questionnaire to explain the details of the study. Consent is secured should the respondents decide to accomplish the questionnaires. It was also clarified to all participants that they are under no obligation to accomplish the survey questionnaires nor will receive monetary compensation for participating in the survey. All potential identifiers were eliminated in the questionnaire. While the risk involved in accomplishing the survey questionnaire was less than minimal, a waiver of informed consent was requested from the Ethics Review Board of the research locales.

The researcher of this study collected no sensitive information. Survey questionnaires did not contain potential identifiers. There was no sensitive information (e.g. illegal drug use, sexual practices) collected. There was an assurance that all gathered information will not be reused or disclosed to any other person or

entity, except as required by law, for authorized oversight of the research study, or for other research for which the use or disclosure of protected information would be permitted by the Privacy Rule.

3.6 Statistical Treatment of Data

In realizing the purpose of this study, the numerical data were treated on Statistical Package for Social Science (SPSS) software. Shapiro-Wilk test confirmed normality of data distribution and considered parametric tests as the appropriate method to treat study data.

To determine the assessment of the respondents on their psychological well-being in terms of autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance, weighted mean and verbal interpretation were used.

To determine the assessment of the respondents on their resilience in terms of active coping, cognitive flexibility, positive emotion, optimism, and spirituality, weighted mean and verbal interpretation were used.

To determine the assessment of respondents on their work productivity in terms of work engagement, work attitude, and work performance, weighted mean and verbal interpretation were used.

To determine significant relationship on the assessment of respondents between their psychological well-being and resilience, Pearson r moment correlation was used.

To determine significant relationship on the assessment of respondents between their psychological well-being and work productivity, Pearson r moment correlation was used.

To determine significant relationship on the assessment of respondents between their resilience and work productivity, Pearson r moment correlation was used.

To determine significant relationship on the assessment of respondents between their psychological well-being, resilience and work productivity, regression analysis was used.

The quantative interpretation of the degree of linear relationship existing is shown in the following range of values.

+ 1.00	perfect positive (negative) correlation
+ 0.91 - 0.99	very high positive (negative) correlation
+ 0.71 - 0.90	high positive (negative) correlation
+ 0.51 - 0.70	moderate positive (negative) correlation
+ 0.31 - 0.50	low positive (negative) correlation
+0.01 - 0.30	negligible positive (negative) correlation
0.00	no correlation

Chapter 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the results of this descriptive-correlational study. This includes the discussion on the responses of the sample of emergency care nurses working in selected specialty hospitals in Anhui Province, China, the explanation of data analysis, and readdressing of research problems. The data obtained from the research are presented in tabular format.

Problem 1. What is the assessment on psychological well-being of emergency care nurses in selected specialty hospitals in Anhui Province, China in terms of:

1.1 autonomy;

1.2 environmental mastery;

1.3 personal growth;

1.4 purpose in life;

1.5 self-acceptance; and

1.6 relations with others?

Table 1

Assessment on Psychological Well-Being of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Autonomy

Variables	Mean	SD	Verbal Interpretation
1. I always stand firm with my decision and do not influenced by others' strong opinion.	3.62	0.51	Strongly Agree
2. I have confidence in my own opinions, even if they are different from the way most other people think.	3.60	0.60	Strongly Agree
3. I judge myself by what I think is important, not by the values of what others think is important.	3.41	0.58	Strongly Agree
Overall Mean	3.54	0.43	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Satisfied) ; 2.51-3.25 (Agree-A / Satisfied) ; 1.76-2.50 (Disagree-D / Not Satisfied) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Satisfied)

Table 1 shows the summary of values showing the mean and verbal interpretation in the assessment of the emergency care nurses on their psychological well-being in selected emergency medical response units in selected specialty hospitals in Anhui Province, China in terms of autonomy with an overall mean of 3.54 verbally interpreted as “strongly agree”. The assessment showed homogeneous response as depicted by standard deviation of 0.43. The strongest component of autonomy domain in which the majority of emergency care nurses strongly agree pertains to “I always stand firm with my decision and do not influenced by others' strong opinion” ($\bar{x} = 3.62$). Meanwhile, the weakest component of autonomy in which the majority of

emergency care nurses strongly agree refers to “I judge myself by what I think is important, not by the values of what others think is important” ($\bar{x} = 3.41$).

Healthcare profession such as emergency care provider entails autonomy in the practice, hence decision-making is a very crucial part of emergency medical response practice. In most cases, emergency care entails a lot of independent functions in which the ability to work independently is being practiced. Objectivity is also another important consideration in practicing autonomy in this profession. Autonomy, open and honest communication are fundamental to creating trusting and supporting environments that can prevent burnout and create viable workflows during increased demand. Maintaining psychological wellbeing is always a shared responsibility. Emergency care nurses need to have an inherent understanding of their autonomous functions and adaptive coping mechanisms that work for them. Meanwhile, emergency care units need to manage the balance of support with increased autonomy among healthcare practitioners to manage emergency care nurses wellbeing especially during emergency situations.

To mitigate possible physical and psychological damage to the emergency care nurses, emergency medical facilities advocated autonomy in practice as psychological first aid and morale boosters. Interestingly, emergency professionals who are less exposed to fewer stations appeared to experience more autonomy than those on the actual front line. This implies that attention should be provided on strengthening autonomy, particularly to health and mental wellness interventions. Moreover, emergency professionals who are not able to exercise autonomy in direct patient care appeared to be more stressed and less fulfilled in their job compared to emergency professionals with greater autonomy in other areas of assignment.

Results of the study affirm the with the study of Azadnajafabad (2020) which delineates care professional's autonomy versus their obligations during an emergency is a controversial issue. Autonomy is one of the human rights to make decisions regarding the performance of healthcare-related tasks or to refuse to provide care. Incidentally, during emergency situations, care professionals join the front line to respond to patients in distress. Emergency care nurses have been present everywhere such as in hospitals, clinics, and treat patients. At times, emergency care nurses struggle with a shortage of equipment but they still must actively participate in combating the challenges of emergency medical response. Given the risk and challenges of emergency, there are also the concerns that cannot be ignored. Furthermore, if emergency care nurses are in a healthy state, they can also provide highly effective health care services to the patients (Zhang et al., 2020).

Meanwhile, emergency medical responders have the knowledge and skills to provide the health care services which are needed for all stages of illness. On the other hand, emergency care nurses also provide psychological support, such as reassurance, information for patients, and support for people outside the community who are living in fear and anxiety during emergency. Therefore, a right to maintain safety must be respected whenever a care professional is threatened. However, there are still scary things that care professionals must be in frontline of emergency, especially when they struggle with time to maintain the patients alive. Despite actively participating in the fight against time, emergency care nurses are experiencing fears of the unknown and anxiety for what lies ahead for themselves and colleagues. In addition to performing their roles at the emergency medical services, care professionals also must shoulder the additional responsibility of supporting and protecting themselves which is a psychological burden for care professionals during emergency situation (Ruiz-Fernández et al., 2020).

Table 2

Assessment on Psychological Well-Being of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Environmental Mastery

Variables	Mean	SD	Verbal Interpretation
1. I feel I am generally in charge of the situation in which I live.	3.30	0.63	Strongly Agree
2. I am good at managing the responsibilities of daily life.	3.52	0.62	Strongly Agree
3. I remain strong in coping with the demands of everyday life.	3.54	0.60	Strongly Agree
Overall Mean	3.45	0.62	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Satisfied) ; 2.51-3.25 (Agree-A / Satisfied) ; 1.76-2.50 (Disagree-D / Not Satisfied) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Satisfied)

Table 2 shows the summary of values showing the mean and verbal interpretation in the assessment of the emergency care nurses on their psychological well-being in selected specialty hospitals in Anhui Province, China in terms of environmental mastery with an overall mean of 3.45 verbally interpreted as “strongly agree”. The assessment showed homogeneous response as depicted by standard deviation of 0.62. The strongest component of environmental mastery domain in which the majority of emergency care nurses strongly agree pertains to “I remain strong in coping with the demands of everyday life” ($\bar{x} = 3.54$). Meanwhile, the weakest component of environmental mastery in which the majority of emergency professionals strongly agree refers to “I feel I am generally in charge of the situation in which I live” ($\bar{x} = 3.30$).

Psychological well-being in the emergency care units is an essential characteristic of emergency care nurses especially in the hospital setting. Being well-motivated and healthy in emergency care practice allows emergency professionals to be able to adjust to their work routine much better. Psychological well-being equates with innovativeness which is an important component of environmental mastery. Familiarity with work affords greater flexibility in duties and responsibilities of emergency professionals.

Emergency care nurses interact with patient and the patient's family environment and social net (friends, relatives and acquaintances) and familiarity with duties and responsibilities is essential. While emergency care nurses with immense exposure have to maintain social interaction and need to disintegrate from their social lives, having environmental mastery resolves practical difficulties in social activities. Managing the responsibilities of daily routines alleviates anxiety over changes associated with emergency crisis often result in increased stress, tension and irritation between family members; and a worsening of collegial relationships. Apart from coping with the demands of work duties, another aspect of medical emergency gruesome influence on quality of life takes place through environmental mastery.

According to Zhang (2020) environmental mastery is important during emergency crisis as it can be associated to becoming more flexible with physical constraints on maintaining disruption of professional functioning, relationships and roles; increased social isolation and dependence; and deterioration of work prospects resulting in increased financial strain. Improved environmental mastery can reduce adverse emotional responses such as fear, anxiety, vulnerability, guilt, loss of confidence, anger, stress and self-perception issues. Catton (2020) explained that environmental mastery in healthcare practice allows emergency professionals to hurdle the social impact of emergency crisis which entails alteration in work productivity and work relationships.

A state of discomfort or fear caused by events or situations that threaten cognition, environmental mastery is common among care professionals directly involved in emergency care and management of distressed patients. Emergency medical respondents are one of the key experts outside hospital setting. Care professionals must be ready to face the pain and death of patient. These situations increase fear, anxiety and present a challenge in providing quality care to patients (Sim, 2020). In emergency cases, the workload increases, the working process may change from usual, and the lack of resources may lead to incorrect arrangement. The efficient use of resources is necessary and urgent. The scientific arrangement of shifts and

reasonable workforce allocation will also optimize the delivery of supplements, reduce the workload, improve the quality of care, and promote the psychological well-being during emergency situations

Emergency care nurses have always played a significant role in public health and become one of the main healthcare providers for patients in the battle. In this case, emergency responders have required the ability to control the environment to maintain critical functionality and improve the quality of service. Working with the increased workloads can lead to work stress, reduced emergency performance, and quality of life (Brooks et al., 2019). Therefore, the responsibilities and working procedures of care professional in emergency response team must be adjusted immediately to reduce the workload.

Table 3

Assessment on Psychological Well-Being of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Personal Growth

Variables	Mean	SD	Verbal Interpretation
1. I have strong determination in making big improvements or changes in my life	3.52	0.60	Strongly Agree
2. I think it is important to have new experiences that challenge how I think about myself and the world.	3.54	0.54	Strongly Agree
3. I believe life has been a continuous process of learning, changing, and growth.	3.66	0.43	Strongly Agree
Overall Mean	3.57	0.34	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Satisfied) ; 2.51-3.25 (Agree-A / Satisfied) ; 1.76-2.50 (Disagree-D / Not Satisfied) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Satisfied)

Table 3 shows the summary of values showing the mean and verbal interpretation in the assessment of the emergency care nurses on their psychological well-being in selected specialty hospitals in Anhui Province, China in terms of personal growth with an overall mean of 3.57 verbally interpreted as “strongly agree”. The assessment showed homogeneous response as depicted by standard deviation of 0.34. The strongest component of personal growth domain in which the majority of emergency care nurses strongly agree pertains to “I believe life has been a continuous process of learning, changing, and growth” ($\bar{x} = 3.66$). Meanwhile, the weakest component of personal growth in which the majority of emergency care nurses strongly agree refers to “I have strong determination in making big improvements or changes in my life” ($\bar{x} = 3.52$).

Continuous life-long learning among emergency care nurses is an important factor of personal growth. Every emergency care nurse should be afforded opportunities for advancement in order to grow in the profession. Nevertheless, emergency care nurses should be constantly motivated to pursue more, aim

higher, and aspire for greater accomplishments even during tough challenges such as the emergency crisis.

Trainings and updates for career growth must be sustained and further expanded for the benefit of enhancing personal and professional competency.

By being on the frontline of emergency cases, emergency care nurses assume the risk of contracting an infection. When responding to ill patients, they can be exposed to pathogens even when following all safety guidelines and procedures. While newer policies and upgraded equipment have lessened the risk to healthcare professionals in recent years, emergency professionals achieve personal growth for their sake. Despite the struggles, frustrations, and risks associated with their jobs, emergency care nurses may remain strong and steadfast in the face of overwhelming odds. Emergency professionals duck in and out of care facility by the hour, many of whose stories may never be told but will forever be appreciated by those who received their help. Emergency care nurses develop self-care strategies such as emotion regulation and self-compassion to lessen their vulnerability to care fatigue and to improve their psychological wellbeing and resilience.

Maunder and colleagues (2019) studied that there is personal growth about emergency professionals enduring longer shifts and higher stress levels which are more likely to occur during emergency situations. When fighting against critical emergency, managing stress and avoiding burnout becomes a top priority in which a lot of personal growth are discovered along the way. Therefore, emergency professionals must keep their opportunities open and take all the necessary precaution to protect themselves both physically and psychologically. The role of emergency professionals in an emergency situation begins even before a patient's condition provides an opportunity for new learning, new experience, and new innovation (Lee et.al., 2021).

Lu et al. (2020) described healthcare professionals having a unique perspective of personal growth which strengthens their credibility in emergency conversations. Emergency professionals improve their communication by being an information broker, supporter, and advocate. Their role spans from translating technical medical details to advocating the patient and family's goals with the wider healthcare team through navigating across the intricacies of the health system, and clarifying the need to prevent futile overtreatment.

The emergency situations have created difficult and challenging issues for care professionals. As a large group of emergency healthcare workers, on the front lines of the system, the emergency care nurses along with other healthcare practitioners, instead of choosing to run away from this challenge, have acknowledged it as a growth and change. The emergency care nurses who had directly taken care of patients in close physical and mental tend to learn through experience. In addition, they are also called and challenged

during unexpected emergencies (Raven et al., 2020). During emergency crisis, care professionals have matured psychologically under the pressure of dealing with medical response. On the other hand, care professionals outside hospital setting can also re-evaluate their own worth and find the motivation to develop themselves by being grateful for the support of institution, friends, and colleagues. A survey by Nahidi et al (2021) showed that most emergency care nurses had a "good" to "extremely good" level of knowledge, receiving information about accidents in terms of the resources and time in which everyone must be fully prepared and receive specific education and guidance (Nahidi et al., 2021).

Life-long learning is essential for career growth in emergency medical response profession and enhancing the effectiveness of health care services. Life-long learning is even more urgent during emergency situations when care professionals often must deal with an frequency in patient's deaths. Researchers also suggest that lifelong learning and personal and professional development are also reflected in membership in professional organizations (Liu et al., 2020).

Table 4

Assessment on Psychological Well-Being of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Purpose in Life

Variables	Mean	SD	Verbal Interpretation
1. I feel like I have done a lot of good accomplishments in life	3.55	0.66	Strongly Agree
2. I value living with a purpose and I focus about the future.	3.58	0.52	Strongly Agree
3. I have always considered positive direction and important goals through life.	3.68	0.49	Strongly Agree
Overall Mean	3.60	0.56	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Satisfied) ; 2.51-3.25 (Agree-A / Satisfied) ; 1.76-2.50 (Disagree-D / Not Satisfied) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Satisfied)

Table 4 shows the summary of values showing the mean and verbal interpretation on the assessment of the emergency care nurses on their psychological well-being in selected specialty hospitals in Anhui Province, China. in terms of purpose in life with an overall mean of 3.60 verbally interpreted as "strongly agree". The assessment showed homogeneous response as depicted by standard deviation of 0.56. The strongest component of purpose in life domain in which the majority of the emergency care nurses strongly agree pertains to "I have always considered positive direction and important goals through life" ($\bar{x} = 3.68$). Meanwhile, the weakest component of purpose in life in which the majority of the emergency care nurses strongly agree refers to "I feel like I have done a lot of good accomplishments in life" ($\bar{x} = 3.55$).

Having a strong purpose in life sets a definite direction on where emergency professionals are heading to. Career goals must be supported through effective mentoring from senior staff and other supervisors in order to enhance motivation to strive more and grow even further. The emergency professionals feel more inspired at work when they feel supported. The emergency care providers are indispensable component of emergency operation, hence must be well-guided towards their objectives.

Learning to respond compassionately to personal distress requires stronger recognition of purpose in life in which self-acceptance in turn can strengthen the emergency professionals' ability to activate self-regulation systems in order to feel safe (i.e., self-soothing activities stimulate positive emotions like contentment, more secure attachment) rather than feeling under threat. Developing a greater sense of self-awareness including mindfulness meditation and compassion training plays a crucial role in discovering one's purpose in life. Focus, determination, motivation, and confidence must remain as the central component of nursing practice and, more importantly, must be provided with the time, autonomy and knowledge to act as patient advocates.

Enhancing purpose in life requires critical thinking in order to evaluate facts and come to rational conclusions objectively. A disciplined and self-directed way of looking at things allows the emergency professionals to prioritize patient needs and troubleshoot difficult clinical issues quickly and accurately. The ability to think critically is an important quality because while emergency professionals most often function in collaboration with other healthcare practitioners, their practice is autonomous, and their professional decisions are their sole responsibility (Brooks et.al., 2019).

The extreme experiences during emergency medical response can make care professionals afraid, losing the normality in life. In these situations, emergency medical staff, including nurses, are ready to do their stem the tide of emergency crisis. Care professionals must be prepared for the role of determining health system policies, preparedness, and recovery efforts to maintain health care services for patients, cooperation, and information sharing. This means that care professionals outside hospital are present in every position to save lives. According to Ji et al (2020), emergency responders have faced challenge of saving lives. Emergency care nurses are the ideal people for critical tasks because of their training and experience (Ji et al., 2020). When challenges during critical times, emergency care nurses not only directly treat and take care of vulnerable people but also provide psychological support, quelling the fear of the patients and the community, and addressing concerns. According to Lehmann et al (2020), care professionals around the world were taking

a supporting role in the response to emergency crisis. The emergency care nurses as part of the health care system have played a significant role in emergency preparedness, prevention, and response.

Table 5

Assessment on Psychological Well-Being of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Self-Acceptance

Variables	Mean	SD	Verbal Interpretation
1. I feel grateful in many ways about my achievements in life.	3.61	0.46	Strongly Agree
2. I am pleased with how things in my life have turned out so far	3.54	0.55	Strongly Agree
3. I like most parts of my personality.	3.44	0.52	Strongly Agree
Overall Mean	3.53	0.51	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Satisfied) ; 2.51-3.25 (Agree-A / Satisfied) ; 1.76-2.50 (Disagree-D / Not Satisfied) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Satisfied)

Table 5 shows the summary of values showing the mean and verbal interpretation in the assessment of the emergency care nurses on their psychological well-being in selected specialty hospitals in Anhui Province, China in terms of self-acceptance with an overall mean of 3.53 verbally interpreted as “strongly agree”. The assessment showed homogeneous response as depicted by standard deviation of 0.51. The strongest component of self-acceptance domain in which the majority of emergency care nurses strongly agree pertains to “I feel grateful in many ways about my achievements in life” ($\bar{x} = 3.61$). Meanwhile, the weakest component of self-acceptance in which the majority of emergency care nurses strongly agree refers to “I like most parts of my personality” ($\bar{x} = 3.44$).

Recognition for emergency care providers’ contribution in the healthcare practice create a stronger sense of collegiality. Good accomplishments must be valued and supported by organizational management so that they would be more inspired. When novice emergency care nurses effort get valued, they feel accepted in the profession which brings more confidence. A confident emergency care nurse equates with greater productivity in the emergency practice. Self-acceptance as part psychological well-being is fundamental to the emergency care profession, with dissonance, as a result of surface acting in day-to-day practice, a potential contributing factor to stress and burnout. The challenge of working in emergency cases is likely to have an enduring impact on the psychological well-being of healthcare staff.

In the midst of emergencies, emergency care nurses are risking their lives to save the lives of others.

Lee et.al., (2021) explained on the significance of self-acceptance for missed opportunities, misguided leadership, and missing supplies which all have led to balancing emergency care nurses' sense of duty with the increasing risks of the job. During medical emergencies, emergency care nurses can expect to work longer shifts, especially as the pathogens spread and healthcare workers themselves fall ill, leaving gaps in the workforce. The emergency care nurses must teach others everything they practice, from symptom awareness and sanitation to disease prevention. As the frontline of healthcare emergency, emergency professionals bear the additional responsibility of caring for their patients and the general public. The emergency professionals have a strong command when it comes to saving lives during medical emergencies (Lara et.al, 2021).

In emergency cases outside hospital, the care professionals expose their lives to save the patients' lives. The missing of opportunity, misleading leadership, and the lack of supportive programs have caused emergency care to make more time for the job, the issues of shortage of human resources have revealed (2020). Although there have been management improvements, supportive resources, and process compliance, care professionals were still at risk when performing their tasks. Emergency care nurses must accept challenges for their interests and society. Stress situations can lead to exhaustion, so when dealing with emergencies, the care providers must prioritize stress control and avoid exhaustion. Therefore, the care professionals engaged in emergency response must take the necessary precautions to protect themselves in terms of physical and mental health. Emergency care nurses can use emotional and compassionate strategies to reduce the risk of psychological damage, Practicing self-acceptance will help nurture to develop greater awareness about healthcare careers.

Psychological well-being, healthcare management systems should advocate in using mental health services, such as psychological first aid, crisis interventions, and access to social media (Kang et al., 2020). Care professionals play a significant role in preparation for a crisis and fighting against, so that their role in emergency situations begins even before serious adverse events may occur (Laosebiakn et.al., 2021). Despite the difficulty and risk factors during an emergency, care professionals should remain steady and consistent, and use strategies such as clinical performance and self-esteem to improve psychological well-being during difficult situations.

Table 6

Assessment on Psychological Well-Being of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Relations with Others

Variables	Mean	SD	Verbal Interpretation
1. I always find it easy and comfortable to maintain close relationships.	3.36	0.67	Strongly Agree
2. I am being described as a giving person and always willing to share my time with others	3.49	0.62	Strongly Agree
3. I have always experienced many warm and trusting relationships with others.	3.38	0.56	Strongly Agree
Overall Mean	3.41	0.62	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Satisfied) ; 2.51-3.25 (Agree-A / Satisfied) ; 1.76-2.50 (Disagree-D / Not Satisfied) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Satisfied)

Table 6 shows the summary of values showing the mean and verbal interpretation in the assessment of the emergency care nurses on their psychological well-being in selected specialty hospitals in Anhui Province, China in terms of relations with others with an overall mean of 3.41 verbally interpreted as “strongly agree”. The assessment showed a homogeneous response as depicted by standard deviation of 0.62. The strongest component of relations with others domain in which the majority of emergency care nurses strongly agree pertains to “I am being described as a giving person and always willing to share my time with others” (\bar{x} = 3.49). Meanwhile, the weakest component of relations with others in which the majority of emergency care nurses strongly agree refers to “I always find it easy and comfortable to maintain close relationships” (\bar{x} = 3.36).

Collegiality in the emergency profession means a lot in collaborative endeavors. Collaboration makes more sense in emergency care practice in so far as continuity of care is essential in healthcare. Care must be properly coordinated between emergency care nurses in order to ensure quality patient care. Interpersonal relationships also extend not just with colleagues but also with their patients. Emergency crisis may, unsurprisingly, make emergency professionals vulnerable to stress and can lead to feelings of compassion fatigue with the duties they perform. Relations with others allow emergency care nurses to cope with one’s everyday environment which may lead to increased levels of resilience and decreased burnout, resulting in an overall good quality of life, both personally and professionally (Liu et al., 2020).

Many emergency care nurses are working on the front lines. Although not the largest sector of the healthcare workforce, they are the backbone and lifeblood of emergency care. In hospitals, emergency professionals are sacrificing a great deal for the good of the whole, with some falling ill or even giving their very lives. Relations with others helps diminish workplace stress for any healthcare professional directly

assigned in medical emergencies. Many emergency care nurses are accustomed to facing mortality and suffering on a daily basis, yet the scope of this emergency care is staggering in which keeping up the communication and stronger collaboration with colleagues makes a difference (Hong et.al., 2020).

Emergency care nurses continual exposure to rescues to accidents had the potential to threaten physical and psychological health. This can affect psychological well-being and reduce compliance with technical procedures, increasing stress and efficiency of healthcare services. In addition, care professionals may experience the effects of stress during emergency response, fear of negative outcomes and post-traumatic stress disorder symptoms (Zammitti et al., 2021). Zang et al (2020) showed that the emergency and disaster crisis and its effects are related to depression, increased isolation, and social dependence; poor job progress can affect their finances (Zhang et al., 2020). Exposure to emergency situations increase anxiety about maintaining psychological well-being or feeling burdened (Jiambo et al., 2020).

Problem 2. What is the assessment on resilience of emergency care nurses in selected specialty hospitals in Anhui Province, China in terms of:

2.1 active coping;

2.2 cognitive flexibility;

2.3 positive emotions;

2.4 optimism; and

2.5 spirituality?

Table 7

Assessment on Resilience of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Active Coping

Variables	Mean	SD	Verbal Interpretation
1. I am able to adapt when changes occur.	3.68	0.47	Strongly Agree
2. I can deal with whatever comes my way.	3.50	0.53	Strongly Agree
3. Having to cope with stress can make me stronger.	3.60	0.57	Strongly Agree
4. I like challenges	3.61	0.56	Strongly Agree
5. I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	3.39	0.56	Strongly Agree
Overall Mean	3.56	0.54	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Adaptive) ; 2.51-3.25 (Agree-A / Adaptive) ; 1.76-2.50 (Disagree-D / Not Adaptive) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Adaptive)

Table 7 shows the summary of values showing the mean and verbal interpretation of the assessment of the emergency care nurses on their resilience in selected specialty hospitals in Anhui Province, China in terms of active coping with an overall mean of 3.56 verbally interpreted as “strongly agree”. The assessment showed homogeneous response as depicted by standard deviation of 0.54. The strongest dimension of active coping domain that the emergency care nurses strongly agree pertains to “I am able to adapt when changes occur” ($\bar{x} = 3.68$). Meanwhile, the weakest dimension of active coping domain that the emergency care nurses strongly agree refers to “I am able to handle unpleasant or painful feelings like sadness, fear, and anger” ($\bar{x} = 3.39$).

Active coping appears to play a significant role in the interaction between stressful situations and adaptations. Active coping can be behavioral or cognitive. Coping describes any behavior that is designed to manage the stresses and overwhelming feelings that come with tough situations. By learning and developing positive coping skills, a worker will be set up with an important skill for life. Active coping strategies increase long-term resilience. Resilience among emergency professionals in medical emergency units is enhanced when they are able to maintain long-term, meaningful relationships with residents. Collegial support that provides opportunities to debrief and validate experiences as well as the use of humor to defuse stress promotes and builds resilience in the workplace.

Moreover, resilience is often described as a factor that can mitigate against stress. It is frequently described as the ability to adapt positively in the face of stress and adversity, to recover from these difficulties, and to potentially gain strength from them. The need to demonstrate resilience is now an integral component of professional standards frameworks. The emergency professionals must be emotionally intelligent and resilient individuals, who are able to manage their own personal health and wellbeing, and know when and how to access support.

According to Flesia and colleagues (2020), there are two different types of resilience: ‘One that is a protection from stress or pressure so that individuals can build their stress tolerance, and the second allows them to bounce back after difficulty so that they recover to their normal state of functioning more quickly. It is different from mental toughness in that resilience allows for adaptability when pressures arise, whereas mental toughness implies a level of single-mindedness and dogged determination. Odessa and colleagues (2020) explained that there is a certain amount of emotional awareness in resilience that allows for noticing

the impact of stressful situations before they become critical, impact upon functioning and possibly lead to burnout.

Active environments and coping style are characterized by problem-solving, seeking information-social support-professional help, changing environments, and planning for activities. Raven et al. (2020) suggested that active coping as an adaptive stress response improves outcomes in medical and neuropsychiatric diseases. Because a positive attitude is the strongest protective factor against distress (Raven et al., 2020), the higher the positive attitude, the lower distress levels (Babore et al., 2020). The positive coping strategy had a significant role in the management of negative states such as anxiety during emergency crisis (Lara et al., 2021), because of the moderate associations among race-related stress, rumination, and depressive symptoms. Active-coping strategies and greater perceived control are associated with improved pain-related outcomes; and allows individuals to positively reinterpret negative situations, as it is related to self-efficacy, greater psychological well-being, and better quality of life (Flesia et al., 2020). On the other hand, active coping and perceived social support mediate the relationship between physical health and resilience (Swanson et al., 2021).

Healthcare workers who had positive coping strategies used active coping and help-seeking, related to high psychological well-being; and negative coping strategies, such as avoidance, related to low psychological well-being (McFadden et al., 2021). Previous studies also determined the relationship between stress and coping strategies (Cai et al., 2020), and interact with behavioral and cognitive efforts to reduce the pressure of a stressful situation. Thus, it can be deduced that active coping is a condition that is vital in sustaining resilience, and that the content of resilience evaluation cannot be devoid of active coping.

Table 8

Assessment on Resilience of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Cognitive Flexibility

Variables	Mean	SD	Verbal Interpretation
1. In times of stress, I know where to find help	3.37	0.56	Strongly Agree
2. Under pressure, I stay focused and think clearly	3.65	0.49	Strongly Agree
3. I prefer to take the lead in problem-solving	3.38	0.59	Strongly Agree
4. I make unpopular or difficult decisions.	3.26	0.60	Strongly Agree
5. I have to guess based on emotions rather than facts	3.44	0.42	Strongly Agree
Overall Mean	3.42	0.53	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Adaptive) ; 2.51-3.25 (Agree-A / Adaptive) ; 1.76-2.50 (Disagree-D / Not Adaptive) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Adaptive)

Table 8 shows the summary of values showing the mean and verbal interpretation of the emergency care nurses on their resilience in selected specialty hospitals in Anhui Province, China in terms of cognitive flexibility with an overall mean of 3.42 verbally interpreted as “strongly agree”. The assessment showed a homogeneous response as depicted by standard deviation of 0.53. The strongest dimension of cognitive flexibility domain that the emergency care nurses strongly agree pertains to “Under pressure, I stay focused and think clearly” ($\bar{x} = 3.65$). Meanwhile, the weakest dimension of cognitive flexibility domain that the emergency care nurses agree refers to “I make unpopular or difficult decisions” ($\bar{x} = 3.26$).

The emergency care nurses who are resilient tend to be flexible in the way they think about challenges and flexible in the way they react emotionally to stress. They are not wedded to a specific style of coping. Instead, they shift from one coping strategy to another depending on the circumstances. Many are able to accept what they cannot change; to learn from failure; to use emotions like grief and anger to fuel compassion and courage; and to search for opportunity and meaning in adversity. Sometimes acceptance involves not only acknowledging the reality of one’s situation, but also assessing what can and cannot be changed, abandoning goals that no longer seem feasible, and intentionally redirecting efforts toward that which can be changed. Thus, acceptance is similar to cognitive flexibility which does not involve giving up or quitting. Instead, acceptance is based on realistic appraisal and active decision-making.

One of the most important actions emergency professionals can take is to cultivate awareness and attention, and this stretches across several domains. An awareness of emotions allows an individual to respond in a more rational way rather than being hijacked by automatic responses. Taking time to get to know the different feelings in the body created by different emotions will allow one to spot when the risk of hijacking is increasing. Using a technique such as the three-step breathing practice can help create space between feeling an emotion rising and reacting to it, which can be useful if it is difficult to regain from a stressful situation.

According to Babore and colleagues (2020), an awareness of alternative options to a problem and taking time to see things from novel perspectives can help build resilience. They asserted to listen to your internal voice (self-talk) and spot whether it is helpful or hindering. Moreover, they pointed to ask whether the voice is logical and true. Being aware of all the different aspects of life and knowing how times the things we love get neglected without us realizing, hence taking time for self-care is an important part of resilience as it allows fast recovery. While emergency professionals have mastered the art of caring for the physical and emotional needs of injured patients, they tend to forget to care for themselves and each other. Today it is

common to find emergency professionals describe their lives as being stuck in 24/7 work mode. It is not only difficult for them to unplug from work but even more difficult to find opportunities to recharge physical and emotional banks.

During an emergency crisis, care professionals are perceived as the first-line health provider, having a public awareness role, and providing care for injured or distressed patients. Besides being responsible for their daily activities, care professionals have roles in ensuring the safety and contentment of their patients outside hospital. When emergency care nurses identify patient care needs, workload management, and reflecting on missed care opportunities; emergency medical respondents present several barriers to their decision-making (Anton et al., 2021). However, the public support and acknowledgment of care provider's role during emergencies positively influenced feelings of being valued (Ashley et al., 2021). This may cause most emergency care providers to remain positive about their roles and career decisions.

Emergency care response and health policy need to prepare well for any unpredicted emerging healthcare emergencies in the future. Preparation to respond to emergencies requires multilateral measures. First, care professionals must be provided adequate equipment and competent team should be the highest priority for healthcare policymakers around the world to combat emergency situations successfully. Second, care professionals outside hospital should have cognition and prepare for their role in emergency medical response. Because the preparation can reduce the damages to this group and maximize their efforts to protect the patients. Thus, emergency medical response services should try to promote the care professional's awareness and preparedness (Sharififar et al., 2021).

Measuring the care professional's preparedness can clarify the challenges in emergency measures taken to respond to the crisis. Evaluating the care professional, determining the challenges and priorities, and finding solutions to resolve them also improve performance in providing emergency health care services. On the other hand, the cognitive emotion regulation strategies of acceptance and positive refocusing contribute to reducing anxiety or depression. These strategies should be considered when implementing psychotherapeutic interventions to improve care professional's adverse emotional symptoms. The need to assess cognitive emotion regulation strategies used in screening for anxiety and depression should develop psychosocial interventions including appropriate strategies to help with adverse emotions during emergency care (Wang et al., 2021).

Table 9

Assessment on Resilience of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Positive Emotions

Variables	Mean	SD	Verbal Interpretation
1. Past successes give me confidence.	3.62	0.64	Strongly Agree
2. I make my best effort, no matter what	3.70	0.43	Strongly Agree
3. I have a strong sense of purpose in life	3.58	0.55	Strongly Agree
4. I feel like I am in control.	3.54	0.43	Strongly Agree
5. I take pride in my achievements	3.31	0.62	Strongly Agree
Overall Mean	3.55	0.53	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Adaptive) ; 2.51-3.25 (Agree-A / Adaptive) ; 1.76-2.50 (Disagree-D / Not Adaptive) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Adaptive)

Table 13 shows the summary of values showing the mean and verbal interpretation on the assessment of the emergency care nurses on their resilience in selected specialty hospitals in Anhui Province, China in terms of positive emotions with an overall mean of 3.55 verbally interpreted as “strongly agree”. The assessment showed homogeneous response as depicted by standard deviation of 0.53. The strongest dimension of positive emotions domain that the emergency care nurses strongly agree pertains to “I make my best effort, no matter what” ($\bar{x} = 3.70$). Meanwhile, the weakest dimension of positive emotions domain that the emergency care nurses strongly agree refers to “I take pride in my achievements” ($\bar{x} = 3.31$).

Positive emotions build the emotional resources needed for resilience. Positive emotions broaden awareness towards more options for problem solving. When positive emotions open us up to new possibilities, we are more able to learn and build on our skills. That leads to doing better on tasks. People who have plenty of positive emotions in their everyday lives tend to be happier, healthier, learn better, and get along well with others. Building positive emotions is especially important if we are already dealing with fear, sadness, anger, frustration, or stress. Positive coping strategies, such as positive reappraisal, problem-focused coping, and infusing ordinary events with positive meaning are related to the occurrence and maintenance of positive affect. The emergency care nurses respond to workload stress in different ways. There are certain emergency professionals that excel in the midst of intense stress, while others crash and burn out. Although stress is a normal occurrence in life, unmitigated chronic stress impacts energy and motivation levels, influencing the ability to effectively negotiate workloads and maintain social skills.

While some studies have documented poor physical and psychological health among emergency professionals, Saks (2020) emphasized that there is evidence that emergency professionals also experience high satisfaction and positive returns from responding to emergencies. This disparity between observations

across studies may be explained by other factors that could influence patient outcomes, such as resilience and social support.

Zang and colleagues (2020) defined resilience as “positive adaptation to face adversity, flexibility, psychological well-being, strength, healthy life, burden, social network, and satisfaction with social support”. They described emergency professionals who have high resilience would experience low burden even when they experience high care demand. This perceived low burden could be attributed to effective coping strategies where resilience was associated with problem- and emotion-focused coping strategies and sense of self-efficacy. Therefore, resilience might be a key variable that explains the ability of some emergency care nurses to ‘bounce back’ and deal with the challenges of caring for their loved ones.

Care professionals can develop personal resilience in several ways, such as finding a meaningful purpose in life, believing that they can influence their surroundings and the outcome of events, and believing they can learn and grow from life experiences. Bright noted that “emotional awareness and self-care are important in developing resilience in emergency response, in addition to optimism, autonomy and empowerment” is essential (Duncan et.al., 2020). During emergency response, positive emotions, and laughter promote resilience. Care professionals working in emergency care develop resilience through self-nurturing, which included being self-aware, coping adaptively, and accepting limitations. Care professionals can support their own mental and spiritual well-being by sharing their experiences of vulnerability and resilience through reflective journals and debriefing.

Table 10

Assessment on Resilience of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Optimism

Variables	Mean	SD	Verbal Interpretation
1. I am not easily discouraged by failure	3.36	0.67	Strongly Agree
2. I tend to bounce back after illness, injury or other hardships	3.31	0.67	Strongly Agree
3. I believe I can achieve my goals, even if there are obstacles	3.68	0.71	Strongly Agree
4. Even when hopeless, I do not give up	3.40	0.70	Strongly Agree
5. I work to attain goals.	3.58	0.64	Strongly Agree
Overall Mean	3.47	0.68	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Adaptive) ; 2.51-3.25 (Agree-A / Adaptive) ; 1.76-2.50 (Disagree-D / Not Adaptive) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Adaptive)

Table 10 shows the summary of values showing the mean and verbal interpretation of the assessment of the emergency professionals on their resilience in selected specialty hospitals in Anhui Province, China in terms of optimism with an overall mean of 3.47 verbally interpreted as “strongly agree”. The assessment showed a homogeneous response as depicted by standard deviation of 0.68. The strongest dimension of optimism domain that the emergency care nurses strongly agree pertains to “I believe I can achieve my goals, even if there are obstacles” ($\bar{x} = 3.68$). Meanwhile, the weakest dimension of optimism domain that the emergency care nurses strongly agree refers to “I tend to bounce back after illness, injury or other hardships” ($\bar{x} = 3.31$).

Learned optimism is a personal trait and optimistic emergency professionals use an adaptive style in order to explain adverse situations. In turn, dispositional optimism refers to a general belief that good things will happen rather than bad things in the future. Hence, optimism, understood as a personality trait reflects good expectations for the future. Resilience is related to effective adaptive resources to occupational stress. Hence, resilience, constructed in the positive optimism, can be understood as a protective factor since it prevents emergency professionals from maladaptive strategies reducing, in turn, occupational stress levels.

Findings of the study have highlighted the benefits that optimism has on physical and psychosocial well-being such as reducing depressive symptoms and stress impact, enhancing self-esteem, forming and maintaining relationships, and favoring adjustment to the health profession. In a recent study, it was found that optimistic emergency professionals were more engaged than non-optimistic ones.

According to Swanson and colleagues (2021), resilience is generally understood as an optimistic outcome despite exposure to adversity or risk, and focuses on strengths rather than weaknesses. The emergency professionals draw on individual resources and interact with their environment by drawing on community and societal resources which may facilitate or hinder resilience. Sacristan (2021) identified the absence of resources may lead to poor outcomes or further caring challenges. Resilience can be described as ‘the process of negotiating, managing and adapting to significant sources of stress or trauma. Assets and resources within the individual, their life and environment facilitate this capacity for adaptation and “bouncing back” in the face of adversity.

Optimism is one factor in predicting preventive behaviors, and its effects on the beliefs, actions, and behaviors of care professionals while caring for the patients, especially during emergencies. Studies that determined care professional’s optimism during emergency crisis showed that care professionals had a high

optimism level. For instance, Mishra et al (2021) conducted research on the optimism of emergency care responders in India, the result showed that more than half of the participants had high optimism. On the other hand, HCW's confidence level against the length of service showed significantly better confidence than others in terms of confidence in performing high-quality chest compression and handling medical equipment; care professionals also confident in resuscitating, leading the resuscitation, managing the airway, and intubation attempt (Abd Samat et al., 2020). A sample of 120 care providers who participated in the research showed that there was a moderate level of self-confidence, and positive relationships were found between carers' self-confidence with self-efficacy ($r=0.81$) and carer-patient interaction ($r = 0.79$). The results also indicated that there was a significant difference in self-confidence and carer-patient interaction (Abu Sharour et al., 2021). These results were proof that emergency medical response services should develop further strategies, such as training, organizational support, and preparing the availability of protective measures to increase self-confidence and the interaction with distressed patients.

Table 11

Assessment on Resilience of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Spirituality

Variables	Mean	SD	Verbal Interpretation
1. I believe most things happen for a reason	3.28	0.63	Strongly Agree
2. I think sometimes fate or God helps me.	3.31	0.66	Strongly Agree
3. I think of myself as a strong person when praying with life's challenges and difficulties	3.70	0.70	Strongly Agree
4. I hold on to my faith and try to see more of my blessings of life when I am faced with problems	3.55	0.52	Strongly Agree
5. I have one close relationship and secured spiritual values.	3.42	0.44	Strongly Agree
Overall Mean	3.45	0.59	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Adaptive) ; 2.51-3.25 (Agree-A / Adaptive) ; 1.76-2.50 (Disagree-D / Not Adaptive) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Adaptive)

Table 11 shows the summary of values showing the mean and verbal interpretation of the assessment of the emergency professionals on their resilience in selected specialty hospitals in Anhui Province, China in terms of spirituality with an overall mean of 3.45 verbally interpreted as “strongly agree”. The assessment showed a homogeneous response as depicted by standard deviation of 0.59. The strongest dimension of spirituality domain that the emergency care nurses strongly agree pertains to “I think of myself as a strong person when praying with life's challenges and difficulties” ($\bar{x} = 3.70$). Meanwhile, the weakest dimension of spirituality domain that the emergency care nurses strongly agree refers to “I believe most things happen for a reason” ($\bar{x} = 3.28$).

Spirituality potentially serves as a pathway to resilience. Religion as a source of meaning and grounding may become more important as people move throughout the life course. Many emergency professionals draw on their religion and faith when confronted with challenges associated with aging, illness, and various other life challenges. Religion and spirituality provide people with a source of hope, comfort, and resilience in the face of adversity.

The emergency care nurses have a spiritual dimension by nature of being human, and therefore, each person has the capacity for spirituality. In essence, spirituality in life consists of finding core meaning in life, responding to meaning, and being in relationship with higher entity. For many people, as they grow older, these contemplations are translated into the search for life-meaning. Essentially, spirituality involves an intense awareness of the present moment, a belief in a Supreme Being or higher power, and/or the transcendence of self. Conceptualizations of spirituality and its relationship to resilience equates with experience of stress and hardship, while enduring adversity over the life course.

Ram and Prabhakar (2020) described the aspect of resilience where spirituality has the potential to be a major resource for emergency professionals as they age and as they expand their consciousness. They described spirituality as providing emergency professionals a framework that guides them through painful and joyful events, often facilitating positive discoveries amidst negative experiences. Consequently, spirituality is a powerful resource in late life providing emergency professionals with the ability to adapt to changing individual needs. Moreover, spirituality as conceptualized as a "realm of human experience, " encapsulates an intense awareness of the present; transcendence of the personal self; and/or a feeling of connection with all of life, the universe or a "Supreme Being" (Swanson et.al., 2021).

Spirituality is considered a fundamental aspect of emergency medical response team. Previous studies identified benefits of spiritual care, including supporting emotional well-being and strengthening relationships between care professionals and patients. For instance, to explore the effective spirituality affecting the resilience of care professionals, Rajabipoor et.al. (2021) conducted research, and the results showed that spirituality affecting the resilience of emergency responders were religious values, morality, self-awareness, patience and hope, wisdom, voluntary activities, and the otherworld belief. Atarhim et al (2019) also found that there was a positive relationship between perception of spirituality and spiritual care among the respondents. However, most care professionals during emergencies felt that they required more education and training about spiritual aspects of care (Wais, 2019). These results were a demonstration that providing

adequate curriculum and on-job training to equip emergency medical responders with knowledge and competence of spiritual care is urgent in a healthcare environment because the program has positive effects on the spiritual and resilience of care professionals.

Problem 3. What is the assessment of the emergency care nurses on their work productivity in selected specialty hospitals in Anhui Province, China in terms of:

3.1 work engagement;

3.2 work attitude; and

3.3 work performance?

Table 12

Assessment on Work Productivity of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Work Engagement

Variables	Mean	SD	Verbal Interpretation
1. I kept abreast of current developments pertaining to my job.	3.29	0.53	Strongly Agree
2. I work in an organized manner.	3.32	0.62	Strongly Agree
3. I work hard to achieve established goals.	3.48	0.67	Strongly Agree
4. I can multitask between several projects.	3.26	0.67	Strongly Agree
5. I am determined to meet productivity standards.	3.28	0.71	Strongly Agree
6. I always listen to suggestions and articulate ideas effectively.	3.30	0.70	Strongly Agree
7. I hold myself accountable to goals and objectives.	3.34	0.64	Strongly Agree
8. I demonstrate effective leadership talents and skills.	3.31	0.63	Strongly Agree
9. I positively motivate others to achieve goals and gain skills	3.34	0.66	Strongly Agree
10. I understand my job requirements and responsibilities.	3.41	0.70	Strongly Agree
Overall Mean	3.33	0.65	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Performing) ; 2.51-3.25 (Agree-A / Performing) ; 1.76-2.50 (Disagree-D / Not Performing) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Performing)

Table 12 shows the summary of values showing the mean and verbal interpretation in the assessment of the emergency care nurses on their work productivity in selected specialty hospitals in Anhui Province, China in terms of work engagement dimension with an overall mean of 3.33 verbally interpreted as “strongly agree”. The assessment showed a homogeneous response as depicted by standard deviation of 0.65. The strongest component of work engagement dimension which the majority of emergency care nurses strongly agree pertains to “I work hard to achieve established goals.” ($\bar{x} = 3.48$). Meanwhile, the weakest component

of work engagement dimension in which the majority of emergency care nurses strongly agree refers to “I can multitask between several projects.” ($\bar{x} = 3.26$).

Work engagement of emergency professionals is extremely beneficial to any workplace. Work engagement has emerged as a critical driver of organizational success in today's competitive marketplace. High levels of work engagement promote retention of talent, foster customer loyalty and improve organizational performance. Work engagement can be affected by social cohesion, feeling supported by one's supervisor, information sharing, common goals and vision, communication, and trust. The emergency professionals want to feel valued and respected; they want to know that their work is meaningful and their ideas are heard. Highly engaged emergency professionals are more productive and committed to the organizations in which they work.

Engaged emergency care nurses might report feeling focused and intensely involved in the work they do. They are enthusiastic and have a sense of urgency. Engaged behavior is persistent, proactive and adaptive in ways that expand the job roles as necessary. Engaged emergency professionals go beyond job descriptions in, for example, service delivery or innovation. Work engagement increases dramatically when the daily experiences of emergency care nurses include positive relationships with their direct supervisors or managers.

The emergency care nurses engagement to their work and to the organization reduces fatigue, burnout, and turnover while improving teamwork, the clinical experience, and organizational outcomes across multiple measures: technically (fewer public works acquired conditions), operationally (staffing and efficiency), culturally (positive work environment and empowerment), and behaviorally (ability to connect with customers and colleagues). A balanced, healthy and supportive hospital work practice environments and psychosocial work environments are all important to sustain stable engagement to work duty and high performance of the workforce. While emergency professionals often work in diverse practice environments, characterized with various difficulties and stress-factors, emergency care providers who have more work engagement, have better performance and are more interested in their job. Moreover, they are more stable when they are faced with difficulties and hardness of work, and this directly affects the success of the healthcare system.

According to Zimmerman (2020), engaged emergency professionals are typically thorough and responsive in their roles and responsibilities, they have a habit of producing quality output. Engaged emergency professionals are more committed to, and enthusiastic about working for the institution. They will

go the extra mile to provide great quality innovations, while disengaged ones may do the bare minimum just to get through the day.

As care providers perform incredible work in the face of adversity, clinical work engagement in professional emergency medical response practice is critically important to consider when addressing key challenges of having the required clinical training purposely to increase demands for quality healthcare and positive patient outcomes. Getting all the necessary training to improve clinical performance in the emergency setting is often used to describe commitment to and productivity in the job. In reality, these are just two facets of engagement including a care professional's level of commitment to the organization that employs them and their commitment to the emergency medical response profession itself. Because engagement to clinical work correlates directly with quality patient outcomes, understanding the current state of work engagement and its drivers must be a strategic imperative (Foster, 2020).

Work engagement or emergency medical responders to their work duty and to the organization reduces compassion fatigue, burnout, and turnover while improving teamwork, the patient experience, and organizational outcomes across multiple measures: clinically (fewer hospital acquired conditions), operationally (staffing and efficiency), culturally (positive work environment and empowerment), and behaviorally (ability to connect with patients and colleagues). A balanced, healthy and supportive practice environment and psychosocial work environments are all important to sustain stable engagement to work duty and high performance of the workforce (Cruz and Forbes, 2020).

While emergency medical response team often works in problematic practice environments, characterized with various difficulties and stress-factors, care professionals who have more work engagement, have better performance and are more interested in their job. Moreover, they are more stable when they are faced with difficulties and hardness of work, and this directly affects the success of the health system (Bryson et.al., 2019). Engaged care professionals are typically thorough and responsive in their care, they have a habit of producing quality output. Engaged care professional are more committed to, and enthusiastic about working for the institution. They will go the extra mile to provide great quality care, while disengaged employees may do the bare minimum just to get through the day (Foster, 2020).

Emergency care engagement in healthcare is one stabilizing force that helps change adjustment and motivates more efficient performance. When care professionals are highly engaged, it is reflected in the patients' experiences. The commitment and emotional involvement is what enables them to function as the

key quality control checkpoint that prevents errors and patient mortality. When care professionals feel engaged in their work duty, their work will be enhanced by the satisfaction of being good at their jobs and achieving work goals, by excitement about challenges and by appreciation in relationships with colleagues (Wais, 2019).

Table 13

Assessment on Work Productivity of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Work Attitude

Variables	Mean		Verbal Interpretation
1. I uphold my organizational culture and values.	3.41	0.33	Strongly Agree
2. I make good use of my skills and abilities.	3.44	0.42	Strongly Agree
3. I appreciate my career path in my organization.	3.38	0.47	Strongly Agree
4. I efficiently utilize all necessary resources to perform my job well	3.66	0.37	Strongly Agree
5. I value workforce diversity.	3.36	0.51	Strongly Agree
6. I have very high regard for high standard work ethics.	3.35	0.60	Strongly Agree
7. I have high regard to managers who communicate a clear sense of direction.	3.39	0.54	Strongly Agree
8. I believe my organization adheres to fair and equitable promotion of employees.	3.48	0.43	Strongly Agree
9. I am satisfied with fair career movement in the organization.	3.40	0.46	Strongly Agree
10. I welcome real opportunities to improve my skills	3.46	0.50	Strongly Agree
Overall Mean	3.43	0.46	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Performing) ; 2.51-3.25 (Agree-A / Performing) ; 1.76-2.50 (Disagree-D / Not Performing) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Performing)

Table 13 shows the summary of values showing the mean and verbal interpretation in the assessment of the emergency care nurses on their work productivity in selected specialty hospitals in Anhui Province, China in terms of work attitude dimension with an overall mean of 3.43 verbally interpreted as “strongly agree”. The assessment showed a homogeneous response as depicted by standard deviation of 0.46. The strongest component of work attitude dimension which the majority of emergency care nurses strongly agree pertains to “I efficiently utilize all necessary resources to perform my job well” ($\bar{x} = 3.66$). Meanwhile, the weakest component of work attitude dimension in which the majority of emergency care nurses strongly agree refers to “I have very high regard for high standard work ethics.” ($\bar{x} = 3.35$).

As a caring profession, emergency care nurses involve not only care for injured or critically-ill patients, but also care for one another. The emergency professionals may not fully appreciate the importance of interprofessional relationships if their ethical concern is solely on social and patient issues. Although challenging, emergency professionals’ occupational interdependence demands a special relationship among the various levels. Inter-professional collegiality and true collaboration between health practitioners has been

proven to improve overall outcomes. Working together in a respectful relationship, rather than isolated silos ensures the patient remains the center of the most appropriate care. No single profession can do it all. Each professional group must work in close proximity with the other, having mutual respect for the knowledge, competence and skills that each brings to the provision of patient care. Such relationships result in better choice and outcomes for the patient. Ultimately collegiality enhances patient outcomes and respectfully acknowledges the competence and proficiency of each group involved in the delivery of care.

Moreover, results of the study noted that collegiality and collaboration are both first lines of professional self-regulation. The emergency professionals much like other professionals tend to avoid conflict with peers, however, and particularly to avoid discussions of errors and problems. Collaboration with other members of the healthcare team certainly improves the quality of administrative and clinical innovations. Collegial relationship also allows emergency professionals to gain valuable experience on field endeavors from other healthcare professionals. Social support from supervisors is an important factor for work attitude, and leaders can support emergency professionals in several ways.

Regular interactions with the emergency professionals are necessary to have the opportunity to consider individual needs. It may be that some emergency professionals need extra training in certain technical procedures, or that some emergency professionals need further challenges. Feedback on work done is also important. Positive feedback on work well done is needed, as well as feedback on mistakes made. Collegiality provides a framework in which emergency professionals are expected to hold each other accountable for the assignment that is given, and for its congruence with standards (Odessa et.al., 2020).

The emergency professionals who are engaged with their colleagues are expected to hold each other accountable for the initiative, and for its congruence with local and national standards. Collegial relationships in the healthcare profession are important for several reasons: coordinating innovations across shifts or sites; ensuring quality and safety; and establishing and maintaining the standards of professionalism. Collegiality defines the relationships of colleagues working together. The emergency professionals often work in close physical proximity, share tasks and information, trade programs back and forth across shifts, seek each other out for problem-solving and assistance, and are, more than members of many professions, treated by others as a collective task (Ram and Prabhakar, 2020).

Work attitude is the first line of professional self-regulation. Emergency medical responders much like other healthcare professionals tend to avoid conflict with peers, however, and particularly to avoid discussions of errors and problems. Collaboration with other members of the healthcare team certainly improves quality of care to patients. Work attitude also allows care professionals to gain valuable experience on patient care from other healthcare professionals. Social support from supervisors is an important factor for work engagement, and leaders can support emergency medical responders in several ways (Wang et.al., 2021).

Regular interactions with the care professionals in medical emergencies are necessary to have the opportunity to consider individual needs. It may be that some care professionals need extra training in certain procedures, or that some need further challenges. Feedback on work done is also important. Positive feedback on work well done is needed, as well as feedback on mistakes made. Collegiality provides a framework in which professionals are expected to hold each other accountable for the care that is given, and for its congruence with standards (Odessa et.al., 2020).

Emergency medical responders who demonstrate good work attitude to their colleagues are expected to hold each other accountable for the care that is given, and for its congruence with standards. Work attitude in nursing are important for several reasons: coordinating care across shifts or sites; ensuring quality and safety; and establishing and maintaining the standards of professionalism. Work attitude defines the relationships of colleagues working together. Care professionals often work in close physical proximity, share tasks and information, trade patients back and forth across shifts, seek each other out for problem-solving and assistance, and are, more than members of many professions, treated by others as a collective task (Ram and Prabhakar, 2020).

A more collegial, unified relationship between emergency care responders has the value of enabling everyone to combine their power to improve patient care. A collegial work environment has a sense of belonging, open communication, cooperation and support among staff, effectively managed conflict, a high work satisfaction, and consequently a high staff retention. A combined approach to the challenges of collegiality is good for individual growth, work performance, and can also facilitate cross-cover through increased workforce productivity. Clearly a collegial culture and work attitude have the advantage of improving work productivity among individuals in order to get the optimum benefit from care professional's potential to contribute (Zimmerman, 2019).

Table 14

Assessment on Work Productivity of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China in Terms of Work Performance

Variables	Mean	SD	Verbal Interpretation
1. I am able to submit high quality work output.	3.36	0.56	Strongly Agree
2. I deliver work on time and meet deadlines.	3.28	0.45	Strongly Agree
3. I arrive to work on time.	3.44	0.49	Strongly Agree
4. I keep myself in professional manner	3.52	0.58	Strongly Agree
5. I take initiatives when working.	3.31	0.62	Strongly Agree
6. I maintain positive attitude at work.	3.65	0.55	Strongly Agree
7. I perform well in high pressure situation.	3.58	0.42	Strongly Agree
8. I seek out opportunities for professional growth.	3.46	0.38	Strongly Agree
9. I get along with my coworkers.	3.55	0.36	Strongly Agree
10. I clearly communicate with others.	3.50	0.40	Strongly Agree
Overall Mean	3.46	0.48	Strongly Agree

Legend: 3.26-4.00 (Strongly Agree -SA / Highly Performing) ; 2.51-3.25 (Agree-A / Performing) ; 1.76-2.50 (Disagree-D / Not Performing) ; 1.00-1.75 (Strongly Disagree -SD / Highly Not Performing)

Table 14 shows the summary of values showing the mean and verbal interpretation in the assessment of the emergency care nurses on their work productivity in selected specialty hospitals in Anhui Province, China in terms of work performance dimension with an overall mean of 3.46 verbally interpreted as “strongly agree”. The assessment showed a homogeneous response as depicted by standard deviation of 0.48. The strongest component of work performance dimension which the majority of emergency care nurses strongly agree pertains to “I maintain a positive attitude at work.” ($\bar{x} = 3.65$). Meanwhile, the weakest component of work performance dimension in which the majority of emergency care nurses strongly agree refers to “I deliver work on time and meet deadlines.” ($\bar{x} = 3.28$).

Work productivity is centered on emergency care nurses and patients working together to improve health conditions. A patient’s greater engagement in healthcare contributes to improved health outcomes. Patients want to be engaged in their healthcare decision-making process, and those who are engaged as decision-makers in their care tend to be healthier and experience better outcomes. Although closely related, work productivity is not the same as the patient experience. Work performance refers to the ability to interact with patients, while the patient experience refers to how the emergency professionals met the patient’s expectations throughout the healthcare interaction. Better work performance often creates a better patient

experience through communication and patient-centered care. At its core, work performance that emphasizes patient engagement is a dynamic, strategic approach taken by healthcare organizations looking to provide holistic care.

Work performance with patients is aimed at improving emergency experience, job satisfaction and customer outcomes. Communication and education are both important keys to making it easier for emergency professionals and healthcare stakeholders to engage in patient care. When appropriate, every stakeholder should be included in decision making so that they have the opportunity to ask questions and gain clarification. Critical planning is another great tool for encouraging work performance. The emergency professionals should be invited to participate in healthcare opportunities to learn how to improve work performance.

According to Saks (2020), creating a culture of work performance with customers invites care professionals to participate in their work in ways that are meaningful to them as individuals. The added benefit is support and respect for achieving their own personal goals and affirming individual values, which could in turn result in greater satisfaction with their healthcare practice. Work productivity helps increase creativity and involvement through active participation. Building a culture that values stakeholders' engagement in all aspects of the initiatives that affect their work performance requires support and enthusiasm from the organizations' leaders at all levels.

Work performance is aimed at improving the patient experience, patient satisfaction and patient outcomes. Communication and education are both important keys to making it easier for patients and families to engage in their care. When appropriate, every patient and family member should be included in patient assessment so that they have the opportunity to ask questions and gain clarification. Emergency care planning is another great tool for encouraging engagement. Patients and family members should be invited to participate in teaching opportunities to learn how to manage care during emergency situations (Sacristan, 2020).

According to Zammiti and colleagues (2021), creating a culture of quality work performance with patients invites care professionals to participate in their work in ways that are meaningful to them as individuals. The added benefit is support and respect for achieving their own personal goals and affirming individual values, which could in turn result in greater satisfaction with their emergency care practice. Resiliency helps increase creativity and involvement through active participation. Building a culture that values patient engagement in all aspects of the initiatives that affect their clinical care or work environment requires support and enthusiasm from the organizations' leaders at all levels.

Emergency care responders are better able to make good work performance about their care options.

They can promote mutual accountability and understanding between the patients and other members of the team. Higher work performance yields improved patient outcomes. Involving patients in the redesign of health care can lead to improved effectiveness, efficiency and quality of health services, improved quality of life, and enhanced quality and accountability of health services (Fletcher and Sarkar, 2021).

Problem 4. Is there a significant relationship on the assessment between psychological well-being and resilience of emergency care nurses in selected specialty hospitals in Anhui Province, China?

Table 15a

Correlational Analysis on the Significant Relationship on the Assessment between Psychological Well-Being and Resilience of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China

Variables	Computed r correlation [95%CI]	Degree of Relationship	p value	Interpretation
Autonomy	0.820 [0.280; 0.535]	High positive correlation	<0.001	with significant correlation
Environmental mastery	0.830 [0.188; 0.481]	High positive correlation	<0.001	with significant correlation
Personal growth	0.863 [0.325; 0.541]	High positive correlation	<0.001	with significant correlation
Purpose in life	0.864 [0.223; 0.504]	High positive correlation	<0.001	with significant correlation
Self – acceptance	0.805 [0.263; 0.532]	High positive correlation	<0.001	with significant correlation
Relations with others	0.862 [0.196; 0.509]	High positive correlation	<0.001	with significant correlation
Autonomy	0.881 [0.246; 0.510]	High positive correlation	<0.001	with significant correlation
Environmental mastery	0.890 [0.279; 0.531]	High positive correlation	<0.001	with significant correlation
Personal growth	0.862 [0.211; 0.513]	High positive correlation	<0.001	with significant correlation
Purpose in life	0.840 [0.336; 0.538]	High positive correlation	<0.001	with significant correlation
Self – acceptance	0.850 [0.332; 0.558]	High positive correlation	<0.001	with significant correlation
Relations with others	0.895 [0.339; 0.583]	High positive correlation	<0.001	with significant correlation
Autonomy	0.858 [0.351; 0.560]	High positive correlation	<0.001	with significant correlation
Environmental mastery	0.850 [0.332; 0.558]	High positive correlation	<0.001	with significant correlation
Personal growth	0.862 [0.350; 0.576]	High positive correlation	<0.001	with significant correlation
Purpose in life	0.896 [0.259; 0.514]	High positive correlation	<0.001	with significant correlation
Self – acceptance	0.886 [0.356; 0.575]	High positive correlation	<0.001	with significant correlation
Relations with others	0.881 [0.358; 0.593]	High positive correlation	<0.001	with significant correlation
Autonomy	0.882 [0.369; 0.591]	High positive correlation	<0.001	with significant correlation
Environmental mastery	0.895 [0.365; 0.550]	High positive correlation	<0.001	with significant correlation
Personal growth	0.870 [0.399; 0.605]	High positive correlation	<0.001	with significant correlation
Purpose in life	0.890 [0.285; 0.520]	High positive correlation	<0.001	with significant correlation
Self – acceptance	0.870 [0.388; 0.618]	High positive correlation	<0.001	with significant correlation

Relations with others	0.861 [0.333; 0.583]	High positive correlation	<0.001	with significant correlation
Autonomy	0.891 [0.267; 0.513]	High positive correlation	<0.001	with significant correlation
Environmental mastery	0.814 [0.314; 0.513]	High positive correlation	<0.001	with significant correlation
Personal growth	0.880 [0.273; 0.535]	High positive correlation	<0.001	with significant correlation
Purpose in life	0.852 [0.202; 0.491]	High positive correlation	<0.001	with significant correlation
Self – acceptance	0.850 [0.332; 0.558]	High positive correlation	<0.001	with significant correlation
Relations with others	0.838 [0.311; 0.551]	High positive correlation	<0.001	with significant correlation

Table 15a supports the analysis in determining the significant relationship between the psychological well-being and resilience of emergency care nurses in selected specialty hospitals in Anhui Province, China. The correlation coefficients between psychological well-being dimensions and resilience have a range from 0.805 to 0.896, (with p values of 0.001), indicating that there are statistically significant high positive correlations between psychological well-being and resilience dimensions.

Table 15b

Summary of Correlational Analysis on the Significant Relationship on the Assessment between Psychological Well-Being and Resilience of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China

Variables	Computed r	Degree of Relationship	P value	Interpretation
Psychological Well-Being and Resilience	.864	High positive correlation	.001	with significant correlation

**. Correlation is significant at the 0.01 level (2-tailed).

Table 15b presents the summary of correlational analysis on the significant relationship between the self-assessed psychological well-being and resilience of emergency care nurses in selected specialty hospitals in Anhui Province, China. It shows that there is a statistically significant relationship between self-assessed psychological well-being and resilience (*p*-value 0.001). The strength of their relationship exhibits high positive correlation which means that an enhancement in psychological well-being would highly improve resilience.

Psychological well-being can be a factor of optimal functioning of each individual which also be a predictor of individual resilience. As emergency care nurses are able to practice autonomy, they get to improve their self-determination and are able to regulate their behavior through internal locus of control, and become more coherent with one's own personal convictions. Also, environmental mastery enables their ability to create environments suitable to healthy conditions. Moreover, personal growth defines one's potentialities

and underlines the importance of new challenges at different moments of life. Meanwhile, their purpose in life equates with the sense of goal directedness and intentionality. Furthermore, self-acceptance consists of self-actualization, optimal functioning, and maturity. The awareness of personal limitation helps emergency professionals to express feelings of empathy and affection for human beings and to be capable of greater dedication to service.

Working in an emergency is an emotionally demanding job that can affect psychological well-being. Psychological well-being of emergency professionals refers to the positive emotional and psychological functioning of individuals. Resilience can also be trained through short, targeted interventions that can support emergency professionals in learning to deal with stressful work-related factors. Given the high job demands of emergency care and the importance of understanding the resilience of emergency professionals contribute to greater psychological well-being.

Creating a resilient workforce takes commitment. The emergency care nurses who are supported, motivated and equipped are best positioned to overcome obstacles and distractions. Leadership is a key in establishing priorities, setting goals and allocating resources to strengthen workplace resilience. And, in communicating clearly and decisively the organization's commitment to resilience is promoted. Resilience is one of the positive emotions that will enhance emergency worker's ability to cope in adverse conditions, such as work intensification, organizational change, and work stress.

Emergency care nurses have always played a significant role in public health and become one of the main healthcare providers for patients in the battle. In this case, emergency responders have required the ability to control the environment to maintain critical functionality and improve the quality of service. Working with the increased workloads can lead to work stress, reduced emergency performance, and quality of life (Brooks et al., 2019). As the frontline of healthcare emergency, emergency professionals bear the additional responsibility of caring for their patients and the general public. According to Ji et al (2020), emergency responders have faced the challenge of saving lives.

Emergency care nurses are the ideal people for critical tasks because of their training and experience (Ji et al., 2020). When challenged during critical times, emergency care nurses not only directly treat and take care of vulnerable people but also provide psychological support, quelling the fear of the patients and the community, and addressing concerns. According to Lehmann et al (2020), emergency care nurses around the world were taking a supporting role in the response to emergency crises. The emergency care nurses which

are part of the healthcare system, have played a significant role in emergency preparedness, prevention, and response. Psychological well-being, healthcare management systems should advocate in using mental health services, such as psychological first aid, crisis interventions, and access to social media (Kang et al., 2020).

According to Babore and colleagues (2020), an awareness of alternative options to a problem and taking time to see things from novel perspectives can help build resilience. According to Rigby and Ryan (2018), resilience is generally understood as an optimistic outcome despite exposure to adversity or risk, and focuses on strengths rather than weaknesses. The emergency professionals draw on individual resources and interact with their environment by drawing on community and societal resources which may facilitate or hinder resilience.

Problem 5. Is there a significant relationship on the assessment between psychological well-being and work productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China?

Table 16a

Correlational Analysis on the Significant Relationship on the Assessment between Psychological Well-Being and Work Productivity of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China

Variables	Computed (r) correlation	Degree of Relationship	P value	Interpretation
<i>Psychological well-being to Work Productivity on Work Engagement</i>				
Autonomy	0.852 [0.018; 0.265]	High positive correlation	<0.001	with significant correlation
Environmental mastery	0.863 [0.021; 0.249]	High positive correlation	<0.001	with significant correlation
Personal growth	0.874 [0.053; 0.292]	High positive correlation	<0.001	with significant correlation
Purpose in life	0.897 [0.062; 0.326]	High positive correlation	<0.001	with significant correlation
Self – acceptance	0.868 [0.093; 0.325]	High positive correlation	<0.001	with significant correlation
Relations with others	0.875 [0.145; 0.399]	High positive correlation	<0.001	with significant correlation
<i>Psychological well-being to Work Productivity on Work Attitude</i>				
Autonomy	0.898 [-0.027; 0.225]	High positive correlation	<0.001	with significant correlation
Environmental mastery	0.824 [0.077; 0.374]	High positive correlation	<0.001	with significant correlation
Personal growth	0.810 [-0.020; 0.239]	High positive correlation	<0.001	with significant correlation
Purpose in life	0.884 [0.151; 0.414]	High positive correlation	<0.001	with significant correlation
Self – acceptance	0.850 [0.093; 0.397]	High positive correlation	<0.001	with significant correlation
Relations with others	0.825 [0.097; 0.367]	High positive correlation	<0.001	with significant correlation
<i>Psychological well-being to Work Productivity on Work Performance</i>				
Autonomy	0.839 [0.201; 0.457]	High positive correlation	<0.001	with significant correlation
Environmental mastery	0.841 [0.222; 0.457]	High positive correlation	<0.001	with significant correlation
Personal growth	0.885 [0.181; 0.477]	High positive correlation	<0.001	with significant correlation
Purpose in life	0.849 [0.124; 0.382]	High positive correlation	<0.001	with significant correlation

Self – acceptance	0.879 [0.242; 0.501]	High positive correlation	<0.001	with significant correlation
Relations with others	0.885 [0.181; 0.477]	High positive correlation	<0.001	with significant correlation

The degree of correlation based on Pearson coefficient:
r = 0.90 – 1.0: Very high; r = 0.70 – 0.89: High; r = 0.40 – 0.69: Moderate
r = 0.11 – 0.39: Weak; r = 0.01 – 0.10: Negligible; r = 0.0: No correlation

Table 16a supports the analysis in determining the significant relationship between the psychological well-being and work productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China. The correlation coefficients between psychological well-being dimensions and work productivity have a range from 0.810 to 0.897, (with p values of 0.001), indicating that there are statistically significant high positive correlations between psychological well-being and work productivity dimensions.

Table 16b

Summary of Correlational Analysis on the Significant Relationship on the Assessment between Psychological Well-Being and Work Productivity of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China

Variables	Computed r	Degree of Relationship	P value	Interpretation
Psychological Well-being and Work Productivity	.858**	High positive correlation	.001	with significant correlation

** . Correlation is significant at the 0.01 level (2-tailed).

Table 16b presents the summary of correlational analysis on the significant relationship between the self-assessed psychological well-being and work productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China. It shows that there is a statistically significant relationship between self-assessed psychological well-being and work productivity (*p*-value 0.001). The strength of their relationship exhibits high positive correlation which means that an increase in the assessment of psychological well-being would equate with very good work productivity.

Effective workplace and psychological well-being programs can have a positive impact on worker's productivity as well as the health and psychological well-being of emergency professionals. In workplaces that are set up to foster psychological well-being, people tend to be more creative, more loyal, more productive, and perform better in terms of customer satisfaction. Psychological well-being improves productivity in the workplace which does not depend exclusively on external conditions in terms of the working and practice environment within which the emergency professionals operate, hence it could be promoted.

Liu et al. (2020) described healthcare professionals having a unique perspective of personal growth which strengthens their credibility in emergency conversations. The emergency professionals improve their communication by being an information broker, supporter, and advocate. Their role spans from translating technical medical details to advocating the patient and family's goals with the wider healthcare team through to navigating across the intricacies of the health system, and clarifying the need to prevent futile overtreatment.

Environmental mastery in healthcare practice allows emergency professionals to hurdle the social impact of emergency crisis which entails alteration in work productivity and work relationships. Many emergency professionals are accustomed to facing mortality and suffering on a daily basis, yet the scope of this emergency care is staggering in which keeping up the communication and stronger collaboration with colleagues makes a difference (Hong et.al., 2020). A balanced, healthy and supportive practice environments and psychosocial work environments are all important to sustain stable engagement to work duty and high performance of workforce (Cruz and Forbes, 2020). Clearly a collegial culture and work attitude have the advantage of improving work productivity among individuals in order to get the optimum benefit from care professional's potential to contribute (Zimmerman, 2020). According to Saks (2020), creating a culture of quality work performance with patient invites care professionals to participate in their work in ways that are meaningful to them as individuals.

Problem 6. Is there a significant relationship on the assessment between psychological well-being and work productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China?

Table 17a

Correlational Analysis on the Significant Relationship on the Assessment between Resilience and Work Productivity of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China

Variables	Computed (r) correlation	Degree of Relationship	P value	Interpretation
<i>Resilience to Work Productivity on Work engagement</i>				
Active coping	0.892 [0.133; 0.409]	High positive correlation	<0.001	with significant correlation
Cognitive flexibility	0.898 [0.150; 0.463]	High positive correlation	<0.001	with significant correlation
Positive Emotions	0.895 [0.070; 0.370]	High positive correlation	<0.001	with significant correlation
Optimism	0.896 [0.355; 0.575]	High positive correlation	<0.001	with significant correlation
Spirituality	0.893 [0.200; 0.483]	High positive correlation	<0.001	with significant correlation
<i>Resilience to Work Productivity on Work attitude</i>				
Active coping	0.895 [0.161; 0.442]	High positive correlation	<0.001	with significant correlation
Cognitive flexibility	0.889 [0.214; 0.529]	High positive correlation	<0.001	with significant correlation
Positive Emotions	0.894 [0.210; 0.497]	High positive correlation	<0.001	with significant correlation

Optimism	0.893 [0.200; 0.483]	High positive correlation	<0.001	with significant correlation
Spirituality	0.895 [0.161; 0.442]	High positive correlation	<0.001	with significant correlation
<i>Resilience to Work Productivity on Work performance</i>				
Active coping	0.892 [0.133; 0.409]	High positive correlation	<0.001	with significant correlation
Cognitive flexibility	0.896 [0.355; 0.575]	High positive correlation	<0.001	with significant correlation
Positive Emotions	0.895 [0.161; 0.442]	High positive correlation	<0.001	with significant correlation
Optimism	0.898 [0.150; 0.463]	High positive correlation	<0.001	with significant correlation
Spirituality	0.892 [0.133; 0.409]	High positive correlation	<0.001	with significant correlation
<i>The degree of correlation based on Pearson coefficient:</i>				
<i>r = 0.90 – 1.0: Very high; r = 0.70 – 0.89: High; r = 0.40 – 0.69: Moderate</i>				
<i>r = 0.11 – 0.39: Weak; r = 0.01 – 0.10: Negligible; r = 0.0: No correlation</i>				

Table 17a supports the analysis in determining the significant relationship between the resilience and work productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China. The correlation coefficients between resilience dimensions and work productivity have a range from 0.892 to 0.898, (with p values of 0.001), indicating that there are statistically significant high positive correlations between resilience and work productivity dimensions.

Table 17

Correlational Analysis on the Significant Relationship on the Assessment between Resilience and Work Productivity of Emergency Care Nurses in Selected Specialty Hospitals in Anhui Province, China

Variables	Computed r	Degree of Relationship	P value	Interpretation
Resilience and Work Productivity	.892	High positive correlation	.001	with significant correlation

**. Correlation is significant at the 0.01 level (2-tailed).

Table 17 presents the summary of correlational analysis on the significant relationship on the assessment between resilience and work productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China. It shows that there is a statistically significant relationship between self-assessed resilience and work productivity (*p*-value 0.001). The strength of their relationship exhibits high positive correlation which means that an increase in the perception of resilience would equate with very good work productivity.

Resilience is a foundational work productivity tool which empowers the individual to feel capable of handling uncertainty. Resilience appears to be an important factor in helping emergency care nurses find meaning and develop positive outlooks on their professional roles. Resilience empowers them to deal with the stressors because they are able to adapt to life's misfortunes and setbacks. Moreover, resilience plays a decisive

role in the response of emergency care nurses under pressure and can help them deal with emergencies more effectively. Resilience has a direct influence on work productivity which suggests that resilience has a direct impact on job performance. A possible explanation for this may be that the protective factors of resilience have also been found to be important factors for an individual's happiness. Family, social, and personal factors positively influence happiness, as well as act as protective factors that are related to higher levels of resilience.

Work productivity is a positive and fulfilling job-related disposition characterized by vigor, dedication, and absorption. Vigor alludes to a remarkable level of energy and resilience when at work. It is the inclination to put in effort in given tasks and perseverance when encountered with difficulties. Dedication is portrayed by a sense of meaning, enthusiasm, motivation, pride, and challenge. Vigor and dedication are regarded as the opposite of exhaustion and burnout. Productive emergency care nurses possess a sense of energetic and affective link to their occupational tasks. Moreover, productive emergency care nurses experience a stable condition of positive energy to their job and feel capable of meeting job demands.

During an emergency crisis, care professionals are perceived as the first-line health provider, having a public awareness role, and providing care for injured or distressed patients. Besides being responsible for their daily activities, care professionals have roles in ensuring the safety and contentment of their patients outside hospital (Amin et al., 2021). The commitment and emotional involvement is what enables them to function as the key quality control checkpoint that prevents errors and patient mortality. When care professionals feel engaged in their work duty, their work will be enhanced by the satisfaction of being good at their jobs and achieving work goals, by excitement about challenges and by appreciation in relationships with colleagues (Wais, 2019). Zang (2020) defined resilience as “positive adaptation to face adversity, flexibility, psychological well-being, strength, healthy life, burden, social network, and satisfaction with social support”. He described emergency professionals who have high resilience would experience low burden even when they experience high care demand. Collegiality provides a framework in which professionals are expected to hold each other accountable for the care that is given, and for its congruence with standards (Odessa et.al., 2019). According to Fletcher and Sarkar (2021) higher work performance yields improved patient outcomes. Involving patients in the redesign of health care can lead to improved effectiveness, efficiency and quality of health services, improved quality of life, and enhanced quality and accountability of health services.

Problem 7. Is there a significant relationship on the assessment between psychological well-being,**resilience and work productivity of emergency care nurses in selected specialty hospitals****in Anhui Province, China?****Table 18***Multiple Regression Analysis Between Factors of Psychological Well-Being, Resilience and Work Productivity of Emergency Care Nurse Respondents in Selected Specialty Hospitals in Anhui Province, China*

Predictors	B	SE	β	t	p- value
PSYCHOLOGICAL WELL BEING					
(Constant)	0.858	0.052		16.418	.000
Autonomy	0.265	0.027	0.367	10.039	.000
Environmental Mastery	0.204	0.021	0.391	9.784	.000
Personal Growth	0.150	0.031	0.274	8.302	.000
Purpose in Life	0.135	0.029	0.153	5.052	.000
Self-Acceptance	0.220	0.020	0.367	11.268	.000
Relationship with Others	0.206	0.021	0.396	9.788	.000
$R^2 = .766$, $F = 341.75$, $Sig = .000$					
** p < .01, *** p < .001, * p < .05					
Predictors	B	SE	β	t	p- value
RESILIENCE					
(Constant)	0.119	0.082		0.072	.000
Active Coping	0.352	0.030	0.367	11.895	.000
Cognitive Flexibility	0.268	0.054	0.276	8.393	.000
Positive Emotions	0.132	0.026	0.152	5.050	.000
Optimism	0.219	0.019	0.365	11.265	.000
Spirituality	0.126	0.025	0.183	8.302	.000
$R^2 = .782$, $F = 276.39$, $Sig = .000$					
** p < .01, *** p < .001, * p < .05					

Table 19 utilizes multiple regression analysis to predict the sub-scales of psychological well-being and resilience predicting work productivity. Among the six dimensions of psychological well-being, the results indicate that autonomy, environmental mastery, personal growth, purpose in life, self-acceptance, and relationship with others, showed a positive relationship with work productivity (p -value <0.05). The outcome of the standard multiple regression analysis revealed that all dimensions of psychological well-being predicted 76.6% of the variance in work productivity ($R^2 = .766$, $F = 341.75$, $p < 0.000$). This result is entirely consistent with the definition of work productivity which entails work engagement, work attitude, and work performance among individuals taking different things in different contexts, especially with the rise of knowledge work and automation, they consistently and efficiently complete their tasks and accomplish their goals. Psychosocial well-being helps the emergency care staff become productive at work as they practice autonomy with environmental mastery and feel more in control of their personal growth, greater purpose in life. Having self-acceptance and good relationships with their colleagues make them more efficient and more likely to become more productive.

Moreover, among the five dimensions of resilience, the results indicate that active coping, cognitive flexibility, positive emotions, optimism, and spirituality showed a positive relationship with work productivity (p -value <0.05). The outcome of the standard multiple regression analysis revealed that all dimensions of resilience predicted 78.2% of the variance in work productivity ($R^2 = .782$, $F = 276.39$, $p < 0.000$). This result also equates with the principles of measuring the amount of work done in a certain period. Resilient emergency care nurses tend to be more engaged, more motivated, and focus on their tasks and produce more results faster. Resilient emergency care nurses are productive care providers and they are usually more motivated, have higher levels of creativity and innovation, and produce better results. Their work productivity results from many factors of resilience including active coping, cognitive flexibility, positive emotions, optimism, and spirituality.

Emergency care nurses who are psychologically well and resilient are better equipped to provide high-quality, patient-centered care. A culture of well-being and resilience translates into improved communication, empathy, and overall job performance. Similarly, a high level of psychological well-being is linked to increased resilience which in turn, increases work productivity. Fostering a culture of psychological well-being is not just an ethical responsibility but a strategic imperative for healthcare organizations. By investing in the psychological well-being of emergency care nurses, resilience is nurtured in the workforce and also contributes to the overall health and vibrancy of the emergency care services.

According to Hong et.al. (2020), frontline nurses as those assigned in emergency care units may experience stress and anxiety because they often witness patients' suffering which has a significant impact on their psychological well-being. Resilience is the ability to cope successfully with stressful events and reduces the effects of workplace stressors, so it is an effective way to enhance employees' psychological well-being. High resilience has a close relationship with work productivity. Emergency care nurses play an important role in providing health services and direct patient care. Their psychological well-being and resilience are key components which are critical to ensuring safe patient outcomes (Cai et.al., 2020).

Problem 8. Based on the results of the study, what framework of improved inter-professional emergency team collaboration can be proposed?

The range of complexity of factors that influence the success of emergency response requires emergency care nurses from diverse health professions to work together in a comprehensive manner. Working together, the combined knowledge and skills of health professionals become a powerful mechanism to enhance

work productivity. As the delivery of care evolves to become more interconnected, coordinating care between emergency care nurses has become increasingly important. In its simplest form, inter-professional collaboration is the practice of approaching patient care from a team-based perspective.

Improved inter-professional emergency team collaboration has a distinctive identity that members value in addition to their own professional allegiances. They appreciate each other's roles, and agree on the team's common purpose. The group climate is supportive rather than defensive, and conflicts are addressed openly in order to seek a satisfactory resolution. Inter-professional collaboration is also assisted through facilitatory leadership styles, the relatively equal status of members, and mutual respect.

Inter-professional emergency team collaboration is latent and relies on transparency of information, assessments, perspectives and strategies among all team members. The emergency care team is more likely to address the patient's needs successfully with continual performance of individual functions that maximize the likelihood of positive outcomes. In a nutshell, inter-professional emergency team collaboration can be enhanced by an interplay between self-esteem, adaptability, and efficiency. These dimensions are crucial factors that determine the outcomes of interventions. Figure 3 depicts how the components of psychological well-being, resilience, and work productivity interact with one another in terms of behavioral factors, personal factors, and environmental factors enhance interprofessional emergency team collaboration. By the very nature, all essential domains require synchronizing and combining individual team member contributions and providing performance expectations and acceptable interaction patterns involve continual process.

The interprofessional emergency team collaboration framework delineates the essentials of improved self-esteem, improved adaptability, and improved efficiency. The proposed framework includes elements that serve as guide for all members of the emergency team towards the delivery of enhanced person-centered care and improved patient and health outcomes. The framework involves a set of high impact team-based competencies and behaviors that can be easily referenced in complex, fast-paced collaborative environments and widely implemented at all levels of the emergency care. The orientation of the proposed framework is based on a pragmatic approach to maximize performance enhancement towards enhanced interprofessional collaboration in the hospital institution.

The proposed framework supports interprofessional collaboration which is placed at the center of the figure. The framework extends to three primary domains which encircle interprofessional collaboration in the figure: (1) improved self-esteem, (2) improved adaptability, and (3) improved efficiency. As interprofessional

teamwork defines working together to deliver the highest quality of care, several healthcare practitioners come together to integrate strengths and capacities. The primary domains of the framework draw on the strengths and capacities of team members by being assertive, receptive and responsive, and goal-oriented. Moreover, in terms of improved adaptability, interprofessional team members need to be focused under pressure, energetic, and proactive. Furthermore, in terms of improved efficiency, interprofessional team members requires to be hardworking, resourceful, and maintain positive attitude.

Interprofessional emergency team collaboration framework recognizes the importance of having improved self-esteem because it encompasses the development of a variety of skill sets and characteristics. Interprofessional collaboration provides members with the perfect opportunity to foster both personal and professional growth. Interprofessional collaboration also encourages networking, which plays a significant role in one's self-esteem. Interprofessional collaboration combines different levels of knowledge, expertise, and experience to provide patients with the best possible care and, in return, improve patient outcomes.

Taking an active role in the process of interprofessional emergency team collaboration is an excellent way to enhance one's adaptability. The weight of every emergency care decision for a patient takes huge responsibility when it comes to patient care where the entire team of professionals efficiently collaborate to one another. Knowing that team members hold responsible for the patient gains access to resources including other staff members. By creating a mutually beneficial relationship among members of the interprofessional emergency team allows efficient resource utilization towards better care for the patients.

Interprofessional emergency team collaboration entails provision for physical, emotional, mental, social, and spiritual needs of the patient to enhance one's efficiency. This approach allows the whole patient care team to provide patients with a holistic care approach and working very closely with all members of the team ensures a holistic approach is maintained and delivered. Within the framework of interprofessional emergency team collaboration, members of the team can foster a healthier work environment that encourages and promotes efficient teamwork. The dynamics of efficient teamwork helps strengthen the relationships between members of the interdisciplinary team.

Within established relationships, interprofessional emergency team members can rely on one another for guidance, fully utilize the available resources, and quickly resolve any conflicts that may occur. This directly impacts the self-esteem, adaptability, and efficiency of the interprofessional emergency team as well

as helps achieve the common goal of safe and high-quality patient care. Interprofessional teamwork is a crucial component in the process of ensuring patient safety.

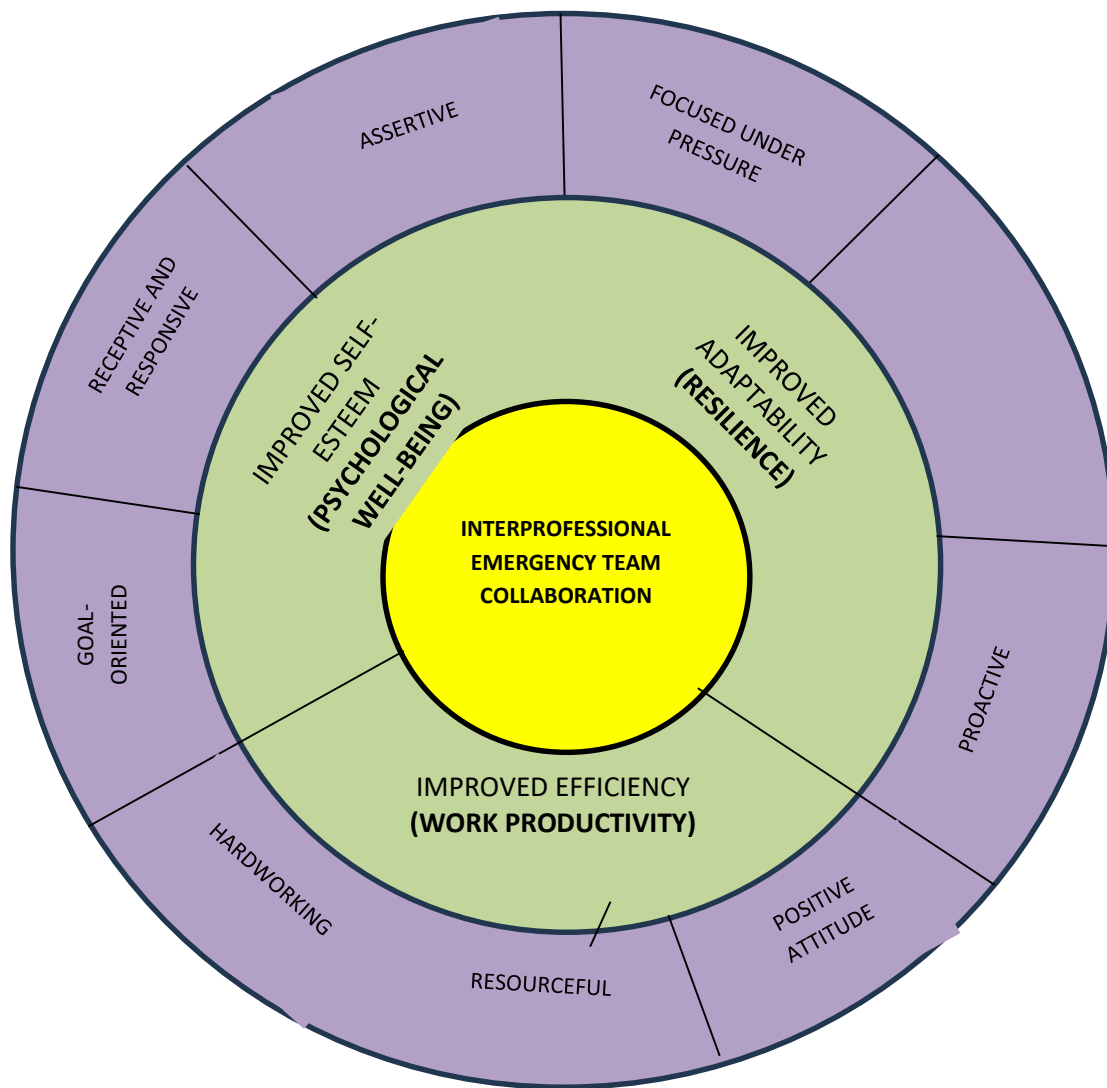


Figure 3. Inter-Professional Emergency Team Collaboration Framework

In order for emergency care nurses in medical emergency response units to become more productive, it is necessary to enhance the following:

Improved Self-Esteem - Investing on behavior is straightforward and demands establishing new habits since process levels have an impact on nurses' wellbeing and performance. Developing routines and outlets to sustain is essential to maintain boundaries so that work does not overly intrude into other aspects of life. It makes sense that we cannot be resilient at work without being on top of our everyday pressures and priorities. A key aspect of role clarity is having effective ways to manage the everyday challenges. It is also ensuring that work demands do not overly compromise personal life. Actively engaging with a challenge strengthens the brain's pathway

for improved future coping. Good workload management such as prioritizing, scheduling or negotiating expectations.

Improved Adaptability - Maintaining perspective and positivity requires having adequate staffing to perform the job. Having enough workforce promotes greater work satisfaction which are anchored on resilience that entails the ability to manage one's mood, letting go of what cannot be influenced. In essence, it is positivity with a flexible plan, and engagement with work that is difficult, dynamic and unpredictable.

Improved Efficiency – Having a sense of connection and relationships with diverse professions who are digitally competent also strengthens positive technological connection which can improve nurses' mood and reduce distress response. Considering all the essential assistance and determining which technologies can foster both improve psychological well-being and resilience. Promoting mutual support for technological integration is a good starting point because it supports individual values and promotes a climate of openness and advancement. Technology promotes greater adaptability as anyone needs to achieve more efficient performance.

Organizing what can be done and having a sense of belonging promote work engagement, work attitude, and work performance of emergency nurses. Having a passion for the job and feeling connected to with work enhance work productivity. Similarly, professional integrity promotes resilience. Personal strengths and leadership are both proactive elements of strategic management. This aspect often becomes more noticeable when accountability for personal resilience rests with every member of the emergency care team, and the outcomes are shaped by the unwritten rules of how things operate.

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings, conclusions drawn from the findings and recommendations made by the researcher based on the interpretation of results of the study.

5.1 Summary

This study was conducted to determine the well-being, resilience, and work productivity among emergency care nurses in selected specialty hospitals in Anhui Province, China with the end view of proposing a framework for improved inter-professional emergency team collaboration. The study utilized descriptive-correlational research design to emergency care nurse respondents (n=218) who were randomly selected. Data were obtained using adopted and validated structured research instruments anchored on four-point Likert scale which include Psychological Well-Being Questionnaire (Ryff and Keyes, 2018); Connor-Davidson Resilience Scale (2020); and Work Productivity Scale (Dulewicz and Higgs, 2016). Psychological Well-Being focused on autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Meanwhile, Resilience focused on active coping, cognitive flexibility, positive emotion, optimism, and spirituality. Furthermore, Work Productivity focused on work engagement, work attitude, and work performance. Descriptive statistics were used to describe and analyze gathered information.

5.2 Summary of Findings

5.2.1 On the assessment of the emergency care nurses on their psychological well-being in selected specialty hospitals in Anhui province, China in terms of: autonomy; environmental mastery; personal growth; purpose in life; self-acceptance; and relations with others.

The self-assessed psychological well-being of the emergency nurses in selected specialty hospitals in Anhui province, China yielded the following findings: autonomy showed an overall mean of 3.54 verbally interpreted as “strongly agree”; environmental mastery illustrated an overall mean of 3.45 verbally interpreted as “strongly agree”; personal growth presented an overall mean of 3.57 verbally interpreted as “strongly agree”; purpose in life showed an overall mean of 3.60 verbally interpreted as “strongly agree”; self-acceptance illustrated an overall mean of 3.53 verbally interpreted as “strongly agree”; and relations with others showed an overall mean of 3.41 verbally interpreted as “strongly agree”.

5.2.2. On the assessment of the emergency care nurses on their resilience in selected specialty hospitals

in Anhui Province, China in terms of: active coping; cognitive flexibility; positive outcomes; optimism; and spirituality.

The self-assessed resilience of the emergency care nurses in selected specialty hospitals in Anhui Province, China yielded the following findings: active coping yielded an overall mean of 3.56 verbally interpreted as “strongly agree”; cognitive flexibility presented an overall mean of 3.42 verbally interpreted as “strongly agree”; positive emotions presented an overall mean of 3.55 verbally interpreted as “strongly agree”; optimism illustrated an overall mean of 3.47 verbally interpreted as “strongly agree”; and spirituality illustrated an overall mean of 3.45 verbally interpreted as “strongly agree”.

5.2.3. On the assessment of the emergency care nurses on their work productivity in selected specialty hospitals in Anhui Province, China in terms of: work engagement; work attitude; and work performance.

The self-assessed resilience of the emergency care nurses in selected specialty hospitals in Anhui Province, China yielded the following findings: work engagement dimension showed an overall mean of 3.33 verbally interpreted as “strongly agree”; work attitude dimension illustrated an overall mean of 3.43 verbally interpreted as “strongly agree”; and work performance dimension presented an overall mean of 3.46 verbally interpreted as “strongly agree”.

5.2.4. On the significant relationship on the assessment between psychological well-being and resilience of emergency care nurses in selected specialty hospitals in Anhui Province, China.

Correlational analysis on the significant relationship between the self-assessed psychological well-being and resilience of emergency care nurses in selected specialty hospitals in Anhui Province, China showed statistically significant relationship (p -value 0.001). The strength of their relationship exhibits high positive correlation which means that an increase in the perception of psychological well-being would highly improve resilience.

5.2.5. On the significant relationship on the assessment between psychological well-being and work**productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China.**

Correlational analysis on the significant relationship between the self-assessed psychological well-being and work productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China showed statistically significant relationship (p -value 0.001). The strength of their relationship exhibits high positive correlation which means that an increase in the perception of psychological well-being would highly improve work productivity.

5.2.6. On the significant relationship on the assessment between resilience and work productivity of**emergency care nurses in selected specialty hospitals in Anhui Province, China.**

Correlational analysis on the significant relationship between the self-assessed resilience and work productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China showed statistically significant relationship (p -value 0.001). The strength of their relationship exhibits high positive correlation which means that an increase in the perception of psychological well-being would highly improve work productivity.

5.2.7. On the significant relationship on the assessment between psychological well-being, resilience, and**work productivity of emergency care nurses in selected specialty hospitals in Anhui Province, China.**

Among the six dimensions of psychological well-being, the results indicate that autonomy, environmental mastery, personal growth, purpose in life, self-acceptance, and relationship with others, showed a positive relationship with work productivity (p -value <0.05). The outcome of the standard multiple regression analysis revealed that all dimensions of psychological well-being predicted 76.6% of the variance in work productivity. Moreover, among the five dimensions of resilience, the results indicate that active coping, cognitive flexibility, positive emotions, optimism, and spirituality showed a positive relationship with work productivity (p -value <0.01). The outcome of the standard multiple regression analysis revealed that all dimensions of resilience predicted 78.2% of the variance in work productivity.

5.3 Conclusions

5.3.1. The psychological well-being of emergency care nurses in selected specialty hospitals in Anhui Province, China confirmed that they need to sustain having firm decisions, staying strong in coping with demands of everyday life since life is a continuous process of learning, changing, and growth. They always

consider having a positive direction, are grateful in many ways about achievements in life, and always experience warm and trusting relationships with others.

5.3.2. The resilience of the emergency care nurses in selected specialty hospitals in Anhui Province, China confirmed that they are able to adapt when changes occur, stay focused under pressure, always make their best effort, always believe they can achieve their goals in spite of obstacles, and think of themselves as strong persons when praying with life's challenges.

5.3.3. The work productivity of the emergency care nurses in selected specialty hospitals in Anhui Province, China confirmed that they work hard to achieve their goals, efficiently utilize all necessary resources to perform their job well, and maintain a positive attitude at work.

5.3.4. The emergency care nurses who are supported, motivated and equipped are best positioned to overcome obstacles and distractions. Their purpose in life equates with the sense of goal directedness and the awareness of personal limitation helps emergency professionals to express feelings of empathy and to be capable of greater dedication to service.

5.3.5. In emergency care workplaces that are set up to foster psychological well-being, nurses tend to be more creative, more loyal, more productive, and perform better in terms of customer satisfaction. Psychological well-being improves productivity in the workplace which does not depend exclusively on external conditions in terms of the working and practice environment. A balanced, healthy and supportive practice environments and psychosocial work environments are all important to sustain stable engagement to work duty and high performance.

5.3.6. Resilience appears to be an important factor in helping emergency care nurses find meaning and develop positive outlooks on their professional roles. Resilience empowers them to deal with the stressors because they are able to adapt to life's misfortunes and setbacks. Moreover, resilience plays a decisive role in the response of emergency care nurses under pressure and can help them deal with emergencies more effectively.

5.3.7. The high level of psychological well-being is linked to increased resilience which in turn, increases work productivity. Fostering a culture of psychological well-being is not just an ethical responsibility but a strategic imperative for healthcare organizations. By investing in the psychological well-being of emergency care nurses, resilience is nurtured in the workforce and also contributes to the overall health and vibrancy of the emergency care services.

5.4 Recommendations

Process Optimization

5.4.1. Hospital emergency department to adopt fast-track systems using advanced triage protocols and enhanced coordination with other hospital departments. Understanding the current workflow and having an optimized process based on patient influx trends and involvement of multidisciplinary teams, an efficient triage system would allow proactive patient management.

5.4.2. Hospital emergency care units to identify the bottlenecks, blockers, and dependencies in order to sustain rapid diagnostic and treatment procedures especially at the point-of-care testing. Enhancing decision support systems and standardized treatment protocols provides easier access to critical care resources and better coordination with intensive care units.

Staffing

5.4.3. Interprofessional emergency team members to have flexible staffing models and continuous staff training. Effective internal communication channels, training in communication skills, regular team meetings, and feedback loops are essential to a positive practice environment.

5.4.4. Interprofessional emergency team members to be well-prepared in handling high-pressure or dealing with difficult situations. Enhancing their self-motivation and promoting career development are both crucial for resilience. Aligning staffing with patient influx through predictive analytics for more efficient staffing, task delegation, wellness programs, and feedback-driven improvements are key factors to timely accomplishment of all tasks.

Technological Integration

5.4.5. Hospitals use advanced diagnostic tools, enhance communication with inpatient units, and implement multidisciplinary teams for comprehensive assessment. With state of the art technology in place in the emergency care, turnaround times can be reduced, information can be clearly provided, comfortable waiting areas and patient-centered care approach can be achieved.

5.4.5. Hospitals to consider technology in dealing with complaint management systems, patient feedback analysis, and continuous service improvement. Having an efficient technology allows more efficient workload management, efficient administrative processes and supportive work environment which makes emergency care practice more productive and satisfactory.

- 5.4.6. Hospital administrator and emergency care unit managers to sustain adherence to clinical guidelines, regular training in current standards, and use of evidence-based protocols, regular monitoring and auditing, patient feedback surveys, and staff training in quality improvement. Benchmarking against best practices and implementation of best practice guidelines would also improve customer service.
- 5.4.7. Hospital administrator and emergency care unit managers to prioritize the psychological health of interprofessional emergency team members through social support, team building and human capital development. Having wellness programs would also improve morale and develop resilience that is more effective than a single strategy. Emergency care units to reduce wait times, provide clear information, comfortable waiting areas, and patient-centered care approach.

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