

## Research Paper

# Relationship Between Psychological Well-being and Resilience of Emergency Medical Technicians in Yazd, Iran



Adel Eftekhari<sup>1</sup>, Atena Dadgari<sup>1</sup>, Mohammad Javad Mirjalili<sup>2</sup>, Farzan Madidizadeh<sup>3</sup>, Najmeh Baghian<sup>4\*</sup>

1. Department of Nursing, Meybod School of Nursing, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

2. Accident Prevention and Crisis Response Research Center, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

3. Department of Biostatistics and Epidemiology, Health Care Data Modeling Center, Faculty of Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

4. Clinical Research Development Center, Shahid Rahneem Hospital, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.



**Citation** Eftekhari A, Dadgari A, Mirjalili MJ, Madidizadeh F, Baghian N. Relationship Between Psychological Well-being and Resilience of Emergency Medical Technicians in Yazd, Iran. *Health in Emergencies and Disasters Quarterly*. 2025; 10(2):77-84. <http://dx.doi.org/10.32598/hdq.10.2.277.2>

<http://dx.doi.org/10.32598/hdq.10.2.277.2>

### Article info:

Received: 23 Apr 2024

Accepted: 27 Jul 2024

Available Online: 01 Jan 2025

## ABSTRACT

**Background:** Paying attention to the psychological well-being of emergency medical technicians (EMTs) is necessary, since they are prone to physical and mental problems caused by emergency work. Resilience plays an important role in reducing stress. The present study aimed to find the relationship between psychological well-being and resilience of EMTs in Yazd, Iran.

**Materials and Methods:** This descriptive-correlational study was conducted in 2023 on 137 EMTs working in the emergency departments and accident management centers in Yazd province, who were selected by a simple random sampling method. Ryff's psychological well-being scale (PWBS) and the Connor-Davidson resilience scale (CD-RISC) were used to measure psychological well-being and resilience. Data were analyzed in SPSS software, version 16 using descriptive statistics, the Wilcoxon test, and the Pearson correlation test.

**Results:** A positive and significant correlation was found between the variable of resilience and psychological well-being. A significant difference was found in the mean score of PWBS based on gender ( $P < 0.05$ ). The mean total scores of CD-RISC and PWBS were  $94.43 \pm 13.9$  and  $74 \pm 9.77$ , respectively. Among the domains of CD-RISC, the highest score was related to personal competence ( $30.71 \pm 5.29$ ). Among the domains of PWBS, the highest score was related to positive relationships with others ( $13.62 \pm 2.71$ ).

**Conclusion:** There is a positive relationship between the psychological well-being and resilience of EMTs in Iran. It is necessary for planners and policymakers in Iran to develop stress reduction programs to promote the psychological well-being and resilience of EMTs by considering the importance of communication with others, personal competence, and spirituality.

### Keywords:

Resilience, Psychological well-being, Emergency medical service, Emergency medical technicians (EMTs)

### \* Corresponding Author:

Najmeh Baghian, PhD.

Address: Clinical Research Development Center, Shahid Rahneem Hospital, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

E-mail: [n.baghian@yahoo.com](mailto:n.baghian@yahoo.com)



Copyright © 2025 The Author(s);

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC-BY-NC: <https://creativecommons.org/licenses/by-nc/4.0/legalcode.en>), which permits use, distribution, and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

## Introduction

The nature and conditions of different jobs have caused stress in employees. Those working in emergency departments face more workplace stressors, including unsafe environments and dealing with critically injured people who need immediate care [1]. These stressors can cause physical and mental problems in these health workers and subsequently cause a decrease in the quality of work and the desire to continue the service provision, leading to changing the job [2]. It is necessary to improve their psychological well-being [3]. Psychological well-being refers to optimal psychological functioning that includes self-acceptance, autonomy, environmental mastery, purpose in life, personal growth, and positive relationships with others [3, 4]. Lack of a disease is not enough to feel healthy; there is also a need for life satisfaction, efficient interaction with others, and positive progress in life. Psychological well-being refers to how people evaluate their lives [5, 6]. People with higher psychological well-being often have positive feelings and a pleasant outlook on dealing with problems and adverse events, while people with low psychological well-being often express negative emotions such as depression and anxiety [7]. Resilience is among the protective factors that can play an important role in reducing stress and increasing psychological well-being [8, 9]. Resilience is related to personality traits and external factors [10, 11]. People with low resilience are more anxious when facing adverse events [12]. The work-related anxiety and stress in emergency medical technicians (EMTs) can disturb their emotional, cognitive, and physical balance, which can lead to job burnout, cognitive, emotional, and physical exhaustion, emotional discharge, listlessness, lack of motivation, and helplessness. As a result, the person does not have the opportunity to experience positive emotions and have satisfaction with life and health, which reduce psychological well-being. Considering the importance of the protective role of resilience and psychological well-being in reducing stress, the present study aims to investigate the resilience and psychological well-being of EMTs in Yazd province, Iran.

## Materials and Methods

This descriptive-correlational study was conducted in 2023. The study population included all EMTs working in the emergency medical services and accident management center in Yazd province. Inclusion criteria were at least one year of work experience in providing emergency medical services and working as an EMT. The unwill-

ingness to participate in the study was the exit criterion. The Equation 1 was used to determine the sample size:

$$1. n = 4 + [(Z_{\alpha/2} + Z_{\beta}) / 0.05 - \ln(1 + r/1 - r)]^2$$

Based on the study by Sadeghifar et al. [13], who showed a correlation value of 0.25 between psychological well-being and resilience, and considering the significance level of 0.05 and a test power of 80%, the initial sample size was determined to be 123. By considering a sample dropout rate of 10%, the final sample size increased to 137. The samples were selected using a simple random sampling method using the table of random numbers.

Ryff's psychological well-being scale (PWBS) was used to measure psychological well-being. This questionnaire has 18 items and six subscales of self-acceptance, environmental mastery, positive relationship with others, purpose in life, personal growth, and autonomy. The items are rated on a 6-point Likert scale from 1 (completely disagree) to 6 (completely agree). The scoring for items 1, 3, 4, 5, 9, 10, 13, and 17 is reversed. Based on the total score, higher scores indicated higher psychological well-being. Kalantarkousheh and Navarbarfi measured the validity, reliability, and factor structure of the Persian PWBS and reported a Cronbach's  $\alpha$  value of 0.60 [14].

The Connor-Davidson resilience scale (CD-RISC) was used to measure resilience. This questionnaire has 25 items rated on a Likert scale from 0 (never) to 4 (almost always). The total score ranges from 0 to 100. The cutoff point for this questionnaire is 50. The validity and reliability of the Persian version of this questionnaire have been confirmed. Cronbach's  $\alpha$  for the reliability of the Persian CD-RISC is 0.89 [15].

Data were analyzed in SPSS software, version 16 using descriptive statistics and analytical tests, including the Pearson correlation test, independent t-test, the Wilcoxon test and one-way ANOVA.

## Results

In this study, 125 EMTs participated. The majority of them were in the age group of 30-40 years (39.2%), male (87.2%), and married (67.2%) with a work experience of <5 years (33.6%) and a bachelor's degree (52.8%) (Table 1).

According to the results in Table 2, the mean total scores of resilience and PWBS were  $94.43 \pm 13.9$  and  $74 \pm 9.77$ , respectively. Among the domains of resilience,

**Table 1.** Demographic characteristics of participants

| Variables           |                     | No. (%)   |
|---------------------|---------------------|-----------|
| Sex                 | Male                | 109(87.2) |
|                     | Female              | 16(12.8)  |
| Age (y)             | <30                 | 42(33.6)  |
|                     | 30-40               | 49(39.2)  |
|                     | >40                 | 34(27.2)  |
| Work experience (y) | <5                  | 42(33.6)  |
|                     | 6-10                | 22(17.6)  |
|                     | 11-15               | 26(20.8)  |
|                     | 16-20               | 13(10.4)  |
|                     | >20                 | 22(17.6)  |
| Educational level   | High school diploma | 5(4)      |
|                     | Associate degree    | 44(35.2)  |
|                     | Bachelor's degree   | 66(52.8)  |
|                     | Master's degree     | 10(8)     |
| Marital status      | Single              | 38(30.4)  |
|                     | Married             | 84(67.2)  |
|                     | Divorced            | 3(2.4)    |

the highest mean score was related to personal competence (30.71±5.29), and the lowest score was related to trust in one's instincts and tolerance of negative affect (8.01±1.67). Among the domains of PWBS, the highest score was related to the dimension of positive relations with others (13.62±2.71), and the lowest score was related to environmental mastery (10.34±2.08).

Based on the results in Table 3, a significant difference was found in the PWBS mean score based on sex (P=0.015); the mean score was higher in female technicians (83.63±17.71) than in males (59.97±13.9). No significant difference was observed based on other demographic variables such as age, educational level, work experience, and marital status (P>0.05). No significant difference was observed in the resilience score based on demographic variables (P>0.05).

Based on the results in Table 4, there was A positive and significant correlation was found between the variable of resilience and psychological well-being. The total score

of PWBS had a significant correlation with all domains of resilience (P<0.05) except for “trust in one’s instincts and tolerance of negative affect”. The total score of resilience had a significant and direct relationship with the psychological well-being domains of personal growth, purpose in life, and self-acceptance (P<0.05).

### Discussion

The purpose of the present study was to investigate the resilience and psychological well-being of EMTs in Yazd city. There was a positive and significant correlation was found between the variable of resilience and psychological well-being. By increasing resilience, psychological well-being can increase in EMTs. Smith and Young, in 2017, also showed that developing resilience through a positive learning experience reduces stress and increases psychological well-being. Based on their findings, adopting coping strategies instead of focusing on eliminating stressors can increase resilience and psychological well-being [16]. De Caroli and Sagone also suggested that,

**Table 2.** Mean scores of psychological well-being, resilience, and their domains

| Variables                | Dimensions  | Mean±SD    |
|--------------------------|---|------------|
| Psychological well-being | Autonomy  | 11.85±2.34 |
|                          | Environmental mastery                                     | 10.34±2.08 |
|                          | Personal growth   | 12.7±2.41  |
|                          | Positive relations with others                            | 13.62±2.71 |
|                          | Purpose in life   | 12.24±2.87 |
|                          | Self-acceptance   | 13.24±2.82 |
|                          | Total   | 74±9.77    |
| Resilience               | Personal competence                                       | 30.71±5.29 |
|                          | Spiritual influences                                      | 28±4.27    |
|                          | Positive acceptance of change and secure relationships    | 19.18±3.34 |
|                          | Self-control  | 11.32±2.21 |
|                          | Trust in one's instincts and tolerance of negative affect | 8.01±1.67  |
|                          | Total   | 94.43±13.9 |

SD: Standard deviation.

Health in  
Emergencies and Disasters Quarterly

with more resilience against stressful situations, more psychological well-being can be obtained. People who are resilient have more progress, personal growth, and self-acceptance. Highly resilient people are generally better at maintaining their physical and mental health and can recover from stressful events more quickly than people with low resilience [17]. In other words, with more ability to cope with life problems and stressful situations, the person is less exposed to mental and emotional disturbances and has higher mental health and quality of life [18, 19]. This can also be applied to EMTs. According to Wut et al. [20], people with high resilience maintain their psychological health and have psychological adaptability during stressful conditions and adverse events.

Hasanvand et al., in a study on nurses from public hospitals in Khorramabad, Iran, stated that the environmental mastery domain of psychological well-being was higher in nurses, which is not consistent with our results. Environmental mastery refers to a person's capacity to manage daily affairs in life efficiently. The EMTs should learn how to manage their lives and surrounding world by considering time management and proper planning [21]. In our study, positive relations with others as a domain of psychological well-being had the highest score. In a study in Egypt, Ahmad and Ibrahim found that more than two-thirds of ambulance personnel had psychologi-

cal well-being. Positive family relationships had a significant relationship with psychological well-being. More than half of ambulance personnel could cope with stress by talking to their colleagues, spending the weekend with their families, and meeting their friends [22]. In other studies, communication with others also was reported to have an important role in health care workers and therapists and led to physical, mental and behavioral outcomes [23, 24]. In our study, relationship with friends and family and having a purpose in life were also the mechanisms of coping with the negative impact of stress in EMTs. This finding also agrees with the findings of Lawn et al. [25].

In our study, among the resilience components, personal competence had the highest score. It refers to high standards, potential, and competency to achieve the goal despite the obstacles in life. Fallon Goodman et al. also showed that personal competence can increase resilience more than compared to other components [26]. In Parizad et al.'s study on the resilience of nurses working in COVID-19 wards, the dimension of spiritual influences had the highest score [27]. In our study, the dimension of spiritual influences had the highest score after the dimension of personal competence. Kim et al. and Zhang et al., in their studies on nurses during the COVID-19 pandemic, stated that resilience and spirituality are important for the mental health of nurses [28, 29].

**Table 3.** Mean scores of psychological well-being and resilience based on demographic variables

| Variables         |                     | Mean±SD     | P      | Mean±SD     | P     |
|-------------------|---------------------|-------------|--------|-------------|-------|
|                   |                     | PWBS        |        | CD-RISC     |       |
| Sex               | Male                | 59.97±13.9  | 0.015* | 62.91±12.03 | 0.944 |
|                   | Female              | 83.63±17.71 |        | 63.59±14.06 |       |
| Age               | <30                 | 63.75±12.25 | 0.877  | 60.06±13.92 | 0.488 |
|                   | 30-40               | 64.22±15.08 |        | 67.83±13.09 |       |
|                   | >40                 | 60.31±13.03 |        | 59.68±12.08 |       |
| Work experience   | <5                  | 66.7±16.04  | 0.279  | 62.23±14.08 | 0.749 |
|                   | 6-10                | 49.36±12.09 |        | 59.05±13.74 |       |
|                   | 11-15               | 64.44±15.07 |        | 59.46±12.05 |       |
|                   | 16-20               | 57.23±11.56 |        | 74.23±14.21 |       |
|                   | >20                 | 71.27±14.95 |        | 65.98±13.78 |       |
| Marital status    | Single              | 73.44±14.68 | 0.897  | 94.57±14    | 0.906 |
|                   | Married             | 74.23±13.06 |        | 94.4±14.03  |       |
|                   | Divorced            | 74.66±13    |        | 93.33±13.09 |       |
| Educational level | High school diploma | 65.6±12.07  | 0.068  | 86.8±12.08  | 0.491 |
|                   | Associate degree    | 72.79±12.96 |        | 96.09±13.54 |       |
|                   | Bachelor's degree   | 75.18±13.78 |        | 94.43±12.04 |       |
|                   | Master's degree     | 75.8±12.74  |        | 90.9±13.58  |       |

SD: Standard deviation.

Independent sample t-test and one-way ANOVA.

In our study, the resilience dimension of trust in one's instincts and tolerance of negative affect had the lowest score, which is consistent with the results of Sadeghi et al. in Hamedan, Iran [30].

Froutan et al. reported the effect of various factors on the increase of resilience in emergency medical staff in burn missions, which can affect the quality of prehospital burn care [31]. In our study, a significant difference was found in the psychological well-being of EMTs based on gender; female technicians had higher psychological well-being than male technicians. Gómez-Baya et al., in their study, stated that female health professionals had lower psychological well-being than males [32]. Madhuchandra and Srimathi showed that gender difference in psychological well-being of nurses and doctors was not significant [33].

One of the limitations of this study was the lack of co operation of some technicians in completing the questionnaire. Moreover, this research was done cross-sectionally. For this reason, it makes it difficult to draw conclusions about the cause.

### Conclusion

There is a positive correlation between the psychological well-being and resilience of EMTs in Iran. Officials and policymakers should develop educational programs to strengthen EMTs' ability to communicate with others, personal competence, and spirituality. Also, organizational planning is needed to improve welfare facilities for EMTs. Also, measures such as reducing work shifts can help reduce stress and increase the well-being of EMTs.

Table 4. Pearson correlation test results for the study variables

| Variables                         | 1         | 2               | 3               | 4              | 5              | 6              | 7              | 8              | 9              | 10             | 11         | 12         | 13 |
|-----------------------------------|-----------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|------------|----|
| 1. Autonomy                       | R<br>Sig. | 1               |                 |                |                |                |                |                |                |                |            |            |    |
| 2. Environmental mastery          | R<br>Sig. | 0.045<br>0.62   | 1               |                |                |                |                |                |                |                |            |            |    |
| 3. Personal growth                | R<br>Sig. | 0.183<br>0.041  | 0.258<br>0.004  | 1              |                |                |                |                |                |                |            |            |    |
| 4. Positive relations with others | R<br>Sig. | 0.228<br>0.011  | 0.225<br>0.012  | 0.283<br>0.001 | 1              |                |                |                |                |                |            |            |    |
| 5. Purpose in life                | R<br>Sig. | 0.386<br>0      | 0.341<br>0      | 0.379<br>0     | 0.266<br>0.003 | 1              |                |                |                |                |            |            |    |
| 6. Self-acceptance                | R<br>Sig. | 0.266<br>0.003  | 0.169<br>0.059  | 0.531<br>0     | 0.281<br>0.002 | 0.351<br>0     | 1              |                |                |                |            |            |    |
| 7. PWBS (total)                   | R<br>Sig. | 0.547<br>0      | 0.501<br>0      | 0.711<br>0     | 0.587<br>0     | 0.732<br>0     | 0.708<br>0     | 1              |                |                |            |            |    |
| 8. Personal competence            | R<br>Sig. | 0.212<br>0.018  | 0.151<br>0.092  | 0.365<br>0     | 0.139<br>0.123 | 0.28<br>0.002  | 0.481<br>0     | 0.44<br>0      | 1              |                |            |            |    |
| 9. Spiritual influences           | R<br>Sig. | 0.096<br>0.289  | -0.007<br>0.939 | 0.146<br>0.105 | 0.026<br>0.772 | 0.166<br>0.065 | 0.301<br>0.001 | 0.204<br>0.023 | 0.719<br>0     | 1              |            |            |    |
| 10. Positive acceptance           | R<br>Sig. | 0.136<br>0.131  | 0.069<br>0.442  | 0.253<br>0.004 | 0.138<br>0.126 | 0.1<br>0.267   | 0.423<br>0     | 0.303<br>0.001 | 0.647<br>0     | 0.301<br>0.001 | 1          |            |    |
| 11. Self-control                  | R<br>Sig. | 0.06<br>0.504   | 0.137<br>0.129  | 0.284<br>0.001 | 0.136<br>0.131 | 0.269<br>0.002 | 0.339<br>0     | 0.333<br>0     | 0.716<br>0     | 0.603<br>0     | 0.559<br>0 | 1          |    |
| 12. Trust in one's instincts      | R<br>Sig. | -0.053<br>0.559 | 0.033<br>0.715  | 0.060<br>0.508 | 0.037<br>0.681 | 0.056<br>0.534 | 0.160<br>0.075 | 0.083<br>0.359 | 0.083<br>0.359 | 0.368<br>0     | 0.397<br>0 | 0.397<br>0 | 1  |
| 13. Resilience (total)            | R<br>Sig. | 0.146<br>0.104  | 0.098<br>0.277  | 0.297<br>0.001 | 0.120<br>0.183 | 0.231<br>0.009 | 0.45<br>0      | 0.366<br>0     | 0.366<br>0     | 0.864<br>0     | 0.799<br>0 | 0.535<br>0 | 1  |

## Ethical Considerations

### Compliance with ethical guidelines

This study has been approved by the Research Council of Meybod School of Nursing, [Shahid Sadoughi University of Medical Sciences](#), Yazd, Iran (Project code: 14511).

### Funding

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

### Authors' contributions

Data collection: Mohammad Javad Mirjalili and Atena Dadgari; Study design and data analysis: Adel Eftekhari, Najmeh baghian and Farzan Madadzadeh; Conceptualization, supervision, review and editing: Adel Eftekhari and Najmeh Baghian; Writing the original draft: All authors.

### Conflict of interest

The authors declared no conflict of interest.

### Acknowledgments

The authors would like to thank the Vice-Chancellor for Research and Technology of [Shahid Sadoughi University of Medical Sciences](#) Yazd, Iran, for the financial support and all EMTs who participated in this study for their cooperation.

## References

- [1] García-Tudela Á, Simonelli-Muñoz AJ, Rivera-Caravaca JM, Fortea MI, Simón-Sánchez L, González-Moro MTR, et al. Stress in emergency healthcare professionals: The stress factors and manifestations scale. *International Journal of Environmental Research and Public Health*. 2022; 19(7):4342. [DOI:10.3390/ijerph19074342] [PMID]
- [2] Moshtagh-Eshgh Z, Aghaeinejad AA, Shahsavani A, koochaki GM, Chehregosha M, Kalantari S, Hosseinzadeh M. [An assessment of general health of operational staff of pre-hospital emergency in Golestan province (Persian)]. *Journal of Health and Care*. 2017; 18(4):359-67. [Link]
- [3] Søvdal LE, Naslund JA, Kousoulis AA, Saxena S, Qoronfleh MW, Grobler C, et al. Prioritizing the mental health and well-being of healthcare workers: An urgent global public health priority. *Frontiers in Public Health*. 2021; 9:679397. [DOI:10.3389/fpubh.2021.679397] [PMID]
- [4] Eden AL, Johnson BK, Reinecke L, Grady SM. Media for coping during COVID-19 social distancing: Stress, anxiety, and psychological well-being. *Frontiers in Psychology*. 2020; 11:577639. [DOI:10.3389/fpsyg.2020.577639] [PMID]
- [5] Ruggeri K, Garcia-Garzon E, Maguire Á, Matz S, Huppert FA. Well-being is more than happiness and life satisfaction: A multidimensional analysis of 21 countries. *Health and Quality of Life Outcomes*. 2020; 18(1):192. [DOI:10.1186/s12955-020-01423-y] [PMID]
- [6] Mazlomi Barm Sabz A, Asgari P, Makvandi B, Ehteshamzadeh P, Bakhtiyar Pour S. Comparison of the effectiveness of positive psychology and emotion regulation training interventions in promoting the psychological well-being in Nar-Anon Group. *International Journal of Mental Health and Addiction*. 2021; 19:1909-18. [DOI:10.1007/s11469-020-00284-2]
- [7] Prizmić-Larsen Z, Kaliterna-Lipovčan L, Larsen R, Brkljačić T, Brajša-Žganec A. The role of flourishing in relationship between positive and negative life events and affective well-being. *Applied Research in Quality of Life*. 2020; 15:1413-31. [DOI:10.1007/s11482-019-09743-y]
- [8] Oosthuizen RM. Resilience as moderator between workplace humour and well-being, a positive psychology perspective. In: Vanderheiden E, Mayer CH, editors. *The Palgrave handbook of humour research*. Cham: Palgrave Macmillan; 2021. [Link]
- [9] McCann CM, Beddoe E, McCormick K, Huggard P, Kedge S, Adamson C, et al. Resilience in the health professions: A review of recent literature. *International Journal of Wellbeing*. 2013; 3(1). [DOI:10.5502/ijw.v3i1.4]
- [10] Cao X, Chen L. Relationships among social support, empathy, resilience and work engagement in haemodialysis nurses. *International Nursing Review*. 2019; 66(3):366-73. [DOI:10.1111/inr.12516] [PMID]
- [11] Converso D, Sottimano I, Guidetti G, Loera B, Cortini M, Viotti S. Aging and work ability: The moderating role of job and personal resources. *Frontiers in Psychology*. 2018; 8:2262. [DOI:10.3389/fpsyg.2017.02262] [PMID]
- [12] Sánchez-Zaballos M, Mosteiro-Díaz MP. Resilience among professional health workers in emergency services. *Journal of Emergency Nursing*. 2021; 47(6):925-32.e2. [DOI:10.1016/j.jen.2020.07.007] [PMID]
- [13] Sadeghifar E, Salari M, Farnia F, Mirzae S, Nasiriani K. Investigating the relationship between resiliency and psychological well-being of nurses in ICU & NICU of University Hospitals of Shiraz in 2012. *World Journal of Peri & Neonatology*. 2019; 2(1):21-7. [DOI:10.18502/wjpn.v2i1.2808]
- [14] Kalantarkousheh SM, Navarabafi F. Reliability and exploratory factor analysis of psychological well-being in a Persian sample. *Science Series Data Report*. 2012; 4(1):11-27. [Link]
- [15] Mahboubzadeh M, Raviz ZE, Joudaki T, Abbaslou F. The effectiveness of compassion therapy on resilience, marital satisfaction and stress of female heads of households in Yazd city. *NeuroQuantology*. 2022; 20(15):5410-7. [Link]
- [16] Smith GD, Yang F. Stress, resilience and psychological well-being in Chinese undergraduate nursing students. *Nurse Education Today*. 2017; 49:90-5. [DOI:10.1016/j.nedt.2016.10.004] [PMID]

- [17] De Caroli ME, Sagone E. Resilience and psychological well-being: Differences for affective profiles in Italian middle and late adolescents. *Revista INFAD de Psicología International Journal of Developmental and Educational Psychology*. 2016; 1(1):149-60. [DOI:10.17060/ijodaep.2016.n1.v1.237]
- [18] Salimi S, Pakpour V, Feizollahzadeh H, Rahmani A. [Resilience and its association with the intensive care unit nurses' intention to leave their profession (Persian)]. *Hayat*. 2017; 23(3):254-65. [Link]
- [19] Hosseininia N, Hatami H. [Anticipating retirees' quality of life based on mental well-being and resiliency (Persian)]. *Knowledge & Research in Applied Psychology*. 2019; 20(1):81-97. [Link]
- [20] Wut TM, Lee SW, Xu JB. Role of organizational resilience and psychological resilience in the workplace-internal stakeholder perspective. *International Journal of Environmental Research and Public Health*. 2022; 19(18):11799. [DOI:10.3390/ijerph191811799] [PMID]
- [21] Hasanvand AL, Arefnezhad M, Soleimani A. [The effect of diverse career path on nurses' psychological well-being (Case Study: Khorramabad Public Hospitals) (Persian)]. *Nursing and Midwifery Journal*. 2021; 19(3):207-21. [Link]
- [22] Ahmad IM, Ibrahim HS. Psychological well-being of ambulance personnel in Elbeheira Governorate. *International Journal of Novel Research in Healthcare and Nursing*. 2018; 5(3):490-500. [Link]
- [23] Ye, J. Advancing mental health and psychological support for health care workers using digital technologies and platforms. *JMIR Formative Research*. 2021; 5(6):e22075. [DOI:10.2196/22075] [PMID]
- [24] Al-Mahrouqi T, Al-Alawi K, Al-Alawi M, Al Balushi N, Al Ghailani A, Al Sabti H, et al. A promising future for tele-mental health in Oman: A qualitative exploration of clients and therapists' experiences. *Sage Open Medicine*. 2022; 10:205031212210863. [DOI:10.1177/20503121221086372] [PMID]
- [25] Lawn S, Roberts L, Willis E, Couzner L, Mohammadi L, Goble E. The effects of emergency medical service work on the psychological, physical, and social well-being of ambulance personnel: A systematic review of qualitative research. *BMC Psychiatry*. 2020; 20(1):348. [DOI:10.1186/s12888-020-02752-4] [PMID]
- [26] Goodman FR, Disabato DJ, Kashdan TB, & Machel KA. Personality strengths as resilience: A one-year multiwave study. *Journal of Personality*. 2017; 85(3): 423-34. [DOI:10.1111/jopy.12250] [PMID]
- [27] Parizad N, Soheili A, Powers K, Mohebbi I, Moghbeli G, Hosseingolipour K. Level of resilience in nurses working at COVID-19 referral centers in Iran. *Nursing Forum*. 2022; 57(3):344-51. [DOI:10.1111/nuf.12685] [PMID]
- [28] Kim SC, Quiban C, Sloan C, Montejano A. Predictors of poor mental health among nurses during COVID-19 pandemic. *Nursing Open*. 2021; 8(2):900-7. [DOI:10.1002/nop2.697] [PMID]
- [29] Zhang H, Hook JN, Hodge AS, Coomes SP, Davis CW, Karwoski LT, et al. The effect of spiritual fortitude on mental health symptoms amidst the COVID-19 pandemic. *Journal of Psychology and Christianity*. 2020; 39(4):288-300. [Link]
- [30] Sadeghi A, Purfarzad Z, Homaie Safir T, Tapak L. [The relationship of organizational justice with professional commitment and resilience of nurses working in medical-educational Centers of Hamedan University of Medical Sciences in 2020-2021 (Persian)]. *Nursing and Midwifery Journal*. 2023; 21(4):277-88. [DOI:10.61186/unmf.21.4.277]
- [31] Froutan R, Khankeh HR, Fallahi M, Ahmadi F, Norouzi K. Resiliency improvements in medical emergency staff in burn missions: A qualitative study in an Iranian Context. *Iranian Red Crescent Medical Journal*. 2015; 17(7):e22495. [DOI:10.5812/ircmj.22495v2] [PMID]
- [32] Gómez-Baya D, Lucia-Casademunt AM, Salinas-Pérez JA. Gender differences in psychological well-being and health problems among European health professionals: Analysis of psychological basic needs and job satisfaction. *International Journal of Environmental Research and Public Health*. 2018; 15(7):1474. [DOI:10.3390/ijerph15071474] [PMID]
- [33] Madhuchandra M, Srimathi N. Psychological well-being among doctors and nurses: A comparative study. *International Journal of Indian Psychology*. 2016; 3(4):203-10. [DOI:10.25215/0304.212]