

Moderating Role of Fear of Covid on the Relationship between Burnout and Psychological Distress among Frontline Healthcare Workers:

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ABSTRACT

This study examines the association between the job burnout and psychological distress among nurses and investigates the moderating role of fear of COVID-19. In this relationship a cross-sectional survey design was employed, and data were collected from 241 nurses using standardized measurement scales for fear of COVID-19, psychological distress and job burnout. Findings reveal that burnout is significant and associate positively with psychological distress ($\beta = 0.185$, $p = 0.001$). However, fear of COVID-19 does not moderate the relationship between burnout and psychological distress significantly ($\beta = 0.017$, $p = 0.774$). These results suggest that burnout remains a critical predictor of psychological distress among nurses during health crises. The study emphasizes the need for healthcare institutions to implement supportive interventions, such as counseling services, psychological support, and stress-management training, to reduce burnout and promote nurses' mental well-being during pandemic situations.

Keywords: Frontline Health Care Workers, Psychological Distress, Burnout, Fear of Covid-19, Cross Sectional

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1 INTRODUCTION

The upsurge in the apprehension of COVID-19 and its prevalence would lead to a neverending state of health anxiety specifically in the people who are associated with the healthcare profession, they will

face vulnerable effects (Banerjee, 2020, Watson, 2023) on their performance and health outcomes (Chen, et al., 2020). Service organizations are particularly vulnerable to abrupt changes in their external environment due to the labor-intensive nature of their operations, which require a high level of human engagement (Abbas, Q., Jamil, S., Asad, Z., & Chang, A. A. R., 2025). This is not just a medical phenomenon (Banerjee, 2020), it does not seem to descend in the near future and several contributing factors are likely to lead to a future rise in psychological distress. The work pressure usually comes when the organizations have a shortage of staff with high turnover (Almeida-Meza et al., 2025). Pakistan is amongst those countries facing an acute shortage of nursing staff due to brain drain and policy issues (Jawed et al., 2025). Thus, The likelihood of job burnout and associated psychological distress is higher among nursing staff working in Pakistan. The Nurses were affected due to a lack of safety kits and awareness of the disease (Khattak et al., 2021). Four major themes were found in Iranian intensive care unit (ICU) Nurses including inefficient organizational support, exhaustion, future uncertainty, and psychological pressure in pandemic (Moradi et al., 2021). Resource scarcity causes a negative impact on medical personnel and the general population as far as their physical and psychological health is concerned (Dymecka, Gerymski & Machnik-Czerwik, 2022). Labrague et al., (2020) reported around 90,000 confirmed cases of healthcare workers have been infected by COVID-19 (Labrague & De los Santos, 2020). Banerjee (2020) highlighted the global neglect of the negative psychological impacts caused by fear of COVID-19. The misleading information through conventional and nonconventional media also paved the way for fear of COVID-19 and the crisis began to get worse (Maslach and Leiter, 2016). By the end of February 2020 there were just two cases of COVID-19 in Pakistan (Khattak et al., 2021). Although the global spread of the disease infection started in January 2020 (Peterson et al., 2008). The infection of COVID19 caused many deaths around the globe (Sung et al., 2020). The death ratio was comparatively low in Pakistan but in the next couple of months, the conditions became vulnerable (Khattak et al., 2021). Such an increasing rate of confirmed cases and deaths developed mental health problems even in nurses and in the general public (Peterson et al., 2008; Sung et al., 2020). The situation is worst in refugee camps due to the risk of transmission and the higher population density of inhabitant per square kilometer (Moradi et al., 2021). The constant state of anxiety mimics the illness as the mental health damage due to COVID-19 was much deeper than the actual spread of infected people (Ozamiz-Etxebarria et al., 2020). A negative relationship was found between COVID-19 anxiety with personal resilience, organizational support, social support (Labrague & De los Santos,

2020). Past studies hypothesized the relation between psychological distress, fear of COVID-19 and turnover intentions (Khattak et al., 2021), work satisfaction (De los Santos & Labrague, 2021), future career anxiety (Maslach and Leiter, 2016), depression & anxiety (Fitzpatrick, Harris and Drawve, 2020; Satici et al., 2021), fear of COVID-19 and absenteeism (Abbas, Q., Rehman, A., Jamil, S., Khan, A., & Asad, Z., 2023) but lessor focus has been given to the later consequences of burnout i.e. the emotional exhaustion & disengagement, burnout bipolar vigor & identification in both facet of physical & psychological demands with psychological distress. Demerouti et al., (2008) identified that burnout level is at a higher side of health care workers than in white collar jobs. The extended hours working leads to severe burnout among employees (Ornell et al., 2020). Occupational burnout in health care settings can lead to psychological distress and impair the performance of employees which can result in more medical errors and early retirement (Gallardo Peralta et al., 2014). The increased pressure conditions negatively affect their performance and the standards of care (Gómez-Salgado et al., 2021). Thus more care must be given to mental health in the organized provision of the medical care sector (Gallardo Peralta et al., 2014). The aim is therefore to examine the association between dimensions of burnout, psychological distress and the moderating role of apprehensions associated with COVID-19. The research indicates that nurses in Pakistan experienced severe emotional exhaustion and distress due to burnout issues (Andlib et al., 2022). Shakil et al. (2025), in a recent survey, found different types of burnouts, where some of them were not causing the distress issues. Burnout is not restricted to the hospitals or healthcare industry; its existence has been found to be a problem in educational institutes. The Pakistani university students suffer from sleep problems due to burnout and anxiety, which further results in mental health issues (Jamil et al., 2025; Khurshid et al., 2025). Hospital staff do not burnout challenges due to client issues, while more burnout is caused by the personal and work-related issues in Pakistan (Shakil et al., 2025). Contrary in other setting, the client related burnout is perceived major cause of psychological distress (Colmar et al., 2025; Juneja et al., 2025). This highlights the fact that the context of Pakistani workplace is different from the western world. Hence, exploring the moderating link of COVID-19 between the job burnout and psychological distress shall improve the understanding of the factors contributing to the burnout and psychological distress.

Theoretical background and hypothesis development

The underlying foundation of an idea of current study is deep rooted in the theory of emotions and job demand resource model. The intensity of the burnout-psychological distress relationship can be explained through the combined perspectives of the Theory of Emotions and the Job Demands - Resources Model because together they provide comprehensive understanding of how emotional processes influence nurse's psychological outcomes through workplace stressors in health care

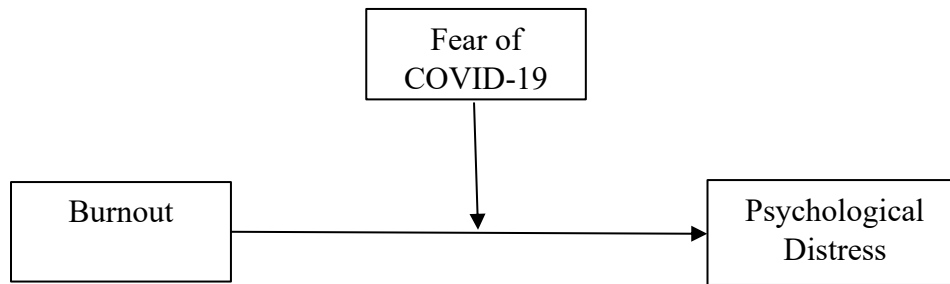


FIGURE 1

Conceptual Framework
settings within Karachi, Pakistan.

The job demand resource model postulates badly designed job demands and insufficiency of resources may lead to emotional exhaustion thus hinder performance. The core idea is the job demands for example hospital workloads, time constraints and health risks for nurses during pandemic and the existing job resources such as support from supervisors and objective morality such as work autonomy. Whenever the demands exceed greater in number or size than available resources over an extended period, nurses are more likely to encounter burnout, which is characterized by emotional exhaustion and disengagement. The term psychological syndrome can be referred to explain burnout due to on the job stressors (Maslach, 2016). This (JD-R) theoretical perspective similarly describes ways of too many jobs demands on one hand can lead to strain followed by burnout when demands are greater than the resources available to manage them, and that chronic burnout will lead over time to psychological issues plasma anxiety, depression, and emotional exhaustion (Demerouti & Bakker, 2011). The situation when an employee is not planning to leave the organization (Mak, 2001) but is affected by the ambiguous emotional states which possibly assist job burnout. Andargeery et al. (2025) also explored the link at job burnout with psychological distress and discovered that intense work pressure and higher expectations lead to such syndromes. His performance is reduced resulting in absenteeism and intention to leave (Kim & Kao, 2014). Within healthcare settings during the COVID-19 pandemic, increased workload, exposure to health risks, and uncertainty about infection (Walton, Murray and

Christian, 2020) represent significant job demands that contribute to burnout among nurses (Vagni, 2020).

On the other hand literature on emotions postulates how emotional reactions influence cognition and behavior and they are adaptive responses that suit the requirements of the environment. Based on the Theory of Emotions, environmental situations are perceived and cognitively appraised by individuals resulting in emotional reactions depending upon perceived threat or harm (Doan et al., 2025; Hatfield, 2007). In chronic risk situations, such as the COVID-19 pandemic, there is a shared experience of fear and anxiety for loss (of loved ones or income) that results in negative emotional states, like worry. To name a few there are William James and Carl Lange emotion theory, Cannon-Bard, Schachter-Singer, Lazarus theory of emotion are noteworthy (Maslach and Leiter, 2016). The Lazarus theory draws on both Cannon-Bard and James-Lange. Lazarus theory intends that people experience emotions based on how the experience is cognitively appraised. The critical factor is the situation and the thoughts that come before the physical arousal and emotions. These thoughts are shaped by culture and religion (Maslach and Leiter, 2016). The core idea and application of the theoretical model help us conceptualize the negative emotional estates such as frustration, fatigue and helplessness that are triggered by burnout. The domain of psychological distress covers symptoms characterized by anxiety and depression, recognized as somatic symptoms ranging from sadness to restlessness. It is a negative emotional reaction of all stressful factors and an indicator to gauge the non-specific mental health problems (Dohrenwend & Dohrenwend, 1982).

Thus, the job demand model explains how job demand creates burnout whereas theory of emotions explains individual's emotional responses to perceived threats that can intensify negative psychological and behavioral outcomes. According to this perspective, workplace experiences for nurses may trigger emotional reactions that influence cognitive evaluation, emotional regulation, and overall well being. In a healthcare setting with a high pressure pandemic environment, prolonged exposure to emotionally demanding tasks can lead to negative emotional states including exhaustion, anxiety and frustration of nurses. When nurses are unable to effectively regulate these emotional responses, the accumulation of negative affect manifests as psychological distress.

Burnout influences psychological distress directly and indirectly, many burnout – psychological distress indirect mediating variables in previous studies were discussed in literature such as psychological empowerment, resilience, self-efficacy, psychological capital and social support (Romani and Ashkar, 2014; Sasangohar et al., 2014). The higher the burnout the lower general health and higher cognitive stress, but with caution as the distress may be a cause of burnout (Kozak et al., 2013). The depression and anxiety association with burnout (Podsakoff, MacKenzie and Podsakoff, 2012; Koutsimani et al., 2019). Therefore, in the light of above literature and integrating the theory of emotions with the job demand resource model that provides a robust theoretical explanation for why burnout leads to psychological distress, we postulate and hypothesize that burnout positively affects psychological distress.

Hypothesis 1: Psychological distress tends to increase as burnout among nurses rises.

When awareness of danger or fear is triggered, it could lead to physiological reactions by unkind feelings, thus anxiety is due to unpleasant feelings when fear is aroused (Beck, A. T., & Emery, G., 1979). The theoretical foundation of the role of fear of COVID-19 introduced additional psychological demands to the job that amplify the stress such as fear of infection, uncertainty and health risks or increased workload and safety concerns. The job demand resources model posits that fear of COVID-19 acts as an additional psychological demand and stress amplifier. Thus when fear is high, the effect of burnout on psychological distress becomes stronger. Fear in different situations is linked with anxiety, depression, and distress (Gatehouse et al., 2025; Lopez-de-Leon et al., 2025). According to Barlow (2004) emotions combined with fear will make up anxiety, so also fear with distress and emotional reactions anger will result in anxiety (Li et al., 2022) but sometimes the blend can be different. Izard (1977) holds that the fear and distress combined with anger will be termed as anxiety but in another instance the shame and guilt combined with fear will be considered as anxiety. Thus only fear is dominant in all emotional combinations to form depression and anxiety, which are the core dimensions of psychological distress.

Fear is a powerful emotion thus high fear associated to COVID-19 increases emotion sensitivity and anxiety. A field study in Algeria established that fear increases anxiety and reduces self-efficacy (Mounir & Abdelhak, 2025). When nurses in healthcare settings already experience burnout, this fear intensifies

their emotional responses, leading to stronger psychological distress. In other words fear acts as an emotional intensifier, strengthening the burnout - stress relationship.

COVID-19 became a source of stress (Reznik et al., 2021), The study of Sevari (2025) discovered, fear of COVID can affect psychological well-being. Fear related to COVID-19 has been linked to higher levels of somatic symptoms, depression, and anxiety (Ahorsu, 2022; Satıcı et al., 2021), along with reduced life satisfaction (Satıcı et al., 2021). Nurses were under more physical stress due to the suffering of patients with COVID-19, long working hours or task rhythms, workload (Westermeyer and Janca 1997; Satıcı et al., 2021), time constraints, emotional reactions, anger, and agitation (Walton, Murray and Christian 2020; Vagni, 2020). They always expose themselves to burnout because of physical and emotional challenges they face and due to the nature of their roles (El-Fatah et al., 2025). Stress is due to the fear of infection and not only due to organizational challenges during a pandemic (Westermeyer and Janca, 1997).

During fear, individuals experience uneasiness during their livelihood, which causes a negative impact on their lives (Okur et al., 2025). With the lens of theory of emotions, fear of COVID-19 works as a stimulus that has the bearing on the emotions of nurses. The different combinations of emotions blended with the dominance of fear develop 'anxiety' (Izard 1997). On philosophical grounds, most scholars established emotions as the assembly of depression and anxiety, and it is entrenched with fear through multiple blends of emotions (Barlow, 2004). According to Barlow (2004) anxiety is the result of those emotions that are combined specifically with fear. On the basis of somatic symptoms and their deep-rooted association with fear, we hypothesize the following relationship.

Hypothesis 2: Fear related to COVID-19 has been linked to moderate job burnout-psychological distress, such that the effect of burnout is higher when fear related to COVID-19 is high.

The research establishes connections with contextual factors and employee physical & psychological characteristics with burnout (Meraya et al., 2021). In the area of health care recent studies concerning COVID-19 have shown a positive relationship with and between stress and burnout (Okwaraji and En, 2014; Tokac and Razon, 2021).

Method and study design

The study applied a cross-sectional design to understand the phenomenon of psychological distress from burnout. The study was conducted during November 2024 and January 2025. Three standard questionnaires were used as a primary unit of analysis to gauge psychological distress, burnout and fear of COVID-19.

Sample size determination

As far as the sample size is concerned, (Cohen, 2013) has established that a sample size above 200 is typically deemed sufficient to identify medium effect sizes with an acceptable statistical power of 0.80 at a significance level of 0.05. According to the formula offered by Cohen (2013) and based on the number of predictors, a minimum sample of 58 is adequate for the moderation and regression. The study, however, has used a higher number of sample sizes for stable and reliable results.

Participants and procedure

Keeping in line with research objectives to investigate the psychological distress phenomenon, five health care public and private settings for COVID-19 patients designated by Govt. of Pakistan in the provincial capital Karachi were included in the study. The selection of such major health care settings was based on the condition of the hospital's over 500 beds with emergency department and providing COVID-19 nursing facility. The survey questionnaires were distributed to 320 nurses through the administration of COVID-19 nursing units. A total of 298 filled questionnaires were collected through the focal person. Finally, only 241 completed in all aspects.. The demographic is in Table 1:

TABLE 1 Demographic of Participants

Gender	Nos.	Percentage
Male	127	52.7%
Female	114	47.3%
Age		
25 or less	32	13.27%
26 – 30	124	51.46%
31– 40	70	29.06%

41 – 50	09	3.72%
51 – 60	05	2.07%
More than 60	01	0.42%
Qualification		
Intermediate	32	13.27%
Bachelor 14 years	85	35.27%
16 Years of education	80	33.2%
18 Years of education	44	18.26%
Designation / Position		
Nurses	170	70.54%
Nursing Assistants	71	29.46%
<i>n=241</i>		

Instrumentation

The Oldenburg Burnout Inventory scale consists of sixteen items that cover physical and cognitive aspects, including two core burnout dimensions namely 'exhaustion' and 'disengagement'. The OLBI scale factorial validity, internal consistency for exhaustion and disengagement $\alpha = .85$ for Nurse and white-collar workers, and convergent validity has been confirmed in many countries and in many studies (Demerouti and Bakker, 2008). The OLBI scale measures the entire spectrum starting from exhaustion to vigor or energy and from disengagement to dedication or identification, thus the scale holds the capacity to gauge the burnout and its antipode. Each range of both dimensions is divided in four questions each in Likert scale, the positively gauge energy items, reverse coded exhaustion items, positively gauge dedication items and reverse coded cynicism.

The scale of COVID-19 related fear was developed by Ahorsu in 2020. This is a unidimensional seven item scale. Assessed the same way with a 5-point Likert scale. This instrument has been previously validated across various contexts and countries (Roche, Haar & Luthans, 2014; Shahrour and Dardas, 2020; Sung et al., 2020). Previous research admirable validity and reliability of this in gauging the apprehensions of COVID-19 with internal consistency above 0.8 (Labrague and De los Santos, 2020).

Psychological distress scale for clinical and epidemiological purposes is known as K-10 used to gauge non-specific psychological distress within the past 4 weeks in the general population (Kessler 2002; Anderson, 2013). K-10 senses mental disorders in the general public as well as it can indicate the mental health of people (Andrews, G., & Slade, T., 2001). For non-specific psychological distress the 6-item or Kessler-6 scale is also validated in studies (Mistry et al., 2021). It has 10 items with a 5-point scale from 1 “All of the time” to 5 “None of the time” to measure two dimensions of psychological distress ‘depression’ and ‘anxiety’ (Anderson et al., 2013). The reliability and validity has emerged in many studies and multiple languages including (Hides, 2007; Spies et al., 2009; Baillie, 2005; Stankovic et al., 2021; Arnaud, 2010; Zou et al., 2016).

Ethical consideration

The institutional committee for ethics of Mohammad Ali Jinnah University Karachi granted the clearance for data collection through a letter for designated hospital permission. The participants were informed about the aim of the study.

Common Method Bias

Common Method Bias (CMB) is identified by following Podsakoff (2011) that recommends the use of psychological and proximal separation of constructs (Ramayah et al., 2020). In order to determine the data bias, Kock and Lynn (2012) and Kock (2015) suggested checking for full collinearity. They recommended VIF range below 3.3 to establish that common method bias is not an issue for the data. Since the VIF values of the outer model are well within range, hence the data used in the study has no such issues of CMB.

TABLE 2 Full Collinearity Analysis

	Burnout	Fear of Covid	Psychological Distress
VIF	1.121	1.132	1.118

Statistical technique used

Multivariate technique partial least squares structural equation modeling was employed to study the relationship of the structural as well as the measurement model. According to Hair et al. (2016), PLS-SEM software allows researchers to analyze multiple variables simultaneously in social science studies (Hair et al., 2021). PLS-SEM is an effective variance-based structural equation modeling technique suitable for small sample sizes and models with multiple endogenous variables (Akter et al., 2017).

Data analysis

The internal consistency results were examined. Suggested and proposed by Hair et al. (1999) and Ramayah et al. (2020), the measurement model was evaluated by analyzing factor loadings, composite reliability (CR), and average variance extracted (AVE) (Reznik et al., 2021). Accordingly, all criteria were evaluated and values of all criteria are well within the prescribed range as suggested by Ramayah et al., (2020) except the value of AVE for the Burnout i.e > 0.40, which is still acceptable if the value of composite reliability CR is higher than 0.60 (Fornell, C., & Larcker, D. F., 1981), as all variables in the study had composite reliability of >0.74. Table 3 displays the measurement model.

Table 3 Measurement model Validity and reliability

Constructs	Items	Loadings	CR	AVE
Burnout	BOD1	0.687	0.744	0.421
	BOD4	0.633		
	BOE7	0.649		
	BOE8	0.623		
Fear of Covid-19	FOC1	0.541	0.876	0.508
	FOC2	0.546		
	FOC3	0.788		
	FOC4	0.775		
	FOC5	0.728		
	FOC6	0.754		
	FOC7	0.803		
Psychological Distress	PsyD1	0.680	0.892	0.508
	PsyD2	0.735		
	PsyD3	0.760		
	PsyD4	0.700		
	PsyD5	0.674		
	PsyD6	0.684		
	PsyD7	0.749		
	PsyD8	0.715		

This study uses the Fornell and Larcker (1981) criteria, which suggest if the inter-correlation value of the construct is below .90, then the constructs are distinctive. The results of this study shown in Table 4 hold that all constructs have value less than 0.72 and thus have no issues of discriminant validity.

Table 4: Correlation and Discriminant Validity: Fornell-Larker criteria

	(1)	(2)	(3)
	0.649		
Burnout			
		0.713	
Fear of COVID-19	-0.272		

Psychological Distress	0.325	-0.580	<i>0.713</i>
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Note: Square root of (AVE) is shown in italics.

To gauge the convergent reliability, the threshold is the (AVE) must be greater than 0.50. The average variance was calculated with squared loadings of standardized regression weights. The AVE was found more than 0.50 for variables psychological distress and fear of COVID-19. The AVE for burnout was calculated 0.42. To check the validity concern Fornell-Larker criteria was used where it suggests that squared root of average variance extracted must be greater than the correlations of the variables (Abbas et al., 2025; Yusuf & Busalim, 2018). In our study the square root of (AVE) from all three variables is greater than the correlations of all three variables thus there are no validity concerns. The discriminant validity exists in all three variables.

SEM Results:

Structural model is assessed through path coefficients, standard errors, t-values and p-values using a 5,000-sample resample bootstrapping method as suggested by Hair et al., (2019). Results indicate that Burnout affects the psychological distress significantly (β 0.185, $p < 0.01$), which suggest that burnout shall increase the psychological distress amongst nurses.

Table 5 Fear of COVID, burnout – psychological distress relationship

Hypothesis	Relationship	Std. Beta	St. Dev	t-value	<i>P</i> value
H1	Burnout -> Psychological Distress	0.185	0.057	3.267	0.001
H2	Moderating Effect FoC	0.017	0.060	0.287	0.774

Std. Beta, standardized regression coefficient, St. Dev, standard deviation

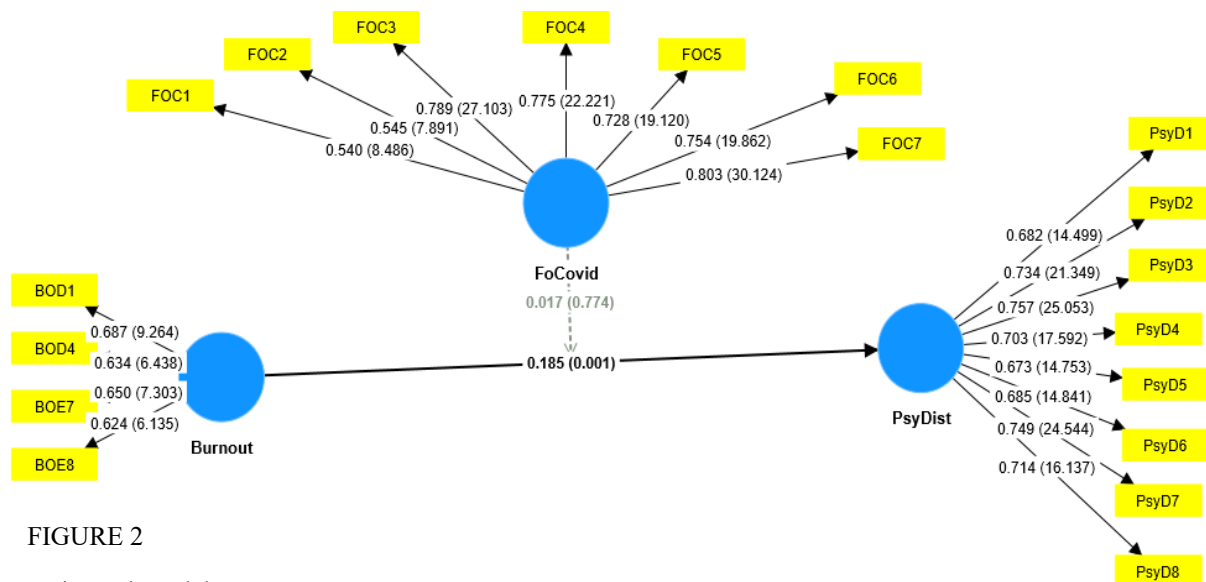


FIGURE 2

Estimated Model

Discussions

Psychological distress has been the paramount concern nowadays during COVID-19 pandemic. It is necessary to understand the psychological impact of COVID-19 on people associated with the healthcare profession. The confirmatory factor analysis confirmed the two-dimensional burnout scale positively impacts unidimensional psychological distress. The fear of COVID-19 was found to have a relationship with psychological distress, but the results were statistically insignificant. It is confirmed that fear of COVID-19 does not moderate the relationship of burnout with psychological distress such that the level of psychological distress is not low when fear of COVID-19 is high.

The prevalence of job burnout in healthcare settings is positively correlated with psychological distress among nurses. Previous studies also proved a positive significant relationship between fear of COVID-19 and hospital anxiety (Ahorsu et al., 2022). Grounded on social support theory Khattak in 2020 tested 'Fear of COVID-19 is positively related with the nurse's psychological distress. Labrague (2020) found Fear of COVID-19 and psychological distress are positively correlated. Fear of the COVID-19 significantly positively predicted depression and anxiety (Satici et al., 2021). The role of psychological distress in mediating the relationship between COVID-19-related concerns and employee absenteeism (Abbas et al., 2023).

The insignificant relationship in our study represents the irrelevancy of impact from fear of COVID-19 on burnout – psychological distress relationship. The idea can be established that burnout does increase the psychological distress among nurses but when fear of COVID-19 appears as an event it

may be irrelevant up to a certain extent as the somatic symptoms may differ in different cultures because they are partly influenced by different cultural norms in different societies (Hegeman, 1991). The intensity and expression of different states of mind such as sadness, anxiousness will vary across cultures (Wittchen, 2010) thus it is widely agreed that psychological distress will not hold the same intensity and expression in different cultures worldwide. Barlow (2004) has identified why depression and anxiety, the core two dimensions of psychological distress, have varying effects on people (Barlow, 2004). As discussed earlier, different and diverse emotional responses can be established among people due to the pandemic diseases like COVID-19. The spread of COVID-19 applies diverse effects on the emotions of nurses in health care settings. Diverse emotional responses are initiated whenever infectious diseases rapidly spread but the responses are not the same in individuals as far as the anxiety, fear and stress is concerned (Khalid et al., 2016). The non-specific mental health problems differ across and within societies, men and women and in different age groups thus, we expect unpredictable results. Young age group, low self-efficacy and ASD acute stress disorder were found as a significant contributor to subsequent psychological distress among Jordanian nurses (Shenoi et al., 2018). The insignificant results of the moderating effect of fear of COVID-19 on burnout – psychological distress relationship reminded the perspective of Barlow (2004) as he said that multiple blends of emotions combined with fear will make up anxiety. Although the part that fear plays in the development of anxiety the core dimension of psychological distress is dominant but with cautions of theme obsessions (Barlow, 2004). He suggests the existence of anxiety in every culture and country but with varying experiences, symptoms and interpretations. The anxiety symptoms in Israel and Nigeria are similar but the complaints regarding those symptoms are different in representation by both countries such as breathing difficulties, heart rate and nervousness. Barlow further describes the concept of the theme of obsessions in eastern societies, specifically Saudi Arabia where the theme of obsession is related to practicing the religion (Barlow, 2004). Mental illness in Saudi or obsessive-compulsive disorder is usual and ordinary in comparison to other countries but religious practices and prayers are the dominant themes of obsession (Mahmud et al., 2021). In Western societies and culture the religious practices are not as common as in Eastern societies so the obsessional theme or the religious practices that are related to the cleaning of human beings are not common. Some people in different cultures are more apprehensive and make acknowledgement of their emotions and arousal but some are not thus the mysteries of anxiety are legion. The important theoretical contributions to the occupational stress,

burnout, and mental health literature by assembling burnout, fear of COVID-19, and psychological distress into a single integrated framework. First, the study contributes to the application and empirical validation of the (JD-R) through that time in a pandemic context. According to the model, the results indicate that burnout leads to a depletion of emotional and psychological resources among nurses, which facilitates higher levels of psychological distress. This supports the theoretical perspective that a burdensome work environment can significantly affect mental well-being, especially in high-risk health care settings, by leading towards excessive job demands and long-term emotional exhaustion. Secondly, by infusing aspects of emotional response into the Stress, Appraisal, and Coping framework, this study adds to the statistical power analysis for the behavioral sciences-based stress and emotion literature. According to the Theory of Emotions, depletion of emotional resources results in anxiety and psychological strain, which is evidenced by these findings. Nevertheless, the trivial moderating effect of fear of COVID-19 offers a valuable theoretical contribution: that contextual or situational fears don't always amplify stress outcomes when long-standing occupational stressors are present. Thirdly, the study adds context-specific contributions by providing evidence from nurses in Karachi, a large metro setting of a developing country. The results indicate that anxiety, one of the main components constitutive of psychological distress operationalized via the K-10 scale, may present across cultures differently. This lends support to emerging theoretical interpretations that emotional responses and mental health outcomes are culturally rooted, shaped by localized coping norms, social exchange networks, and cultural-scale resilience. The negligible effect of fear of COVID-19 additionally suggests that nurses working in high-exposure settings may develop psychological adaptation over time.

Study limitations

About limitations, our research is not without them, all the items were based on self-reported assessment. Most of the respondents were from the provincial capital of Pakistan, Karachi and these findings were preliminary taken at a single interval of one-month time. Thus, the effect of burnout on psychological distress in health care settings across different cities of Pakistan is needed to understand causal relation from burnout to psychological distress and its association with fear of COVID-19. The recent hectic work schedules in the healthcare sector may disproportionately affect mood, leading to inconsistent responses from the respondents. The questionnaires were self-reported so there may be a chance of source bias. The study design is cross sectional and the data was gathered at one point of

time thus the results may not be generalized as there is a chance of change in data over the period of time.

Conclusion and Managerial Implications

This research focused on the role of fear of COVID-19 with burnout – psychological distress relationship. The impact of burnout on psychological distress is positive and statistically significant which is consistent with previous literature in health care studies (Ornell et al., 2020; Sasangohar et al., 2014; Spies et al., 2009). In conclusion we can say that we have used the normative data for our measurement from the large population of Karachi and use K-10 scale to gauge the general health as well as the disorder associated with psychological impairment. Our findings consistent with job demand resource model and theory of emotions that depletion of emotional resource leads to burnout thus anxiety the core dimension of psychological distress appear differently as it is culture specific. The fear of COVID-19 insignificantly contributes to the burnout - psychological distress relationship among nurses. This study extends the theory in such a way by surveying and examining the bearing of fear as stimuli on multiple blends of emotions, more specifically the event 'COVID-19' on both dimensions of 'burnout' namely 'exhaustion' and 'cynicism' with 'psychological distress'.

Healthcare administrators need to focus on reducing excessive job demands so that emotional exhaustion can be prevented. Secondly, the management of hospitals can ensure adequate staffing levels, manageable work schedules, and rotation-based shifts to reduce the excessive workload on their staff. Reducing workload pressure and providing supportive supervision shall help their staff to conserve energy and minimize the subsequent psychological distress. Thirdly, the study indicates that burnout reflects the depletion of emotional resources; healthcare managers should invest in psychological support systems within their organizations. Practices such as counseling, mental healthcare screening, and stress management can help nurses cope with occupational strain. Finally, the current study emphasized proactive management of workload and psychological resources; health managers should recognize psychological well-being as an essential component of a sustainable workforce. Allocation of adequate resources, developing employee well-being programs, and improving the effectiveness of the healthcare workers can play an important role in handling burnout issues.

The utmost importance must be given by health policymakers to develop their understanding of psychological distress, mental illness and consider psychological resources as an integral part of coping

with the depletion of energy in nurses. It also contributes to scholars to understand why anxiety, the core of psychological distress, acts differently across and within cultures. The COVID-19 related stress may be reduced with the actions from government and non-government stakeholders, and they are required to mitigate the future burnout in nurses. We believe that the analysis may be useful in broad range studies in future.

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Conflict of interest

The authors declare no conflicts of interest.

Data availability statement

Data available on request from the author

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