

## Research Paper

# The Relationship Between Health Anxiety and Perceived Stress With Moral Distress in Emergency Nurses: The Mediating Role of Distress Tolerance



Ziba Soltani<sup>1</sup>, Hadi Ebrahimi<sup>2</sup>, Sara Mousa Niai Maddah<sup>3</sup>, Ali Jahanian<sup>4\*</sup>

1. Department of Psychology and Educational Sciences, Payame Noor University, Tehran, Iran.

2. Department of Counseling, Faculty of Educational Sciences and Psychology, Mohaghegh Ardabili University, Ardabil, Iran.

3. Department Psychology, Faculty of Human Sciences, Bandar Abbas Branch, Islamic Azad University, Bandar Abbas, Iran.

4. Department of Counseling, Faculty of Educational Sciences and Psychology, Kharazmi University, Tehran, Iran.



**Citation** Soltani Z, Ebrahimi H, Mousa niai Maddah S, Jahanian A. The Relationship Between Health Anxiety and Perceived Stress With Moral Distress in Emergency Nurses: The Mediating Role of Distress Tolerance. *Health in Emergencies and Disasters Quarterly*. 2022; 7(3):127-134. <http://dx.doi.org/10.32598/hdq.7.3.409.1>

**doi** <http://dx.doi.org/10.32598/hdq.7.3.409.1>



### Article info:

**Received:** 29 Apr 2021

**Accepted:** 08 Nov 2021

**Available Online:** 01 Apr 2022

### Keywords:

Health, Anxiety, Stress,  
Morality, Tolerance,  
Emergency, Nurse

## ABSTRACT

**Background:** Nurses in emergency departments always experience stress and moral issues due to job stressors. This study was conducted to present a model of the relationship between health anxiety and perceived stress with moral distress containing the mediating role of distress tolerance in emergency department nurses.

**Materials and Methods:** This descriptive correlational study was performed on 230 emergency nurses in Tehran, Iran, in 2020. They were recruited using the convenience sampling method. In this study, the perceived stress questionnaire (Cohen, Kamark, and Marmelstein, 1983), health anxiety (Salkowski and Warwick, 2002), distress tolerance (Simons and Gahr, 2005), and Jameton moral perturbation questionnaire were used. Data analysis was performed by path analysis using SPSS v. 24 and Amos v. 24.

**Results:** The study's findings showed that perceived stress ( $t=5.58$ ) and health anxiety ( $t=7.1$ ) had a positive and direct effect on moral distress. Nevertheless, distress tolerance ( $t=8.33$ ) had a negative and direct effect on moral distress ( $P<0.01$ ). Furthermore, distress tolerance has a mediating role in the relationship between perceived stress and health anxiety with moral distress ( $P<0.01$ ).

**Conclusion:** Distress tolerance mediates the relationship between perceived stress and health anxiety with moral distress. The findings of this study can improve distress tolerance and the level of work ethic and reduce the moral distress of emergency department nurses.

### \* Corresponding Author:

Ali Jahanian, MSc.

**Address:** Department of Counseling, Faculty of Educational Sciences and Psychology, Kharazmi University, Tehran, Iran.

**E-mail:** [alijahanian852@gmail.com](mailto:alijahanian852@gmail.com)

## 1. Introduction

Nurses are exposed to occupational injuries and stressors, and the psychological pressures caused by them endanger their health in the profession and the workplace [1]. In this regard, emergency department nurses are constantly experiencing stresses caused by emergencies and related factors related to the specific nature of their job. These stresses can affect the quality of their work and, consequently, the organization's productivity [2]. Also, nurses in emergency departments experience many problems in the hospital environment, which cause emotional reactions and, consequently, increase individual and interpersonal problems in the workplace [3]. Appropriate communication between medical staff and patients and the seriousness and collective spirit in work are the moral aspects of nursing and the medical profession. These aspects reduce patients' anxiety and worry and improve their treatment processes [4]. Therefore, one of the essential factors in nursing that can affect the therapeutic and health aspects of the workplace is moral distress [5].

Moral distress has been defined as a psychological imbalance and a state of negative emotion in which a person cannot change moral or professional decisions based on his or her knowledge into action and behavior. Sometimes distress is caused in response to facing individual barriers such as depression and anxiety and sometimes organizational barriers such as burnout and low job satisfaction so that a person cannot continue activity based on the primary moral distress and subsequent negative emotions [5]. Moral distress can have different consequences for both the patient and the nurse or the staff, and it can cause a feeling of losing control over environmental conditions and patient care in the treatment staff [6]. Also, studies have shown that moral distress affects low job attachment, burnout, the tendency to quit work, and patients' dissatisfaction [7, 8].

Stress involves reactions toward one's work environment and personal life, which can have both positive and negative effects on individuals [9]. Barzgar et al. [10] showed that job stress in nurses working in the emergency department is more than in other departments, which leads to their burnout. In examining the consequences of stress and its impact on work morale issues; the studies show that stress and stressful conditions create conflicting feelings, futility, indifference, and depression in nurses [11] that result in ethical issues such as reducing empathy with patients [12] and work ethics [13].

Emergency department nurses are exposed to serious risks and diseases related to their health due to constant contact with patients and frequent use of equipment [14]. They are constantly exposed to the risk of physical and mental illnesses and stress [15]. Persistent and intense health concerns characterize health anxiety, and in the diagnostic term, those who become disabling due to anxiety are diagnosed with hypochondriasis [16]. Concerning health anxiety and nursing staff, Myers et al. reported on the important consequences of job stress in such a way that 60% to 90% of emergency department nurses complain of physical illness [17]. Sirati, Karimi, and Khalili [18] concluded that coronavirus department nurses had tolerated much stress facing the epidemic of COVID-19 disease; this stress is concerned about health and death, and life, which have different consequences, including problems in work ethic.

Tolerance of turbulence is one of the concepts that can act as psychological protection against health anxiety and stress in emergency department nurses. Ellis et al. [19] defined tolerance of turbulence as the ability of an individual to experience and tolerate negative emotional states that can have a developmental and educational aspect. According to Ellis et al. [19], parents can determine this aspect of children's upbringing and development by disregarding some of their needs. This structure is a variable of individual differences that refers to the capacity to experience and resist emotional distress [20]. Tolerance of turbulence is increasingly seen as an important structure in developing new insights about the onset and maintenance of psychological trauma and prevention and treatment [21]. Many reports have focused on the distinct concept of tolerance of turbulence among people with or at risk of psychological trauma [22]. Moqaddas and Khaleghi [23] achieved the relationship between tolerance of turbulence and moral intelligence in nurses. Also, according to the social components of moral distress, i.e., reducing the social relations between nurses in the emergency department, a study has shown the relationship between optimism and tolerance of turbulence with nurses' moral distress [24].

The moral distress of emergency department nurses significantly affects their performance in the workplace and plays a decisive role in the level of service to patients and the medical system. So many stressful stimuli in the nursing workplace can affect clinical performance. For this reason, it is necessary and important to pay attention to the problems of emergency department nurses, especially moral issues, during the COVID-19 epidemics and the existence of many effective psychological stimuli. In this regard, the present study was conducted

to determine the relationship between health anxiety and perceived stress with moral distress and mediation of distress tolerance in emergency department nurses.

## 2. Materials and Methods

This research is descriptive-correlational. The research population consisted of all nurses in the emergency department of Tehran in 2020, of whom 230 nurses who met the inclusion criteria were selected by convenience sampling method. Some studies [25] consider the acceptable number for descriptive research of path analysis type to be 200. Path analysis is a statistical method for applying the standard beta coefficients of multivariate regression in structural models. This analysis aims to obtain quantitative estimates of causal relationships between variables based on the assumptions of correlations and research background. Therefore, in this study, 230 people are considered to satisfy the desired statistical power and adequacy of sampling. Because of the COVID-19 epidemics and its limitations, an online questionnaire was used instead of a paper questionnaire. Because data collection was online, first, a link to the questionnaire and the request for cooperation were sent to the participants via email or WhatsApp. The data were then collected within a specified time.

### Research tools

#### Health anxiety questionnaire

The health anxiety questionnaire was prepared by Salkowski and Warwick. This questionnaire is a self-assessment scale with 18 four-option expressions that describes a person's position during the last 6 months in the best way. The expressions of this test are concerns related to health, paying attention to emotions or bodily changes, and the terrible outcomes of disease. Each expression is scored between 0 and 3. If a person selects more than one option, options with a higher score are selected for scoring [26]. In Iran, a study that examined the validity and reliability of this scale showed that the construct validity of this questionnaire includes three factors: disease, disease outcomes, and general health concerns. Also, the Cronbach  $\alpha$  coefficient with a value of 0.75 showed the desirable validity of the questionnaire [27].

#### Distress Tolerance Scale (DTS)

The Distress Tolerance Scale (DTS) is a self-assessment scale that was developed by Simons and Gaher [28] and had 15 questions and 4 subscales. Its subscales

are tolerance, absorption, evaluation, and adjustment, which are scored on a 5-point scale from 1=strongly agree, 2=slightly agree, 3=equally agree and disagree, 4=slightly disagree, to 5=strongly disagree. Higher scores indicate high distress tolerance [28]. Alpha coefficient in Basharpour et al. [29] research for these scores were 0.72, 0.82, 0.78, 0.70, and 0.82 for the whole scale, respectively.

#### Moral distress questionnaire

Jameton moral perturbation scale (2009) is the first scale to measure moral distress in the healthcare community. The questionnaire consisted of 28 questions that measured the level of moral distress experienced by treatment staff in specific situations. The scoring of this tool was done using the 7-point Likert scale for levels of moral distress from very low to very high. The total score of the questionnaire ranges from 28 to 196; the higher the score, the greater the moral distress. The scientific validity and reliability of the tool of moral distress have been measured in an internal study, which has been determined by retesting and the Cronbach  $\alpha$  value as 0.86 [30].

#### Perceived stress questionnaire

Perceived Stress Questionnaire was developed by Cohen, Kamarck, and Marmelstein [31] and had 3 versions of 4, 10, and 14 items that are used to measure the general stress perceived in the past month. This questionnaire is used when one wants to know to what extent a person's life situations are stressful [31]. The questionnaire items are scored on a 5-point Likert scale from never=4 to very high=0. A higher score indicates more perceived stress. In the study conducted by Cohen et al. [31], the Cronbach  $\alpha$  for this scale was 0.85.

Considering moral principles such as confidentiality of participants' information and their informed consent to enter and exit the research, the information obtained from the data is analyzed by statistical methods such as the Pearson correlation and path analysis in SPSS and Amos software.

## 3. Results

About 75% of the nurses participating in the study were married, and 25% were single. Also, 39% had more than 10 years of work experience, 42% had more than 5 years, and 19% had less than 5 years of work experience.

**Table 1.** The Pearson correlation matrix between research variables

Variables	Mean±SD	1	2	3	4
1. Health anxiety	46.11±6.67	1			
2. Perceived stress	31.51±3.89	0.64**	1		
3. Distress tolerance	39.22±4.71	-0.35**	-0.53**	1	
4. Moral distress	34.76±4.45	0.57**	0.61**	-0.29**	1

\* P<0.01; \*\* P<0.001.

**Table 2.** Model fit indices

$\chi^2/df$	CFI	AGFI	GFI	RMSEA	P
2.34	0.98	0.96	0.97	0.05	0.005

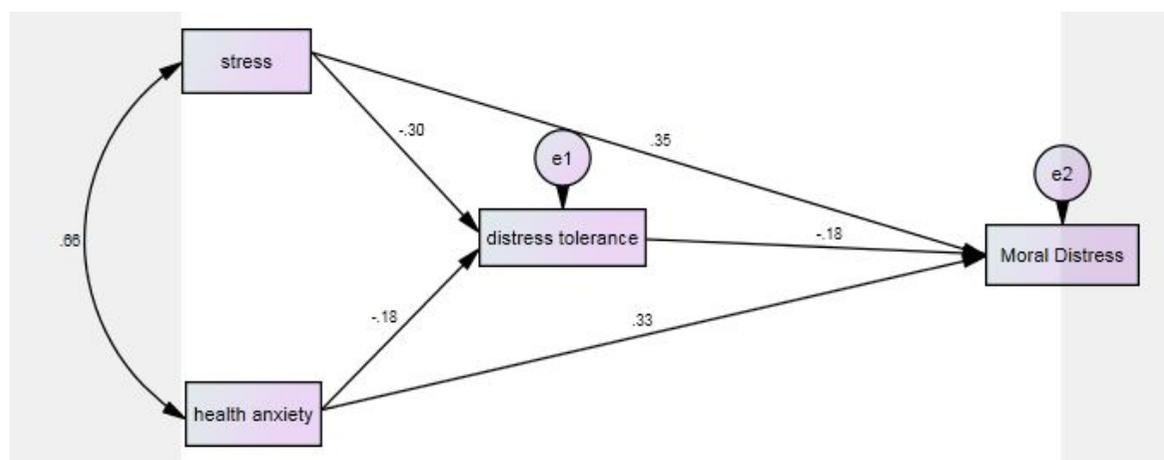
GFI: Goodness Fit Index; AGFI: Adjusted Goodness of Fit Index; CFI: Comparative Fit Index; RMSEA: The Root Mean Square Error of Approximation

According to [Table 1](#), the relationship between health anxiety and perceived stress with moral distress is positive and significant, but the relationship between distress tolerance and moral distress is negative and significant (P<0.01). The results of the correlation matrix showed that the relationships between study variables are significant. Therefore, it is possible to review the model. Initially, the model fit indices were calculated ([Table 2](#)).

According to [Table 2](#), the values of the Goodness Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), and Comparative Fit Index (CFI) are 0.97, 0.96, and 0.98, respectively, indicating that the model fits well with the data. If the CFI, AGFI, and GFI indices are higher than

0.90, it indicates a very appropriate and desirable fit, and a value higher than 0.80 indicates an appropriate and desirable fit. The Root Mean Square Error of Approximation (RMSEA) for the present study was 0.05, indicating the appropriate fit of the model with the data.

According to [Figure 1](#) and [Table 3](#), perceived stress and health anxiety have a positive and direct effect on moral distress, but distress tolerance has a negative and direct effect on moral distress (P<0.01). Also, perceived stress and health anxiety have direct and adverse effects on distress tolerance (P<0.01). To investigate the mediating role of distress tolerance between perceived stress and health anxiety with moral distress, Bootstrap instruction



**Figure 1.** The final model obtained from the relationship between health anxiety, perceived stress, and moral distress mediated by distress tolerance

**Table 3.** Direct path coefficients in the model

Paths	Estimation Value	Standard Value	S.E	C.R	P
Perceived stress on moral distress	0.88	0.35	0.15	5.58	0.001
Health anxiety on moral distress	0.56	0.33	0.07	7.01	0.001
Perceived stress on distress tolerance	-0.43	-0.30	0.01	-3.84	0.02
Health anxiety on distress tolerance	-0.05	-0.18	0.02	-2.32	0.001
Distress tolerance on moral distress	-0.25	-0.18	0.03	-8.33	0.001

was used (Table 4). As seen in Table 4, distress tolerance mediates between perceived stress and health anxiety with moral distress.

#### 4. Discussion

We investigated the relationship between health anxiety and perceived stress with moral distress and mediating role of distress tolerance in emergency department nurses. The results showed that health anxiety and perceived stress have a positive and direct effect on moral distress in emergency department nurses. Our study result is consistent with the findings of other studies [11-13]. The psychological problems such as stress and depression caused by physical health concerns and health anxiety and death in emergency department nurses, if excessive, can lead to physical, psychological, behavioral, and even moral complications for the nurses and endanger their health and occupational environment. When the stress of work requirements (observation of mortality, the severity of illness) exceeds the threshold, even a small problem can become a psychological crisis and make it harder for a person to bear the problems. Fan et al., in a study, showed that moral distress in the workforce is strongly associated with symptoms of depression and anxiety, so the symptoms of depression and anxiety can increase the moral distress in the workforce [32].

The main results of the study show that distress tolerance has a mediating role in the relationship between

health anxiety and stress with moral distress in emergency department nurses so that health anxiety and perceived stress have a positive effect on their moral distress by reducing nurses' distress tolerance. This obtained result in our study is consistent with the findings of other studies [23, 24]. Also, the findings of this study are consistent with some studies that inversely show that the feeling of job security (lack of anxiety in the workplace) by using the appropriate coping mechanism, including distress tolerance, causes mental health and the workplace [33].

People who cannot tolerate stress and distress in stressful situations probably get involved in moral problems in the organization. Some findings indicate that mindfulness and cognitive regulation against health anxiety and stress can increase distress tolerance and reduce burnout, which is a significant cause of moral distress [34]. One study showed that distress tolerance reduced the risk of suicide due to firefighters' job stress [35]. Distress intolerance reinforces avoidance behaviors against emotion and physical symptoms in people with health anxiety and stress that this strategy can be a threat to the nurses and all members of the treatment staff for their professional and moral performance [36].

Research results show that COVID-19 anxiety reduces stress management and greater vulnerability and reduces responsibility [37]. Therefore, health anxiety and stress in emergency department nurses who recently suffered from COVID-19 can reduce their tolerance to various as-

**Table 4.** Estimation of indirect paths in the model using bootstrap

Predictor	Path/Variable		Estimation Value	Upper	Lower	Sig.
	Mediator	Criterion				
Perceived stress	Distress tolerance	Moral distress	0.13	0.26	0.05	0.005
Health anxiety	Distress tolerance	Moral distress	0.18	0.39	0.06	0.03

pects of workplace problems and make them vulnerable to moral problems and slips. On the other hand, among the consequences of the inability to manage stress in the work environment is a decrease in adherence to organizational ethics, resorting to behaviors that avoid work responsibilities, and communication disorders [13]. One of the limitations of this study was that it was performed on emergency nurses in Tehran, so the generalization of the results to other occupations and cities should be made with caution.

## 5. Conclusion

This study confirms the mediating role of job distress in the relationship between health anxiety and perceived stress with the moral distress of emergency department staff. According to the findings, in addition to measures to reduce and manage health anxiety and stress and due to the inevitable nature of this anxiety, by strengthening the spirit of acceptance and tolerance of work environment distress, we should reduce the moral distress of these nurses in the work environment.

## Ethical Considerations

### Compliance with ethical guidelines

In this study, ethical considerations such as maintaining personal information confidential, having informed consent to participate in the research, and the right to leave the research were fully considered by the researchers.

### Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

### Authors' contributions

All authors equally contributed to preparing this article.

### Conflict of interest

The authors declared no conflict of interest.

### Acknowledgments

We would like to thank those who helped us conduct this research, especially the emergency department nurses who cooperated with us.

## References

- [1] Lee SH, Phan PH, Dorman T, Weaver SJ, Pronovost PJ. Handoffs, safety culture, and practices: Evidence from the hospital survey on patient safety culture. *BMC Health Services Research*. 2016; 16:254. [PMID] [PMCID]
- [2] Baysal HY, Yildiz M. Nursing's job life quality's effect on job satisfaction. *International Journal of Caring Sciences*. 2019; 12(2):1056. [Link]
- [3] Hamric AB, Blackhall LJ. Nurse-physician perspectives on the care of dying patients in intensive care units: Collaboration, moral distress and ethical climate. *Critical Care Medicine*. 2007; 35(2):422-9. [DOI:10.1097/01.CCM.0000254722.50608.2D] [PMID]
- [4] Dargah S, Haghani Zemydani M, Ghalavand M. [The relationship between work-family conflict and work ethics with mediating role of job stress in nurses (Persian)]. *Iranian Journal of Medical Ethics and History of Medicine*. 2017; 10(1):44-54. [Link]
- [5] Corley MC. Nurse moral distress: A proposed theory and research agenda. *Nursing Ethics*. 2002; 9(6):636-50. [PMID]
- [6] Corley MC, Minnick P, Elswick RK, Jacobs M. Nurse moral distress and ethical work environment. *Nursing Ethics*. 2005; 12(4):381- 90. [DOI:10.1191/0969733005ne809oa] [PMID]
- [7] Meltzer LS, Huckabay LM. Critical care nurses' perceptions of futile care and its effect on burnout. *American Journal of Critical Care: An Official Publication, American Association of Critical-Care Nurses*. 2004; 13(3):202-8. [DOI:10.4037/ajcc2004.13.3.202] [PMID]
- [8] Abbaszadeh A, Borhani F, Ameri F, Najmi G, Dowlatabadi S. The relationship between moral distress and nurses belong. *Journal of Medical Ethics*. 2013; 7(24):33-53. <https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=309938>
- [9] Bavandpur A. [Job stress and its role in the optimal performance of employees (Persian)]. *Kermanshah University of Medical Sciences and Health Services*. 2013; 324-35. [Link]
- [10] Barzgar M, Mostafazadeh A, Habibzadeh H, Radfar M, Khalkhali HR. [Prediction occupational burnout based job stress in nurses in the emergency department (Persian)]. *Iranian Journal of Psychiatric Nursing*. 2021; 8(6):20-8. [Link]
- [11] Jameton A. Dilemmas of moral distress: Moral responsibility and nursing practice. *AWHONN's Clinical Issues in Perinatal and Women's Health Nursing*. 1993; 4(4):542- 51. [PMID]
- [12] Ayadi N, Dargahi S, Ghamari Givi H, Abbasi M. [The impact of job stress on subjective well-being, marital stress and empathy of nurses (Persian)]. *Iranian Journal of Medical Ethics and History of Medicine*. 2016; 9(2):67-79. [Link]
- [13] Norouzi R, Dargahi S, Aeyadi N, Sarhaddi M. The association between workplace spirituality and Job Stress with occupational ethics through mediating role of Job Enthusiasm among nurses in Zahedan City, 2017. *Journal of Occupational Health and Epidemiology*. 2018; 7(1):3-10. [DOI:10.29252/johe.7.1.3]
- [14] Acke S, Couvreur S, Bramer WM, Schmickler MN, De Schryver A, Haagsma JA. Global infectious disease risks associated with occupational exposure among non-healthcare workers: A systematic review of the literature. *Occupational and Environmen-*

- tal Medicine 2022; 79(1):63-71. <https://oem.bmj.com/content/79/1/63>
- [15] Berland A, Natvig GK, Gundersen D. Patient safety and job-related stress: A focus group study. *Intensive & Critical Care Nursing*. 2008; 24(2):90-7. [PMID]
- [16] Jamshidian Y, Kiani A, Dargahi S. Relationship of cognitive emotion regulation and meaning in life with health anxiety among emergency nurses. *Health in Emergencies and Disasters*. 2018; 3(4):199-206. [DOI:10.32598/hdq.3.4.199]
- [17] Myers WC, Burket RC, Lyles WB, Stone L, Kempf JP. DSM-III diagnoses and offenses in committed female juvenile delinquents. *The Bulletin of The American Academy of Psychiatry and the Law*. 1990; 18(1):47-54. [PMID]
- [18] Sirati Nir M, Karimi L, Khalili R. [The perceived stress level of health care and non-health care in exposed to covid-19 pandemic (Persian)]. *Iranian Journal of Psychiatry and Clinical Psychology*. 2020; 26(3):294-305. [DOI:10.32598/ijpcp.26.3.405.1]
- [19] Ellis AJ, Salgari G, Miklowitz D, Loo SK. Is distress tolerance an approach behavior? An examination of frontal alpha asymmetry and distress tolerance in adolescents. *Psychiatry Research*. 2018; 267:210-4. [DOI:10.1016/j.psychres.2018.05.083] [PMID]
- [20] Van Eck K, Warren P, Flory K. A variable-centered and person-centered evaluation of emotion regulation and distress tolerance: Links to emotional and behavioral concerns. *Journal of Youth and Adolescence*. 2017; 46(1):136-50. [DOI:10.1007/s10964-016-0542-y] [PMID]
- [21] Zvolensky MJ, Vujanovic AA, Bernstein A, Leyro T. Distress tolerance: Theory, measurement, and relations to psychopathology. *Current Directions in Psychological Science*. 2010; 19(6):406-10. <https://doi.org/10.1177/09637214103888642>
- [22] Hernandez DC, Daundasekara SS, Arlinghaus KR, Sharma AP, Reitzel LR, Kendzor DE, et al. Fruit and vegetable consumption and emotional distress tolerance as potential links between food insecurity and poor physical and mental health among homeless adults. *Preventive Medicine Reports*. 2019; 14:100824. [DOI:10.1016/j.pmedr.2019.100824] [PMID] [PMCID]
- [23] Moghadas M, Khaleghi M. Investigate of relationship between moral intelligence and distress tolerance in Isfahan staff. *International Journal of Research In Social Sciences*. 2013; 2(2):26-30. [Link]
- [24] Falavarjani MF, Yeh CJ. Optimism and distress tolerance in the social adjustment of nurses: Examining resilience as a mediator and gender as a moderator. *Journal of Research in Nursing*. 2019; 24(7):500-12. [DOI:10.1177/1744987119839102] [PMID] [PMCID]
- [25] Anderson JC, Gerbing DW. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*. 1988; 103(3):411-23. [DOI:10.1037/0033-2909.103.3.411]
- [26] Salkovskis PM, Warwick HM. Making sense of hypochondria: A cognitive theory of health anxiety. In: Asmundson GJG, Taylor SW, Cox BJ, editors. *Health anxiety: Clinical and research perspective on hypochondria and related conditions*. New York: Wiley; 2001. [Link]
- [27] Nargesi F, Izadi F, Kariminejad K, Rezaisharif A. [The Investigation of the reliability and validity of Persian Version of Health Anxiety Questionnaire in students of Lorestan University Of Medical Sciences (Persian)]. *Training Measurement*. 2017; 7(27):147-60. [Link]
- [28] Simons JS, Gaher RM. The Distress Tolerance Scale: Development and validation of a self-report measure. *Motivation and Emotion*. 2005; 29(2):83-102. [DOI:10.1007/s11031-005-7955-3]
- [29] Basharpour S, Mowlaie M, Sarafrazi L. [The role of cognitive fusion, distress tolerance and self-compassion in post traumatic growth of abused individuals in their childhood (Persian)]. *Shenakht Journal of Psychology & Psychiatry*. 2020; 7(3):87-100. [DOI:10.52547/shenakht.7.3.87]
- [30] Razzaghi kashani OM, Motevallian SA, Alizadegan S, Vaziri M hossein, Merghati Khoiee E, Goushegir SA, et al. Developing the moral distress scale in the population of Iranian nurses. *Iranian Journal of Psychiatry*. 2008; 3(2):55-8. [Link]
- [31] Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *Journal of Health and Social Behavior*. 1983; 24(4):385-96. [DOI:10.2307/2136404] [PMID]
- [32] Fan LB, Blumenthal JA, Watkins LL, Sherwood A. Work and home stress: Associations with anxiety and depression symptoms. *Occupational Medicine*. 2015; 65(2):110-6. [PMID]
- [33] Menéndez-Espina S, Llosa JA, Agulló-Tomás E, Rodríguez-Suárez J, Sáiz-Villar R, Lahseras-Díez HF. Job insecurity and mental health: The moderating role of coping strategies from a gender perspective. *Frontiers in Psychology*. 2019; 10:286. [PMID] [PMCID]
- [34] Motaghedi H, Donyavi R, Mirzaian B. Effectiveness of mindfulness based cognitive therapy on the distress tolerance of nurses and job burnout. *Journal of Nursing and Midwifery Sciences*. 2016; 3(4):3-12. [DOI:10.18869/acadpub.jnms.3.4.3]
- [35] Stanley IH, Boffa JW, Smith LJ, Tran JK, Schmidt NB, Joiner TE, et al. Occupational stress and suicidality among firefighters: Examining the buffering role of distress tolerance. *Psychiatry Research*. 2018; 266:90-6. [PMID] [PMCID]
- [36] Mami S, Sharifi M, Heidaryan F, Almasi F, Yarahmadi H, Zandifar H, et al. [Predict job performance based on difficulties in regulating emotions and practices to deal with stressors in a military hospital medical staff (Persian)]. *Journal of Nurse and Physician Within War*. 2017; 4(13):178-86. [Link]
- [37] Aziziaram S, Basharpour S. [The role of health promoting behaviors and health beliefs in predicting of corona anxiety (covid-19) among nurses (Persian)]. *Quarterly Journal of Nursing Management*. 2020; 9(4):1-10. [Link]

---

**This Page Intentionally Left Blank**

---