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Original Research

The Moderating Role of Emotional Intelligence on the Relationship Between Nurses' Preparedness to Care for COVID-19 Patients and Their Quality of Work-Life

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Abstract: Emotional intelligence (EI) is increasingly recognized as a key factor in healthcare, where managing emotions is critical for job satisfaction, productivity, and interpersonal relationships. For nurses, particularly during the COVID-19 pandemic, EI plays a pivotal role in navigating emotional challenges and improving their quality of work-life (QoWL). This study aims to examine how EI moderates the relationship between nurses' preparedness to care for COVID-19 patients and their QoWL. A cross-sectional, correlational design was used, involving 267 nurses from various healthcare settings. Data were collected through the Emotional Intelligence Scale, the Quality of Nursing Work Life survey, and demographic questionnaires, and analyzed using hierarchical regression. The results showed that nurses' preparedness to care for COVID-19 patients did not initially predict QoWL ($\beta = .034$, $p = .57$). However, when EI was included, it significantly moderated this relationship, explaining 41% of the variance in QoWL. Both personal and social competence components of EI had a buffering effect, highlighting the importance of EI in improving nurses' work-life quality ($\beta = .578, .665$, $p < .001$). These findings suggest that fostering EI in nurses can enhance their resilience and work-life quality, particularly in high-stress healthcare environments like those experienced during the pandemic.

Keywords: emotional intelligence; nurses; COVID-19 preparedness; quality of nursing work life; healthcare crises; nurse well-being

1. Introduction

Emotional Intelligence (EI) refers to the ability to recognize, understand, manage, and utilize emotions effectively in oneself and others. Goleman's model of Emotional intelligence comprises four primary skills: self-awareness, self-management, social awareness, and relationship management [1]. In this model, both self-awareness and self-management components focus on the person, while social awareness and relationship management are concerned with the individuals' relationships [2,3].

Although emotional intelligence does not naturally increase with age, anyone can develop it at any stage of their life. Some people can benefit from their life experiences. Furthermore, developing Emotional Intelligence isn't easy due to the necessity of perseverance, determination to change, and behavioral practice [4]. In the high-stress healthcare environment, where nurses frequently encounter emotionally charged situations, EI plays a pivotal role in their overall job satisfaction, well-being, and performance. In this context, in various studies, EI has been linked to work-life quality among employees, including nurses in healthcare settings.

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Furthermore, EI has been found to affect organizational and nurses' performance [5,6]. Several epidemics and pandemics have occurred across the globe, impacting thousands to millions of people. Medical advancements have not prevented new pathogens from posing a threat to human life, economic security, and health systems [7].

Being at the forefront of the COVID-19 disease fight, nurses are at higher risk of contracting the disease and still face ethical dilemmas [8,9]. Furthermore, nurses working directly with Coronavirus patients often witness patients dying and suffering, which affects their mental well-being and causes fatigue of compassion [10] as well as manifestations of post-traumatic stress [11]. As a result of the significant stress nurses experienced during the COVID-19 pandemic, their health and well-being were negatively affected, and they were performing life-saving procedures under dangerous conditions [12].

In their integrative study, Al Thobaity and Alshammari [13] highlighted the most common problems nurses encounter when caring for COVID-19 patients, and emergency interventions have been recommended. The most frequently reported problem is a shortage of nurses, which becomes even more severe when some become ill or are quarantined. Additionally, anxiety-related depression and fear of infection, the lack of patient contact, fatigue due to long hours of work without adequate nutrition, and the lack of medical supplies and resources, especially personal protective equipment (PPE), were identified as significant concerns [13]. Generally, nurses who experience high levels of stress and emotional exhaustion report less work-life quality, decreased job satisfaction, and a greater desire to leave their current positions. Another possibility is compassion exhaustion, which occurs when coping abilities are depleted. As a result, their tolerance levels drop and they become burnt out, which adversely impacts their work lives and careers [13,14].

For the emergency interventions, Al Thobaity & Alshammari, (2020) recommended that nurses need to maintain a pandemic emergency plan to guide them before, during, and after health-related crises. Additionally, nursing leaders and powers should invest in nurses since they make up the largest group of healthcare professionals with very specific and important roles in care provision and management. Furthermore, all medical supplies, especially personal protective equipment, must be available to nurses and patients to prevent infection and keep them healthy [13].

The atmosphere in which nurses work is extremely dangerous. Nurses, among many others, face biological, physical, chemical, and psychosocial hazards. All of these considerations must be considered to establish a safe practice atmosphere [15].

The relationship between Emotional Intelligence and nurses' work life is profound. By enhancing their ability to manage emotions, foster positive relationships, and navigate the complexities of patient care, EI significantly contributes to a more fulfilling and sustainable nursing career.

Aim:

This study aims to explore how Emotional Intelligence (EI) moderates the relationship between nurses' preparedness to care for COVID-19 patients and their quality of work life.

Objectives:

1. To evaluate the level of Emotional Intelligence among nurses during the COVID-19 pandemic.
2. To assess nurses' perceptions of their work-life quality amid the COVID-19 pandemic.
3. To examine the level of preparedness among nurses for managing COVID-19 patients.
4. To analyze the interplay between Emotional Intelligence, preparedness to care for COVID-19 patients and quality of work-life among nurses.

Theoretical Framework

The current study is grounded in the Job Demands-Control (JDC) model, originally proposed by Karasek (1979)[16]. This model posits that an imbalance between job demands and job control is a key predictor of employees' well-being. In this framework, job demands are defined as the physical, emotional, and psychological stressors that challenge an individual's ability to complete tasks, whereas job control refers to the degree of decision-making autonomy and the ability to use skills in managing job-related responsibilities. According to the model, the interplay between job demands

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and job control creates different job experiences: high job demands with low control result in high-strain jobs, which can negatively affect workers' health and psychological well-being, while high demands with high control lead to active jobs that foster learning, motivation, and positive well-being.

The model also emphasizes the importance of social support from peers and supervisors, which can buffer the negative effects of high job demands. In the context of nursing, this framework is particularly relevant, as nurses face intense demands in high-stress environments like those encountered during the COVID-19 pandemic.

In this study, emotional intelligence (EI) is hypothesized as a key moderating skill that enhances nurses' ability to manage and control job demands. EI, through its components of self-awareness, self-regulation, empathy, and social skills, enables nurses to better navigate job stressors, make more informed decisions, and maintain emotional balance. By applying EI, nurses are expected to improve their job control, which would contribute to greater motivation, skills development, and ultimately, enhanced quality of work life (QoWL). Thus, EI is a crucial resource that mitigates the impact of job demands and fosters a more positive work environment, leading to improved well-being and performance (Refer to Figure 1).

Hypothesis: Emotional Intelligence (EI) is expected to influence nurses' Quality of Work Life (QoWL) both directly and indirectly by moderating the relationship between nurses' preparedness to care for COVID-19 patients and their QoWL (Refer to Figure 1).

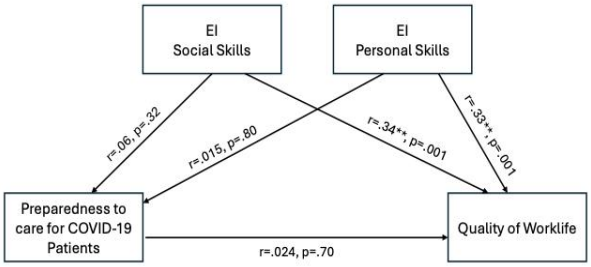

Figure 1. Conceptual Framework.

Literature Review

In the healthcare sector, Emotional Intelligence (EI) is broadly defined as the ability to recognize, understand, manage, and influence one's own emotions and the emotions of others [17]. In healthcare settings, where stress is often high and relationships with patients and colleagues are crucial, EI has emerged as a critical factor influencing job satisfaction [18,19], interpersonal relationships [19], Patient outcomes [20], and overall nurses' well-being [18,21].

International studies have consistently demonstrated the value of EI in healthcare. In Indonesia [22] and India, [23] the researchers found that nurses with higher levels of EI were better able to manage work-related stress. In contrast, Soriano-Vázquez [18] found that nurses working in Puro hospitals had higher levels of job satisfaction and career longevity. Concomitantly, Kerimi, Leggat, Bartram, et al. [24] explored how emotional awareness and self-regulation, key components of Emotional Intelligence, help healthcare professionals cope with the emotional toll of patient care. Their findings highlight that higher levels of Emotional Intelligence significantly contribute to improved mental well-being, psychological empowerment, and job performance, ultimately enhancing the quality of patient care and the overall work environment.

In the regional context, Othman, et al., [6] investigated the relationship between Emotional Intelligence, job satisfaction, and organizational commitment among first-line nurse managers in Qatar. Their study revealed that nurses with higher levels of Emotional Intelligence demonstrated better resilience, greater job satisfaction, and stronger organizational commitment. These findings are particularly relevant in the Gulf region, where nurses encounter unique cultural and systemic challenges, emphasizing the importance of Emotional Intelligence in navigating these complexities. Nationally, Aljarboa et al. [25] found that Saudi Arabian nurses with higher levels of Emotional

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Intelligence demonstrated greater resilience in managing stressors such as compassion fatigue and burnout, particularly during the COVID-19 pandemic. Their ability to effectively regulate emotions helped them cope with the overwhelming demands of the healthcare system, highlighting the critical role of Emotional Intelligence in maintaining mental well-being during crises.

Moreover, EI has been found to have a direct and significant relationship with nurses' Quality of Work Life (QWL). Several studies, including Nathaya et al., [26] found that Emotional Intelligence (EI) has a direct and significant impact on nurses' Quality of Work Life (QWL). Their study demonstrated that Indonesian nurses with higher EI experience better work-life balance, increased job satisfaction, and reduced burnout. By effectively managing emotional stressors, these nurses were able to maintain a healthier work environment, resulting in enhanced overall job performance and personal well-being. Similarly, Tajigharajeh et al. [27] investigated the relationship between EI, interpersonal sensitivity, and QWL in nurses. Their findings revealed that nurses with higher Emotional Intelligence were better equipped to handle interpersonal challenges, which contributed to improved QWL. The ability to manage emotions not only positively influenced their work-life balance but also enhanced their relationships with colleagues and patients, fostering a supportive and productive workplace.

In the Saudi Arabian context, Baghdadi et al. [28] highlighted the association between higher levels of Emotional Intelligence (EI) and better emotional regulation, which contributed to improved well-being and perceived caring behavior among nursing students. This reflects broader patterns observed among professional nurses, where EI plays a crucial role in managing stress and preventing burnout. Similarly, Shahin et al. [29] demonstrated that nurses with higher EI working in primary healthcare centers experienced lower levels of burnout and emotional fatigue, leading to improved job satisfaction and a better quality of work life. Conversely, nurses with lower EI found it more challenging to manage workplace stressors, which contributed to greater emotional exhaustion, reduced job satisfaction, and higher turnover intentions. In line with these findings, Almansour [30] emphasized that Saudi nurses and nursing students with elevated EI were more resilient and better equipped to handle the emotional demands of patient care, underscoring the importance of EI in promoting a healthier and more sustainable nursing work environment.

Preparedness is an essential concept in healthcare, particularly in response to pandemics and other health crises. The Theory of Planned Behavior (TPB) provides a useful framework for understanding the factors that influence nurses' preparedness to care for COVID-19 patients. According to TPB, behavior is driven by attitudes, subjective norms, and perceived behavioral control [31]. In the context of the pandemic, these factors are significantly shaped by the availability of resources, training, and support systems, which collectively enhance nurses' confidence and preparedness to respond effectively.

International studies, such as those conducted by Razu et al. [32], highlighted the global challenges faced by healthcare professionals during the COVID-19 pandemic, including shortages of protective equipment, inadequate training, and emotional strain. Additionally, the National Academies of Sciences, Engineering, and Medicine [33] emphasized the importance of supporting the health and professional well-being of nurses, advocating for policies that address these challenges. Furthermore, research by Hill et al.[34] documented specific work-based concerns among Australian frontline healthcare workers during the first wave of the pandemic, reinforcing that feelings of preparedness can mitigate stress and enhance job satisfaction.

In Saudi Arabia, the preparedness of healthcare workers to respond to crises such as the COVID-19 pandemic has been pivotal. Research indicates that the country faced unique challenges and developed targeted interventions to enhance its healthcare response. A qualitative study by Arbaein et al. [35] examined the Makkah healthcare cluster's response during the pandemic, revealing significant challenges, including resource allocation, staff training, and the integration of emergency protocols. These factors are critical for ensuring that nurses and other healthcare professionals are adequately prepared to handle the demands of infectious disease outbreaks. Furthermore, a cross-sectional study by Altwaijri et al. [36] reported high levels of psychological distress among healthcare workers during the pandemic. This highlights the need for effective preparedness strategies that not

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only equip nurses with the necessary skills and resources but also address their mental health needs. The emotional and psychological burdens faced by nurses can significantly impact their performance and overall quality of care, making it essential to foster resilience and coping mechanisms within the workforce.

Sheerah et al. [37] provided a comprehensive overview of public health challenges during the pandemic, emphasizing the importance of strengthening healthcare infrastructure and support systems. They noted that while significant strides have been made, continuous improvement in training, resource availability, and emotional support for healthcare workers remains crucial for enhancing preparedness.

Together, these studies underscore the importance of a multifaceted approach to preparedness in Saudi Arabia, focusing not only on the practical aspects of training and resources but also on the psychological well-being of healthcare professionals. By prioritizing both elements, the Saudi healthcare system can better equip its workforce to manage future health crises effectively.

By emphasizing preparedness through the lens of the TPB, we can better understand how to cultivate an environment where nurses feel equipped to handle crises, ultimately leading to improved job satisfaction, quality of care, and overall well-being in challenging healthcare settings.

Streamlining, the relationship between preparedness and quality of work life (QWL) has been extensively explored in the context of nursing. Research indicates that a nurse's sense of preparedness for crises like COVID-19 significantly influences their work-life quality. For instance, Goniewicz et al. [38] highlighted that factors such as experience and organizational preparedness positively impact nurses' preparedness to respond to disasters, which in turn affects their overall QWL. Preparedness is not only linked to the ability to manage immediate challenges but also plays a critical role in reducing stress and burnout.

Additionally, a regional study by Fahmy et al. [39] found that Egyptian nurses who felt adequately prepared for the emotional and physical demands of working in isolation hospitals reported lower levels of compassion fatigue and better time management. This suggests that effective preparedness can lead to improved emotional resilience, ultimately enhancing the quality of work life.

National studies, in the Saudi Arabian context, Al Mutair et al. [40] conducted a descriptive cross-sectional study that revealed a direct correlation between the quality of nursing work life and the levels of preparedness among nurses. Their findings suggest that nurses who feel well-prepared for their roles report higher satisfaction in their work lives, highlighting the importance of training and resources in enhancing nurses' overall well-being. Similarly, Alharbi et al. and Alharbi et al. [10,41] echoed these findings, reporting that Saudi nurses with higher preparedness levels experienced better work-life quality and lower levels of stress, further underscoring the role of preparedness in fostering resilience in high-pressure healthcare environments.

Collectively, these findings underscore the importance of fostering a well-prepared nursing workforce, as it directly contributes to their mental well-being and job satisfaction. Nurses who feel ready to tackle the challenges of their roles are likely to experience reduced stress and emotional exhaustion, leading to a more positive and sustainable work-life quality.

The interaction between Emotional Intelligence (EI), Preparedness, and Quality of Work Life (QWL) is crucial in healthcare, especially during crises like the COVID-19 pandemic. Studies consistently show that nurses with higher EI are better equipped to manage stress and maintain preparedness, leading to enhanced QWL. Moradian et al. and Alam et al. [42,43] found that higher EI improves emotional regulation, and resilience, and reduces psychological stress in nurses. This not only allows them to cope more effectively with the demands of patient care but also mitigates the risk of burnout, even when facing resource constraints or remote working environments. Collectively, these findings emphasize EI as a key factor in enhancing preparedness and maintaining a healthier work-life balance for nurses.

In the Middle East, research consistently highlights the moderating role of Emotional Intelligence (EI) in reducing stress and enhancing work-life quality among nurses. Alhawatmeh et al. [44] found that resilience, supported by high EI, mitigated stress and improved the quality of life for

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Jordanian nurses during the COVID-19 pandemic. Similarly, Jawabreh [45] demonstrated that ICU nurses in the region with higher EI exhibited better coping mechanisms, allowing them to manage the intense emotional demands of critical care, thereby enhancing job satisfaction.

Nationally, Aljarboa et al. [25] observed that Saudi nurses with elevated EI were more resilient and able to maintain work-life balance despite the challenges of low preparedness during the pandemic. This aligns with Turjuman and Alilyyani's [46] findings, which emphasize that higher EI correlates with improved performance and work engagement among Saudi nurses, reinforcing the critical role EI plays in navigating crises and improving both preparedness and quality of work life.

The literature demonstrates a strong interconnection between Emotional Intelligence (EI), preparedness, and Quality of Work Life (QWL) among nurses, particularly in crises such as the COVID-19 pandemic. Both regional and national studies highlight the buffering effect of EI in mitigating stress and enhancing resilience, thereby improving nurses' preparedness and work-life balance, even in the face of insufficient resources. This review underscores the need for further investigation into how EI can be leveraged to support nursing staff, aligning with the aim of this study, which seeks to explore the moderating role of Emotional Intelligence in the relationship between preparedness to care for COVID-19 patients and the Quality of Work Life among nurses.

2. Materials and Methods

2.1. Study Design

The study employed a multi-site, descriptive, cross-sectional, correlational design using convenience sampling. The primary goal was to examine whether Emotional Intelligence (EI) moderates the relationship between nurses' preparedness to care for COVID-19 patients (independent variable) and their Quality of Work Life (QWL) (dependent variable).

2.2. Participants

A convenience sample of registered nurses working in inpatient wards, emergency departments, and critical care units in four governmental hospitals affiliated with the Ministry of Health in four different cities in Saudi Arabia, namely: Riyadh, Mekka, AlMadinah Almonawarah and Hail. The registered nurses who cared for suspected or confirmed COVID-19 patients were invited to participate. Participants had to be full-time bedside nurses with at least one year of experience in their current setting, proficient in English, and willing to take part in the study. The sample size was calculated at 267 using the G*Power program.

2.3. Study Instrument

Data were collected using an electronic survey administered via an online platform. E-surveys were chosen due to their efficiency in reaching a large, geographically diverse sample across multiple hospital sites, particularly during the pandemic, when physical contact was limited. The e-survey was designed to be user-friendly and accessible on both mobile and desktop devices, ensuring ease of completion for participants.

The e-survey included the following sections:

a. Demographic and Occupational Characteristics: Participants provided information on their demographic and occupational characteristics, including age, gender, marital status, educational level, nationality, work location, unit, job title, and working hours. In addition, the preparedness to care for COVID-19 patients information included previous COVID-19-related training, direct interaction with COVID-19 patients, perceived support, PPE availability, and stress levels.

b. Emotional Intelligence Scale (EI (PcSc) Scale): The EI of participants was measured using the EI (PcSc) Scale [47] based on Goleman's Emotional Intelligence Competency Model [17]. This 69-item scale assesses personal competence (self-awareness, self-motivation, and emotion regulation) and social competence (social awareness, social skills, and emotional receptivity), scored on a 5-point

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Likert scale. Higher scores reflect greater emotional intelligence. The scale has demonstrated strong reliability (Cronbach's alpha = 0.91).

c. Quality of Nursing Work Life (QNWL) Survey: The Quality of Nursing Work Life was assessed using a modified version of Brooks' Quality of Nursing Work Life Survey [48]. This 42-item survey covers four dimensions: work life, work context, work design, and work world, rated on a 5-point Likert scale. For this study, Cronbach's alpha was 0.95, indicating excellent reliability.

A pilot study with 12 participants was conducted, and the survey was reviewed by eight expert reviewers to ensure its clarity and validity.

2.4. Ethical Considerations

Ethical approval was obtained from the Institutional Review Board (IRB) of [Institution Name]. Informed consent was collected electronically before survey participation, ensuring that participants were fully aware of the study's purpose, procedures, and their rights. The anonymity and confidentiality of participants were strictly maintained throughout data collection and analysis. All data were stored securely and encrypted, accessible only by the research team.

For electronic surveys, additional ethical measures were taken to ensure participant privacy. Each participant was assigned a unique identifier, and responses were stored in a secure cloud-based platform compliant with regional and institutional data protection regulations. The study followed ethical standards consistent with the Declaration of Helsinki.

2.5. Method of Data Collection

Data collection was conducted through an electronic survey (e-survey) distributed to participants via a secure online platform. Before the administration of the e-survey, the necessary permissions were obtained:

1. Adoption of Tools: Approval was sought from the original authors of the Emotional Intelligence (EI) Scale and Brooks' Quality of Nursing Work Life Survey to use and adapt their instruments for this study. Correspondence was initiated, and written consent was obtained, ensuring adherence to copyright regulations.

2. Ethical Approval: Ethical clearance was obtained from the Research Ethics Committees in the Ministry of Health, ensuring compliance with national ethical guidelines for research involving human subjects. The research proposal was submitted for review, and feedback was incorporated before final approval was granted.

3. Administrative Permissions: Official approval was secured from the administration of each participating hospital. This involved presenting the study's objectives, methodology, and potential benefits to nursing staff and hospital management to ensure support and cooperation during the data collection process.

Following these approvals, the e-survey was distributed to registered nurses meeting the inclusion criteria. Participants received an invitation via email, which included a brief overview of the study, an assurance of anonymity, and a link to access the e-survey. Consent was obtained electronically before participants could proceed to complete the survey.

To ensure a high response rate, reminders were sent to participants one week after the initial invitation, encouraging their participation and emphasizing the importance of their input in enhancing nursing practices and policies.

2.6. Statistical Analysis

Data were analyzed using IBM SPSS Statistics version 27. Descriptive statistics, including frequencies, means, and standard deviations, were calculated to describe the sample characteristics

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and survey responses. Pearson's correlation coefficient was used to explore the relationship between Emotional Intelligence, preparedness, and Quality of Work Life. Multiple regression analysis was employed to assess whether Emotional Intelligence moderates the relationship between preparedness and QWL. Interaction terms were created for moderation testing. A significance level of $p < 0.05$ was set for all analyses.

3. Results

3.1. General Characteristics:

The study sample comprised 267 participants, predominantly female (94.4%), with a mean age of 37.47 years (SD = 8.09) and an average of 8.43 years of experience (SD = 6.33). Most participants were married (59.6%) and held a bachelor's degree in nursing (68.5%). Regarding nationality, 79% were non-Saudi. The majority worked in the central region (55.8%) and were bedside nurses (88.4%). A significant portion (82%) reported working more than 40 hours per week. For additional demographic details, see Table 1.

Table 1. Demographic and work-related characteristics of the study participants (N = 267).

Variable		Mean	SD
Age (Yrs)		37.47	8.09
Years of Experience (Yrs)		8. 43	6.33
Variable		**Frequency (N=267)**	**Percentage (%)**
Gender	Men	14	5.6
	Women	252	94.4
Marital Status	Single	95	35.6
	Married	159	59.6
	Divorced	8	3
	Widowed	5	1.9
Educational Level	Diploma	65	24.3
	Bachelor	183	68.5
	Postgraduate[1]	19	7.1
Nationality	Saudis	56	21
	Non-Saudis	211	79
Working Unit	General wards	115	43.1
	Critical Care Units	63	23.6
	Specialized Units	89	33.3
Job Title	Bedside nurse	236	88.4
	Nurse managers	31	11.6
Working hours per week	More than 40 hours	219	82
	From 30 to 40 hours	39	14.6
	Less than 30 hours	9	3.4

[1] Include Master and PhD holders.

3.2. Preparedness to Care for COVID-19 Patients

Notably in Table 2, 87.3% of nurses attended workshops related to COVID-19, while 12.7% did not. Additionally, 84.3% reported direct interaction with COVID-19 patients, and 72.7% indicated they received proper support during the pandemic.

When questioned about the necessity of personal protective equipment (PPE), 100% agreed that PPE is essential for the care of COVID-19 patients. However, the perceived stress associated with

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providing nursing care to COVID-19 patients varied: 44.2% found it very stressful, 34.5% reported moderate stress, 17% indicated slight stress, and 4.5% stated it was not stressful (Table 2).

Overall, 76.4% of nurses felt ready to care for COVID-19 patients, while 13.5% reported being not ready and 10.1% were undecided.

Table 2. Preparedness to care for COVID-19 Patients (N = 267).

Variable		Frequency (N=267)	Percentage (%)
Attending COVID-19 related Workshop(s)	Yes	233	87.3
	No	34	12.7
Direct interaction with COVID-19 patients	Yes	225	84.3
	No	42	15.7
Received proper support during the pandemic	Yes	194	72.7
	No	73	27.3
PPEs are necessity to care for COVID-19 patients	Necessary	267	100
	Not necessary	0	0
Reported level of stress to care for COVID-19 patients	Very stressful	118	44.2
	Moderately stressful	92	34.5
	Slightly stressful	45	16.9
	Not stressful	12	4.5
Overall preparedness	Ready	204	76.4
	Not decided	27	10.1
	Not ready	36	13.5

3.3. Emotional Intelligence Among Nurses

Descriptive statistics indicated that 93.6% of nurses reported a good level of personal competence, while 6.4% rated themselves as fair. For social competence, 85.4% reported good levels and 14.6% fair, as detailed in Table 3.

Table 3. Level of Emotional Intelligence among nurses working during the COVID-19 pandemic (N = 267).

Emotional Intelligence		Frequency (N=267)	Percentage (%)
Personal competence	Good	250	93.6
	Fair	17	6.4
	Poor	0	0%
Social competence	Good	228	85.4
	Fair	39	14.6
	Poor	0	0

3.4. Quality of Work Life During the Pandemic

Table 4 reveals that 71% of nurses perceived their quality of work life as good, while 29% rated it as fair.

Table 4. Nurses' perception of the quality of their work life during the pandemic (N = 267).

Variable		Frequency (N=267)	Percentage (%)
Quality of work life	Good	190	71
	Fair	77	29
	Poor	0	0

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3.5. Correlation Between Emotional Intelligence, Preparedness, and Quality of Work Life

Pearson correlation analysis indicated a significant positive correlation between personal competence ($r = .33$, $p < .001$) and social competence ($r = .34$, $p < .001$) with the quality of work life. However, preparedness to care for COVID-19 patients showed no significant correlation with either emotional intelligence or quality of work life (Table 5).

Table 5. Correlation between EI, preparedness, and quality of work life among nurses (N = 267).

Variables	Personal competence	Social competence	Preparedness	Quality of work
Personal competence	-			
Social competence	r = .52** p = .000	-		
Preparedness	r = .015 p = 80	r = .060 p = .32	-	
Quality of work life	r = .33** p = .000	r = .34** p = .000	r = .024 p = .70	-

** P< 0.001.

3.6. Moderation Effect of Emotional Intelligence

A hierarchical regression analysis was performed to examine the moderating effect of emotional intelligence. The initial model showed that preparedness to care for COVID-19 patients was not a significant predictor of quality of work life ($\beta = .034$, $p = .57$). However, when including interaction terms, the model explained 41% of the variance in quality of work life, indicating significant moderation effects (personal competence: $\beta = .578$, $p < .001$; social competence: $\beta = .665$, $p < .001$), as summarized in Table 6.

Table 6. Regression test of moderation effect of EI on the relationship between preparedness to care for patients with COVID-19 and quality of work (N = 267).

Regression	B	SEB	β	p
Preparedness	-.487	.081	-1.17	.000
Personal competence x preparedness	.080	.021	.578	.000
Social competence x preparedness	.094	.032	.665	.000
r = .41**		p = .000		

** P< 0.001.

4. Discussion

Emotional Intelligence (EI) plays a pivotal role in shaping nurses' work life quality, especially during high-stress situations such as the COVID-19 pandemic. This study highlights the moderating effect of EI on the relationship between nurses' preparedness to care for COVID-19 patients and the quality of their work life.

Our findings indicate that nurses exhibited high levels of personal and social competence, consistent with previous research that associates EI with better coping mechanisms and professional satisfaction [49]. For instance, nurses with strong emotional awareness can better recognize and manage their emotions, enabling them to handle workplace stress more effectively [25]. However, the observed levels of emotional intelligence, while acceptable, contrast with studies showing that frontline nurses in Wuhan reported varying degrees of emotional intelligence alongside significant

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anxiety and stress [50]. This discrepancy may stem from differences in sample demographics, the intensity of the pandemic's impact in different regions, or variations in support systems in place for nurses. For example, a supportive work environment with access to mental health resources could enhance EI among nurses by fostering resilience and adaptability during crises [25].

Regarding preparedness to care for COVID-19 patients, a majority reported feeling prepared, aligning with other studies that note increased resilience among healthcare professionals during crises [51]. In contrast, some studies highlight considerable stress and trauma among nurses, particularly during the initial waves of the pandemic [52,53]. This contrast might be justified by the presence of comprehensive training programs and psychological support systems in our sample, which could have bolstered nurses' confidence and preparedness to face the challenges of caring for COVID-19 patients [54]. For instance, nurses who underwent simulation training for COVID-19 care might have felt better equipped to handle patient interactions, leading to higher reported preparedness [55].

The quality of work life among nurses was reported positively by the majority, reflecting similar conclusions in studies that point to the impact of supportive work environments on employee morale [56]. However, findings from various healthcare settings indicate that the pandemic exacerbated issues such as burnout and compassion fatigue, highlighting the complexity of the work-life experience for nurses during this period [55,57]. This divergence can be attributed to differing organizational responses to the pandemic; for example, institutions that provided regular mental health check-ins, flexible scheduling, and peer support groups might have seen a more positive work-life compared to those that did not [58]. The contrast between our findings and those suggesting significant declines in quality of life could thus be attributed to the availability of resources and support systems tailored to meet the evolving needs of nursing staff during the pandemic.

The relationship between EI, preparedness, and quality of work life reveals significant correlations, reinforcing the notion that emotional and social competencies are essential for better work outcomes. This is supported by Pérez-Fuentes et al. findings [59], who found that nurses with higher emotional intelligence demonstrated greater engagement and job satisfaction. For example, nurses with strong social skills can foster better teamwork and communication [60], leading to more collaborative and supportive work environments [61]. However, the lack of significant correlation between preparedness to care for COVID-19 patients and either form of emotional intelligence suggests a complex interplay that may require a more nuanced examination. It is plausible that while nurses feel prepared, the emotional burden of the pandemic may overshadow their perceived competency, leading to feelings of inadequacy despite high preparedness scores [62].

Our analysis showed that EI moderated the relationship between preparedness and quality of work life, suggesting that nurses with higher emotional competencies experienced a buffer against the stresses associated with COVID-19 care. This aligns with findings by Aljarboa et al. [25], which highlight the critical role of EI in fostering resilience and improving outcomes for nursing staff during crises [42]. For example, nurses who are adept in emotional regulation might have been better equipped to manage challenging interactions with patients and families, reducing overall stress and enhancing their work experience. This underscores the need for targeted interventions to enhance EI as a strategy to support nurses in future healthcare challenges.

Limitations

Despite the valuable insights gained from this study, several limitations must be acknowledged. First, the cross-sectional design limits the ability to infer causality between emotional intelligence, preparedness to care, and quality of work life. Longitudinal studies could provide a deeper understanding of how these factors evolve, particularly during prolonged crises. Including a qualitative part would better explain such phenomena.

Second, the study relied on self-reported measures, which may be subject to bias, including social desirability bias. Future research could benefit from utilizing mixed methods or structured interviews to enhance the reliability of the findings.

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Additionally, the sample was primarily composed of nurses working in specific regions, which may limit the generalizability of the results to other contexts or healthcare settings. Finally, while the study focused on emotional intelligence, other factors such as organizational culture, support systems, and external stressors were not explored in depth, which could significantly influence the dynamics of work-life quality.

5. Conclusions

In conclusion, this study underscores the importance of emotional intelligence as a moderating factor in the relationship between nurses' preparedness to care for COVID-19 patients and their quality of work life. The findings suggest that fostering EI among nursing professionals can enhance their resilience, coping strategies, and overall work satisfaction, particularly in high-stress environments. While many nurses reported a positive quality of work life, the interplay of emotional competencies and preparedness to care reveals a complex relationship that warrants further exploration. Future research should aim to address the limitations identified in this study and explore additional factors that may influence the well-being of nurses in challenging healthcare settings. By prioritizing emotional intelligence training and support, healthcare organizations can better equip nurses to face the multifaceted challenges of patient care during crises, ultimately improving both nurse and patient outcomes.

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Informed Consent Statement: All participants provided informed consent before participating in the survey, and their responses were anonymized to protect their privacy.

Data Availability Statement: The corresponding author is willing to provide the data that supports this study's findings upon receiving a reasonable request.

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