



THE IMPACT OF JOB STRESS ON JOB SATISFACTION AMONG NURSES DURING COVID-19 PANDEMIC: THE MODERATING ROLE OF PSYCHOLOGICAL CAPITAL

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ABSTRACT

The mental well-being of nurses has been severely impacted by COVID-19, and safety measures are required for both their physical and mental well-being. Effective treatment of their psychological trauma requires a thorough understanding of their experiences. Ensuring public safety requires dedicated nursing staff participation in the management of plague clinics. Supporting nurses' psychological and physical well-being through adequate compensation, mental health counselling and job satisfaction is critical to addressing this crisis and future challenges.

This study is proposed to provide baseline information on the impact of job stress on Al Dhafra hospitals nurses' job satisfaction during the COVID-19 pandemic and the effect of psychological capital as a moderator. Furthermore, the study will open a new aspect for further research to improve and reduce its adverse effects. Besides, the study will highlight the importance of exploring coping strategies and perceived influential supporting factors to address stressors of nurses in the UAE and mounting concerns about job satisfaction during Covid-19. In addition, it can be used as a reference to create, improve, or modify guidelines and existing protocols. As well as serve as a reasonable contribution study for further nursing management in future crises.

The study employed a quantitative correlation research design, and an online survey was conducted and participated in by 255 nurses who are in direct contact with and managing patients with COVID-19 in AI Dhafra hospitals in the UAE.

The present study's findings indicate that there is a negative relationship between job stress and job satisfaction; on the other hand, the findings also revealed a positive moderating effect of psychological capital on the relationship between job stress and job satisfaction.

The current study has important implications for hospitals in developing managerial, training, and strategic policies. According to the findings of this study, job stress has a significant impact on nursing satisfaction. Furthermore, hospitals can improve their job satisfaction as well as can be applied to other cultural and demographic contexts to reduce employee stress.

KEYWORDS

Al Dhafra Hospitals, COVID-19 Pandemic, Job Satisfaction, Job Stress, Psychological Capital.

INTRODUCTION

The psychological damage from COVID-19 affected the overall population, predominantly the nurses. They are the health workers who are most often on the front lines, and as a response to the rampant global pestilence, nursing's role has expanded to deal with patients stricken by COVID-19.

Nurses are facing many challenges as frontline providers. The mission of preventing the spread of infection or managing patients with COVID-19 infections puts further stress on the shoulders of the healthcare team. These challenges may increase their internal pressure and affect their psychological well-being and job satisfaction. Patient's psychological health may worsen due to observing many of them die. It requires immediate attention to the coronavirus pandemic's undetermined effect on healthcare providers' mental hygiene. In the UAE, more resources are needed to discuss this problem. Al-Dhafra hospitals are located in a relatively isolated region of the UAE, making them an ideal location to examine the impact of work stress in areas of geographical isolation, limited resources and diverse patient populations The choice of Al Dhafra hospitals is an option that is appropriate for this methodology. By examining these specific factors that are overlooked in health research, the study seeks to fill an important gap in our understanding of job stress, job satisfaction, and psychological capital about addressing less complex areas of health care. The purpose of this study is not only to elucidate the impact of job stress on nurse satisfaction, but also to investigate the possible influence of psychological capital on this ability. The insights gained are expected to inform the design of, and ultimately helpful, targeted interventions and programs to support the wellbeing and retention of health care workers in remote areas sustain high quality patient care.

Stress combines psychological, passionate, mental, and physical responses to job-related factors such as work materials, work environment, and working conditions [1].

Nurses are exposed to many stressors that influence them toward psychological illness. Nurses who work closely with and handle COVID-19 patients are expected to experience more depression and anxiety than ordinary people or administrative personnel [2]. It was discovered during the COVID-19 pandemic that there was a high level of stress, fear, and depression among nurses. In

comparison, other studies distinguish between the short-term and long-term impacts of the infection on human bodies [3,4,5].

JOB SATISFACTION

Job satisfaction is often characterized as a good and pleasurable emotional response triggered by an individual's overall evaluation [6]. Furthermore, job satisfaction, as an individual's subjective emotional state, provides a positive emotional reaction due to the person's perception of the worth of their work. That person might get more actively involved in the position [7].

Job dissatisfaction and job stress have mutual connections. An emotion of displeasure or the staff feels unstable between what he attains and performs [8]. During the COVID-19 pandemic, it is critical for nurses to feel satisfied with their work. Various studies worldwide recorded shallow job satisfaction among nurses, including Israeli nurses, with mean job satisfaction of 3.6 (score range, 5-point Likert) [9]. While in Italy, a large-scale study among healthcare professionals was recorded with a mean score of 2.8 on a 4-point Likert scale [10].

Job satisfaction has also been shown to be negatively related to job stress [11]. Another research [12] found a link between work satisfaction and job stress, with job stress lowering dignity during sad moods and contributing to physician turnover. A substantial connection exists between perceived stress and work satisfaction [13].

JOB STRESS

The concept of job stress has been studied extensively especially in the nursing profession due to its profound impact on individual health workers and on health care as a whole the relationship between job stress and job satisfaction is complex, with elevated stress levels often leading to diminished satisfaction and, consequently, higher turnover rates among nursing staff [14,15]. The pandemic has increased the number of stressors, making it important to examine their effects on nurses' job satisfaction in this unique context. Furthermore, nurses have a reason to choose to step down from their work due to the devastating effect on mental health, danger to safety, and inadequate protection for their loved ones. Recognizing the psychological problems surrounding poor job satisfaction among nurses is vital to achieving more precise solutions [16]. According to research, there is no correlation between work stress and job satisfaction [17]. Another study [18] found a link between work satisfaction and job stress, with job stress lowering dignity during sad moods and contributing to physician turnover.

PSYCHOLOGICAL CAPITAL

Psychological capital is considered the second request build that incorporates people's mental limits like self-viability, trust, strength, and confidence, which can be coordinated or created [19]. Psychological capital acts as a defensive cradle against the abysmal mental impacts of the coronavirus. Psychological capital is considered the second request build that incorporates people's mental limits like self-viability, trust, strength, and confidence, which can be coordinated or created [19].

With its dimensions of hope, effort, resilience, and hope, psychological capital provides a promising framework for understanding how nurses can effectively manage the COVID-19 pandemic. This psychological positivity has been shown to play an important role in improving individuals' ability to cope with job stress, and may offset the negative effects on job satisfaction [20,21]. The psychological capital of nursing staff in the high-stress environment of the pandemic may be an important factor in maintaining or improving job satisfaction despite many challenges If the role of psychological capital in nursing job stress is examined and job satisfaction in Al Dhafra hospitals provides valuable insights.

Psychological capital acts as a defensive cradle against the abysmal mental impacts of the coronavirus. Psychological capital likewise intervenes in the positive connection between self-administration and well-being and defensive behavior during the pandemic [22]. Furthermore, evidence proves that psychological capital decreases the feelings of trepidation in nurses' entourage despite hardship [23]. In addition, previous research has shown that nurses' psychological capital is negatively linked with occupation burnout [24] and aids in reducing nurses' perceptions of mental distress, increasing work satisfaction, and improving patient safety [25].

The COVID-19 pandemic has placed unprecedented stress on healthcare systems around the world, significantly affecting the well-being and job satisfaction of nursing staff. Al Dhafra Hospitals, which serves a remote and diverse population in the UAE, provides a unique context for examining these developments. The aim of this study is to examine the impact of job stress on nurses' job satisfaction in this critical context with a focus on the moderating role of psychological capital.

This study mainly proposes to provide baseline information on the impact of job stress on Al Dhafra Hospital nurses' job satisfaction during the COVID-19 pandemic and the effect of psychological capital as a moderator. Furthermore, the study will open a new avenue for further research to improve and reduce its adverse effects. The study will highlight the importance of exploring coping strategies and perceived influential supporting factors to address stressors for nurses in the UAE and mounting concerns about nurses' level of satisfaction. It is hopeful that the findings of this study would produce positive affirmation for the staff engaged in the workplace, thus building a good relationship with the leader that is encouraging and courageous while at the same time being counseled flexibly. In addition, it can be used as a reference to create, improve, and modify the guidelines and existing protocols. It can also serve as a reasonable contribution study for further nursing management in future crises.

METHODS

DATA COLLECTION AND PROCEDURE

This study population was extracted and gathered from within Al Dhafra Hospitals in UAE, and the participants are the nurses who work there. Participants were chosen using questionnaires sent to the Al Dhafra hospitals using online survey questionnaires.

The survey was drawn from nurses in Al Dhafra hospitals in the UAE, with a focus on those treating patients with COVID-19. Selection was made through an online survey, in which only nurses involved in COVID-19 care were included.

To examine nurses' job stress, job satisfaction, and psychological capital during the COVID-19 pandemic, the researcher used valid and reliable questionnaires, including socio-demographic characteristics, job stress, job satisfaction, and psychological capital scales.

All information was kept confidential on the principal investigator's laptop, secured with a password. After cleaning the data, all information was entered into the Statistical Package for Social Science (SPSS) version 26.

The study employed a quantitative correlation research design. Descriptive statistics (frequency, means, percentages, and standard deviations) were employed to characterize the demographic characteristics. The

inferential statistics used correlation and regression analysis of variance to test job stress, job satisfaction, and psychological capital scores among participants' demographic features. The questionnaire was examined after the survey was finished to make sure it adhered to the guarantee accurate data input, rules. To auestionnaires were double-entered and consistently numbered. The hospital nurses provided 255 survey respondents out of a total of 420 possible participants, and they completed the surveys with a recovery rate of 60.7%. The analysis showed that at least 201 responses were required to reach a confidence level of 95% with a margin of error of ±5%, ensuring the study's findings are statistically reliable and reflective of the nurses' experiences during the pandemic.

CONFIDENTIALITY AND ETHICAL ISSUES

The Medical Research and Development (Department of Health) Ethical Committee in Abu Dhabi, UAE, granted ethical approval for this study (DOH/CVDC/2022/1711).

DEMOGRAPHIC INFORMATION FORM

The demographic information questions contained seven items, including age, gender, marital status, educational

level, years of experience, types of nursing specialties, and the workplace/unit in the hospital.

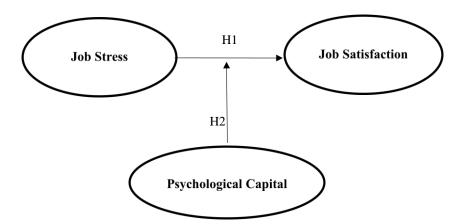
JOB STRESS, JOB SATISFACTION, AND PSYCHOLOGICAL CAPITAL SCALE

This study examined 13 items from the organizational determinants of job stress [26] that were used to measure stress at work. The generic job satisfaction scale (GJSS) [27] was used in this research to evaluate job satisfaction. It consists of 10 items that assessed the psychological capital at work using the short version of the questionnaire [28] with 22 items. Participants picked a number between 1 and 5 on a 5-point Likert scale to represent their Level of each variable.

CONCEPTUAL FRAMEWORK

The conceptual framework of this study, created based on the connections between the numerous factors found in the literature review, is shown in Figure 1. To examine the relationship between job stress and job satisfaction, we developed a conceptual framework for this study. During the COVID-19 pandemic, we needed to also consider how psychological capital moderates the link between job stress and job satisfaction.

FIGURE 1: CONCEPTUAL FRAMEWORK



HYPOTHESES

Numerous hypotheses are developed using the conceptual Framework shown in Figure 1 following the literature search conducted at the start of this study.

H1: Job stress is negatively related to job satisfaction among nurses during COVID-19 pandemic.

H2: Psychological capital will moderate the relation between job stress and job satisfaction among nurses during COVID-19 pandemic so that when psychological capital is low, the influence of job stress on job satisfaction is high, and when psychological capital is high, the effect of job stress on job satisfaction is low.

RESULTS

DESCRIPTIVE STATISTICS

Utilizing SPSS 26.0, statistical analyses were carried out. Descriptive statistics like frequency and component ratio were used to examine the data. The descriptive statistics of the 255 study participants reveals a predominance of nurses aged 30-39 years (60%), with the majority being female (76.5%) and married (76.5%); Educational level is surprisingly high, with 78.8% holding a bachelor's degree. In terms of work experience, there is an equal distribution

among those aged 6-10 years (30.6%), 11-15 years (31.8%), and over 16 years (32.9%), indicating independent workers skilled in most are registered nurses (88). is 2%), reflecting the focus on this group in the study. Workplaces are diverse, with the largest group working in intensive care units (42.4%), emphasizing the importance of critical care This population gives the number of nurses available Details of Al Dhafra Hospitals offering different types of acute care. Identify well-educated, skilled, and predominantly female nurses working in the setting. Table 1 lists the characteristics of the final 255 participants.

TABLE 1: DESCRIPTIVE STATISTICS OF THE PARTICIPANTS (N = 255)

		Frequency	Percent	Valid Percent	Cumulative Percent
Age					
	20-29 years	18	7.1	7.1	7.1
	30-39 years	153	60.0	60.0	67.1
Valid	40-49 years	54	21.2	21.2	88.2
	50 years and above	30	11.8	11.8	100.0
	Total	255	100.0	100.0	
	Gender				
	Male	60	23.5	23.5	23.5
Valid	Female	195	76.5	76.5	100.0
	Total	255	100.0	100.0	
	Marital Status				
	Single	54	21.2	21.2	21.2
Valid	Married	195	76.5	76.5	97.6
Valia	Divorce	6	2.4	2.4	100.0
	Total	255	100.0	100.0	
Ec	ducational Level				
	Diploma	30	11.8	11.8	11.8
	Bachelor	201	78.8	78.8	90.6
Valid	Master	18	7.1	7.1	97.6
	Doctorate	6	2.4	2.4	100.0
	Total	255	100.0	100.0	
Years of Experience					
	1-5 years	12	4.7	4.7	4.7
	6-10 years	78	30.6	30.6	35.3
Valid	11-15 years	81	31.8	31.8	67.1
	16 years and above	84	32.9	32.9	100.0
	Total	255	100.0	100.0	

No	ursing Specialties				
	Practical Nurse	3	1.2	1.2	1.2
	Registered Nurse	225	88.2	88.2	89.4
Valid	Charge Nurse	21	8.2	8.2	97.6
	Senior Charge Nurse	6	2.4	2.4	100.0
	Total	255	100.0	100.0	
	Workplace	Frequency	Percent	Valid Percent	Cumulative Percent
	Out-Patient	45	17.6	17.6	17.6
	Intensive Care Unit	108	42.4	42.4	60.0
Valid	Emergency	42	16.5	16.5	76.5
valia	Department				
	In-Patient	60	23.5	23.5	100.0
	Total	255	100.0	100.0	

MEASURES

The reliability of the questionnaire was assessed using its internal consistency (Cronbach's a coefficient) and composite reliability. At the same time, content validity and aggregation validity were used to evaluate the questionnaire's overall validity. The questionnaire included demographic information as well as job stress, job satisfaction, and psychological capital measures. The result is summarized in Table 2 for the reliability test.

TABLE 2: RELIABILITY TEST

Variables	Cronbach's	Items
	Alpha	
Job Stress	91.2%	13
Job Satisfaction	88.7%	10
Psychological Capital	94.6%	22

HYPOTHESIS ANALYSIS

Relationship between job stress and job satisfaction

Hypothesis one:

H1: Job stress is negatively related to job satisfaction among nurses during COVID-19 pandemic.

The link between the independent and dependent variables was examined using Pearson's product correlation coefficient and regression analysis.

The results of the correlation and regression between job stress and job satisfaction obtained from SPSS Tables 3 and 4 show the results as follows:

Table 3 is a correlation analysis between job stress and respondents' job satisfaction. The correlation coefficient is r = -.341**, a negative correlation. Also, it is significant as its p-value is 0.000, which is less than the significance level (a = 5%), and from regression analysis as per Table (4), the R square (R2) value is 0.117, which means the job stress explained by job satisfaction represents 12%. It can be concluded that the fitted model is significant (F = 33.392, pvalue.000 less than the significance level (5%), and the regression coefficient of job stress on job satisfaction is found to be -.303, which implies that any increase in job stress led to a decrease in job satisfaction by 303. Also, the regression coefficient is significant as the p-value p.000 is less than the many Level of 5%. So, we accepted hypothesis H1. That result indicates that if nurses stress is high, nurse satisfaction will be low among nurses in the Al Dhafra Hospitals during the COVID-19 pandemic.

TABLE 3: CORRELATION RESULTS

		Job Stress	Job satisfaction
	Pearson Correlation	1	341**
Job Stress	Sig. (2-tailed)		.000
	N	255	255
	Pearson Correlation	341**	1
Job Satisfaction	Sig. (2-tailed)	.000	
	N	255	255

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

TABLE 4: HYPOTHESIS (1) REGRESSION RESULTS

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	4.496	.168		26.786	.000
'	Job Stress	303	.052	341	-5.779	.000

a. Dependent Variable: Job Satisfaction,R2=0.117, F = 33.392,p=.000 > 0.05

The Moderation Effect of psychological capital on the Relationship between Job Stress and Job Satisfaction

Hypothesis Two:

H2: Psychological capital will moderate the relation between job stress and job satisfaction among nurses during Covid-19 pandemic so that when psychological capital is low, the influence of job stress on job satisfaction is high, and when psychological capital is high, the effect of job stress on job satisfaction is low.

The relationship between the independent, dependent, and moderating factors was examined using linear regression analysis.

As shown in Table (5), regression analysis was performed to examine the effects of psychological capital on the direction and degree of the link between job stress and job satisfaction. According to the results, the link between job stress and job satisfaction was somewhat influenced by psychological capital (=.738, Beta =.610, p 0.000). the relationship between psychological capital and job stress (=-.071, beta=.018, p 0.000).

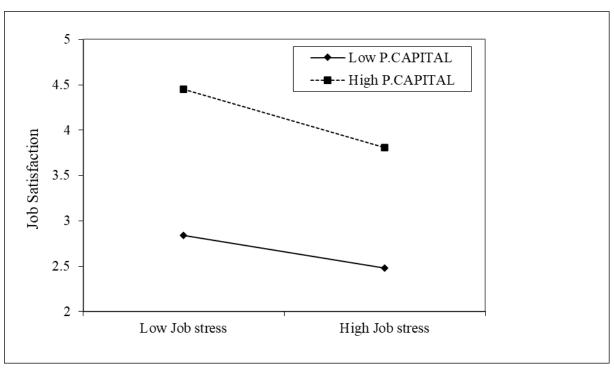
Results indicates that psychological capital is a positive moderator effect on the relationship between job stress and job satisfaction, which means that the hypothesis is accepted. In addition, as indicated by the graph in Figure 2, job satisfaction decreased as job stress increased, regardless of the Level of psychological capital; However, the detrimental impact of job stress on job satisfaction was more pronounced when psychological capital was low.

TABLE 5: RESULT OF MODERATED VARIABLE REGRESSION ANALYSIS

Model		Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	1.300	.230		5.648	.000
1	Job Stress	234	.037	264	-6.323	.000
	P.CAPITAL	.817	.051	.675	16.171	.000
	(Constant)	1.632	.238		6.857	.000
2	Job Stress	251	.036	283	-6.929	.000
	P.CAPITAL	.738	.053	.610	13.979	.000
	INTERACT	071	.018	176	-4.048	.000

a. Dependent Variable: Job Satisfaction

FIGURE 2: MODERATING EFFECT OF PSYCHOLOGICAL CAPITAL IN THE RELATION BETWEEN JOB STRESS AND JOB SATISFACTION.



DISCUSSION AND CONCLUSIONS

This research aimed to determine the effect of job stress on job satisfaction among nurses during the pandemic. Work-related stress is a growing problem worldwide, and healthcare workers responding to pandemic outbreaks as front-liners are more susceptible to stress and anxiety. By doing regular mental health assessments, providing support services, and therapeutic therapy, supplying adequate protective supplies, recommending treatment options, and submitting full organizational support to the staff working during the crisis, we can minimize the negative effect of mental health on healthcare workers during pandemics.

The outcome of the latest research empirically detected that psychological capital moderates the connection between job satisfaction and job stress. The results of the current study enlighten the point that nurses are individuals too, and the latest condition of the pandemic has also infected their mental hygiene. Nurses are the rescuers of the country, and their mental hygiene and psychological capital are fundamental to the UAE Government's battle against this infectious virus. These results imply that healthcare companies should consider nurses' psychological capital as a critical strategy for improving their competitive advantage. It may increase the quality of

medical services and achieve high performance by efficiently building and managing nurses' psychological capital. Furthermore, healthcare institutions must acknowledge the need to provide enough employment resources for nurses.

Throughout the pandemic, nurse stress and stiama are top priorities among hospital nurses; anxiety and individual demands, more significant workload, and vulnerability to infection are the utmost priorities in facing death. Job stress can be due to job satisfaction. Job stress due to job tiredness will have an impact on the psychological nurse so that it causes work satisfaction to lessen. The results of this research support those of other studies that followed parallel lines of inquiry [28,11,12,13]. In addition, psychological capital is effective in the relationship between job stress and job satisfaction; this result is supported by the previous research mentioned earlier [23,24]. Our findings confirmed a previous study's finding that a low job satisfaction rate also results from an overall rise in job stress. According to most study results, happy nurses work for organizations more often.

The medical institution needs to pay more attention to the psychological state of nurses. It needs to provide nurses with leadership training and job stress evaluation to manage and improve work satisfaction. The nursing vocation has taken up a priceless position in medical care organizations. An unavoidable part of all healthcare settings is the need for the nursing profession. The improvement of job satisfaction among nurses is required to confirm the quality of the career. To enhance the working situation of nurses, the hospital must tackle numerous measures. The institution's administration must deliver a good payment package, other organizations for nurses, and promotional opportunities. Provision of promotion opportunities for immediate enhancement of the quality of work, and the right salary package will inspire the nurses to do their utmost.

Nurse leaders and managers are highly skilled nursing professionals who function to produce top-quality healthcare. Leaders should look after employees and facilitate them with a voice in the organization by persuading nurses to join a coalition board so as to increase decision latitude and self-efficacy.

Managers should regularly assess nurses' accomplishments to lessen job stress, increase self-perception, and increase job satisfaction. Nurse job satisfaction and motivation

depend on nursing management, considering the area or unit where a nurse wishes to work. Nurse leaders can make work significant by allowing staff to challenge themselves and grow in clinical nursing roles. They also help other nurses see their job as valuable and essential in achieving their goals. These measures are crucial during a nationwide pandemic like the COVID-19 pandemic when routines are halted, the environment is tense, and change makes workers feel more uneasy.

THEORETICAL AND PRACTICAL IMPLICATIONS

Our research provides information on nurses at the Al Dhafra Hospitals in the UAE. It has implications for the pandemic response, especially regarding how work stress affects job satisfaction, performance, retention, absenteeism, commitment, and turnover rates. Given the evidence that these variables influence nurses' work satisfaction, addressing nurses' concerns about readiness, social support, and mental health is crucial. Workplace mindfulness training, stress management strategies, and social support may lessen stress.

Nurses' capability, confidence, and morale may be strengthened, for instance, through effective communication between the government and hospital administration, training, higher and prompt compensation, incentives, and workforce growth.

Concerning the practical indications that may be obtained from this research, the outcome proposes that, in a pandemic state, including for healthcare professionals, the impact of psychological capital could lessen the psychological stress from job-state experiences, meaning that work satisfaction is not decreased. Psychological capital is an essential personal resource that can be developed through coaching and training programs. This is supported by another study, which validated the role of psychological capital in a similar context and setting [16].

It is necessary to cultivate psychological management skills that aid medical practitioners in getting essential resources like optimism, self-efficacy, and resilience that are effective for handling times such as the pandemic. In summary, we assumed that our study has added to the latest attempt to show the moderating role of psychological capital in the connection between job satisfaction and psychological stress among nurses since the beginning of the worldwide pandemic. These results also inspire the development of individual resource management actions, such as plans, to

maximize the health and performance of nurses' psychological capital.

Management in the hospital should give proper safety procedures in the latest situation and deal with the physical requirements of the nurses, as all of the government hospital facilities in the UAE do not have essentials like private rooms to rest and bathrooms for nurses.

LIMITATIONS AND FUTURE RESEARCH

The initial limitations are that this study is a correlation study design, and other elements that may impact job stress, job satisfaction, and psychological capital are not managed. The data was taken from a single hospital in Al Dhafra. Nurses employed in remote areas were not selected, so the overall ability of the result is restricted. Additionally, the study's findings during the COVID-19 pandemic only apply to the job satisfaction and stress levels of nurses working at Al Dhafra Hospitals in the UAE. Future studies may include other factors, such as job engagement, fatigue, and service performance, to address the effects of the perceived COVID-19 threat.

Future research may examine the impact of the integrity of the information source on people's worries, which was not discussed in this study. The psychological effects of COVID-19 misinformation and false news have been the focus of prior studies.

RESEARCH STUDY INSTRUMENT

A copy of the data collection instrument used in this research is available by requesting it from the contact author.

References

- Milutinović D, Golubović B, Brkić N, Prokeš B. Professional stress and health among critical care nurses in Serbia. Arhiv za higijenu rada i toksikologiju. 2012 Jun 15;63(2):171-9.
- Lu W, Wang H, Lin Y, Li L. Psychological status of medical workforce during the COVID-19 pandemic: A cross-sectional study. Psychiatry research. 2020 Jun 1;288:112936.
- 3. Kang L, Li Y, Hu S, Chen M, Yang C, Yang BX, Wang Y, Hu J, Lai J, Ma X, Chen J. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. The Lancet. Psychiatry. 2020 Mar;7(3):e14.

- World Health Organization. Mental health and psychosocial considerations during the COVID-19 outbreak, Mar 18, 2020. World Health Organization; 2020
- Schutz V, Shattell M. Impact of COVID-19: What does it mean for nurses and health systems? Journal of psychosocial nursing and mental health services. 2020 Aug 1;58(8):2-3.
- 6. Zhang M, Chen H, Wang N, Li Y, Li X, Liu Y. The mediating role of job satisfaction between psychological capital and work engagement among Chinese nurses during COVID-19 outbreak: a comparative study between nurse specialists and general nurses. Frontiers in psychiatry. 2022;13
- Lan T, Chen M, Zeng X, Liu T. The influence of job and individual resources on work engagement among Chinese police officers: a moderated mediation model. Frontiers in psychology. 2020 Apr 7;11:497.
- Lee MK, Jung DY. A study of nursing tasks, nurses' job stress and job satisfaction in hospitals with no guardians. Journal of Korean Academy of Nursing Administration. 2015 Jun 1;21(3):287-96.
- Savitsky B, Radomislensky I, Hendel T. Nurses' occupational satisfaction during Covid-19 pandemic. Applied Nursing Research. 2021 Jun 1;59:151416.
- Puci MV, Nosari G, Loi F, Puci GV, Montomoli C, Ferraro OE. Risk perception and worries among health care workers in the COVID-19 pandemic: Findings from an Italian survey. InHealthcare 2020 Dec 3 (Vol. 8, No. 4, p. 535). MDPI.
- 11. Chang E, Hancock K. Role stress and role ambiguity in new nursing graduates in Australia. Nursing & health sciences. 2003 Jun;5(2):155-63.
- Lo WY, Chien LY, Hwang FM, Huang N, Chiou ST. From job stress to intention to leave among hospital nurses: A structural equation modeling approach. Journal of advanced nursing. 2018 Mar;74(3):677-88.
- Applebaum D, Fowler S, Fiedler N, Osinubi O, & Robson M. The impact of environmental factors on nursing stress, job satisfaction, and turnover intention. The Journal of nursing administration. 2010 Jul;40:323.
- 14. Lim JY, Kim GM, Kim EJ. Factors associated with job stress among hospital nurses: A meta-correlation analysis. International Journal of Environmental Research and Public Health. 2022 May 10;19(10):5792.
- 15. Liu Y, Aungsuroch Y, Yunibhand J. Job satisfaction in nursing: a concept analysis study. International nursing review. 2016 Mar;63(1):84-91.
- Li Q, Chen J, Xu G, Zhao J, Yu X, Wang S, Liu L, Liu F. The psychological health status of healthcare workers

- during the COVID-19 outbreak: a cross-sectional survey study in Guangdong, China. Frontiers in Public Health. 2020 Sep 18;8:562885.
- 17. Sullivan SE, Bhagat RS. Organizational stress, job satisfaction, and job performance: where do we go from here? Journal of Management. 1992 Jun:18(2):353-74.
- Lo WY, Chien LY, Hwang FM, Huang N, Chiou ST. From job stress to intention to leave among hospital nurses: A structural equation modeling approach. Journal of advanced nursing. 2018 Mar;74(3):677-88.
- 19. Luthans F, Avolio BJ, Avey JB, Norman SM. Positive psychological capital: Measurement and relationship with performance and satisfaction. Personnel psychology. 2007 Sep;60(3):541-72.
- Avey JB, Reichard RJ, Luthans F, Mhatre KH. Metaanalysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. Human resource development quarterly. 2011 Jun;22(2):127-52.
- 21. Maykrantz SA, Langlinais LA, Houghton JD, Neck CP. Self-leadership and psychological capital as key cognitive resources for shaping health-protective behaviors during the COVID-19 pandemic. Administrative sciences. 2021 Apr 12;11(2):41.
- 22. Mubarak N, Safdar S, Faiz S, Khan J, Jaafar M. Impact of public health education on undue fear of COVID-19 among nurses: The mediating role of2psychological capital. International Journal of Mental Health Nursing. 22021 Apr;30(2):544-52.
- 23. Lu W, Wang H, Lin Y, Li L. Psychological status of medical workforce during the COVID-19 pandemic: A cross-sectional study. Psychiatry 3research. 2020 Jun 1;288:112936.
- 24. Brunetto Y, Saheli N, Dick T, Nelson S. Psychosocial safety climate, psychological capital, healthcare SLBs' wellbeing and innovative behaviour during the COVID 19 pandemic. Public Performance & Management Review. 2022 Jul 4;45(4):751-72.
- 25. Parker DF, DeCotiis TA. Organizational determinants of job stress. Organizational behavior and human performance. 1983 Oct 1;32(2):160-77.
- 26. Macdonald S, MacIntyre P. The generic job satisfaction scale: Scale development and its correlates. Employee Assistance Quarterly. 1997 May 30;13(2):1-6.
- 27. Luthans F, Youssef CM, Avolio BJ. Psychological capital: Developing the human competitive edge.
- 28. Giorgi G, Lecca LI, Alessio F, Finstad GL, Bondanini G, Lulli LG, Arcangeli G, Mucci N. COVID-19-related mental health effects in the workplace: a narrative

review. International Journal of environmental research and public health. 2020 Nov;17(21):7857.