# Health Management and Information Science

HMIS **Original Article** 

# Investigating the Relationship between Perceived Organizational Support and Resilience of Staff **Employees Working at the Tehran Emergency Organization**

#### Emir Tahmazi Aghdam<sup>1</sup>, Mohamad Esmaeel Tavakoli<sup>1</sup>, Saeed Mehr Soroush<sup>1</sup>, Asgar Aghaei Hashjin<sup>2</sup>, Nasrin Joudyian<sup>2</sup>, Leila Kabiri<sup>1\*</sup>

<sup>1</sup>Emergency Medical Services Organization of Tehran Province, Ministry of Health & Medical Education, Tehran, Iran <sup>2</sup>Department of Health Services Management, School of Health Management and Information Science, Iran University of Medical Sciences, Tehran, Iran

#### Abstract

Introduction: The present study aimed to investigate the relationship between perceived organizational support and the resilience of administrative staff working in the Tehran **Emergency Organization in 2023** 

Methods: A cross-sectional design was employed to investigate the correlation between perceived organizational support and resilience among administrative staff at the Tehran Emergency Organization in 2023. A convenience sample of 60 employees was randomly selected from the organization's administrative staff. Data collection relied on the Connor-Davidson Resilience Scale (CD-RISC) and the Perceived Organizational Support Questionnaire. The reliability and validity of both scales were established in previous research. Data analysis involved descriptive statistics, Pearson correlation, and regression analysis to examine the relationship between the study variables.

Results: Findings revealed that participants exhibited poor levels of resilience and perceived organizational support. Statistical analysis indicated a weak positive correlation between resilience and managerial support, suggesting a limited association. Regression analysis failed to establish a significant predictive relationship between organizational support and resilience. These results challenge the strong correlation between these variables among administrative staff in the Tehran Emergency Organization.

Conclusion: Results underscore the critical need for enhanced organizational support to bolster employee resilience and optimize prehospital emergency service delivery. Targeted interventions, such as resilience training, stress management programs, and improved organizational support systems, are recommended to mitigate occupational stressors' impact and enhance prehospital emergency personnel's overall well-being.

Keywords: Prehospital emergency care, Emergency medical services (EMS), Resilience, Social support, Occupational Health

# Introduction

rehospital emergency services are crucial for responding to accidents, medical emergencies, acute illnesses, high-risk pregnancies, and promoting community health (1, 2). The goals of prehospital care, which include preserving life, facilitating rapid patient transfer, preventing further injury to casualties, and reducing mortality, have been identified (3). Furthermore, they are a critical part of the prehospital care process. Prehospital care is one of the most important medical services (4). Healthcare professionals prioritize patient care, especially in life-threatening circumstances. The community and medical industry collaboration is highlighted (5). The quality of prehospital

Article History: Received: 3 October 2024 Accepted: 26 November 2024

Please cite this paper as: Tahmazi Aghdam E, Tavakoli ME, Mehr Soroush S, Aghaei Hashjin A, Joudyian N, Kabiri L. Investigating the Relationship between Perceived Organizational Support and Resilience of Staff Employees Working at the Tehran Emergency Organization. Health Man & Info Sci. 2025; 12(1): 32-40. doi: 10.30476/ ihmi.2025.105933.1271.

\*Correspondence to: Leila Kabiri. **Emergency Medical Services** Organization of Tehran Province, Ministry of Health & Medical Education, Tehran, Iran Tel: +98 21 49231652 Email: L.Kabiri@tehran115.ir

emergency treatment significantly impacts community trust in health care (3).

The most important components of prehospital emergency include organization, training, human power, transportation, and communication (6). Prehospital emergency personnel play a vital role as first responders in medical crises. Their quick interventions significantly influence patient survival and the success of further medical care (7). They experience job stress and tension, among the main factors reducing organizational productivity and causing physical and psychological complications for employees. Healthcare and medical professionals are exposed to multiple stressors in their work environment due to their responsibility for ensuring public health and treatment (8). Prehospital emergency responders face stress while stabilizing patients, relaxing them and their families, and assuring adequate treatment until patients reach medical facilities (9). Saberi et al. found that one-third of prehospital emergency professionals experience significant psychological stress, which is higher than in other countries (10).

This tension may cause job burnout. Burnout from work affects familial, social, personal, and organizational aspects of life. Significant repercussions include absenteeism, turnover, service disruptions, psychological complaints, arguments, job transitions, diminished quality of patient care, and conflicts with coworkers (11). Considering the significance of motivating employees in work environments to perform their job duties, the current managerial and organizational concern is to find ways to enhance employee job engagement (12). Managers can reduce job stress by applying specific actions and measures, such as creating a desirable organizational atmosphere and supporting employees (13).

The focus nowadays is on individuals" psychological resources for coping with stress rather than the cause of stress. An individual's coping mechanism is more important than stress severity and frequency. Increasing resilience is a coping strategy that helps people handle stress and prevent illness-causing diseases (14). Resilience refers to the ability to endure, adapt, and overcome occupational crises. In other words, despite being exposed to severe pressures and risk factors, individuals can improve their organizational and social capacity and overcome work problems (15). Research shows that boosting resilience in EMS workers significantly improves their mental well-being, highlighting the importance of targeted support programs for this critical workforce (16). In line with enhancing resilience and based on the norm of reciprocal exchange in social interactions, employees who perceive a high level of organizational support are more likely to reciprocate the organization's support with positive attitudes and desired work behaviors (17).

Organizational support essentially refers to the notion that employees are important to the organization, and the organization values its most critical component, the human workforce, and strives for their well-being and comfort as its primary supporter (18). Research indicates that perceived organizational support, on the one hand, leads to increased performance and willingness of employees to remain in the organization. On the other hand, it reduces job stress and avoidance behaviors, such as the tendency to leave the job (19). Studies confirm that strong organizational support significantly boosts emergency workers' resilience, helping them handle job stresses more effectively. Research shows this is especially true during high-pressure situations like the COVID-19 pandemic, where comprehensive support systems proved vital for prehospital staff (20).

Research on organizational support and resilience within Iran's emergency sector, particularly in Tehran, is notably limited. However, several studies provide insights into the factors contributing to enhanced resilience among emergency personnel, emphasizing the need for context-specific solutions.

# Methods

Using descriptive and correlational analysis, study cross-sectional examined this the relationship between organizational support and administrative staff resilience in the Tehran Emergency Organization in 2023. The research population of the study included 100 staff employees working at the Tehran Emergency Organization, and 60 administrative staff members selected randomly using Cochran's formula as a sample. Data was collected using two questionnaires: the Resilience Scale and the Perceived Organizational Support Scale. The Connor-Davidson Resilience Scale (CD-RISC) consists of 25 items scored on a Likert scale from 0 (false) to 5 (true). A high score indicates resilience in the respondent. In a foreign study, the questionnaire was reported to be 0.89 reliable (21); in a domestic study, it was reported to be 0.89 (22); this scale's Cronbach's alpha coefficient. In foreign studies, the Connor-Davidson Resilience Scale showed a strong positive correlation with the Kobasa Hardiness Scale and a significant negative correlation with the Perceived Stress Scale and Sheehan Stress Vulnerability Scale, indicating reliability and concurrent validity. Factor analysis confirmed the construct validity of the new resilience scale in a home school, with loadings ranging from 44 to 93%, indicating acceptable construct validity for this questionnaire (23).

The Perceived Organizational Support Questionnaire by Eisenberger et al. has no subcomponents, and it contains eight items. This questionnaire's scoring is based on a seven-point Likert scale (strongly disagree=0, disagree=1, somewhat disagree=2, neither agree nor disagree=3, somewhat agree=4, agree=5, strongly agree=6). The questions in this questionnaire are as follows: questions 2, 3, 5, and 7 are scored oppositely, so "strongly disagree" receives a score of six, and "strongly agree" receives a score of zero. The greater the score an individual receives from this questionnaire, the more beneficial the individual will perceive the organizational support from the organization (24).

To assess the reliability of the Perceived Organizational Support Survey questionnaire in foreign studies, Cronbach's alpha statistic was calculated to be 0.787, while in domestic studies, Cronbach's alpha statistic was 0.89 (25). Hellman et al. also reported the validity of this questionnaire to be acceptable in their study of the generalizability of reliability in examining perceived organizational support by reviewing 62 studies (26). Asgari et al. calculated the validity of this questionnaire's face and content in domestic

1 . . . mation of narticinants in the study T.1.1. 1 D

studies. Furthermore, they conducted a pilot study on 30 employees of the General Department of Physical Education of Kermanshah Province, obtaining the reliability of this questionnaire using the Cronbach's alpha method, which yielded a reliability coefficient of 0.84 (27).

After obtaining data collection coordination from the Tehran Emergency Organization, they sent questionnaires to their administrative staff. Survey participants were educated on the study goal and how to respond to questions before administering the survey. All participants were freely involved in the study. Data was collected via a questionnaire and analyzed using SPSS-25.

The ethics committee of Iran University of Medical Sciences approved the study under the code IR.IUMS.REC.1403.402.

#### **Results**

A review of the demographic information revealed that most participants were in the age group of 40-50 years; of age, 63.3% had a bachelor's degree, and 30% had 16 to 20 years of work experience.

Category	on of participants in the study	Frequency(N)	Percentage (%)
Age	20-30 years	10	16.7
C C C C C C C C C C C C C C C C C C C	31-40 years	21	35
	40-50 years	26	43.3
	Up 50 years	3	5
Gender	Male	35	58.3
	Female	25	41.7
Marital Status	Single	15	25
	Married	42	70
	Other	1	1.7
Education Level	Diploma	2	3.3
	Associate Degree	9	15
	Bachelor's Degree	38	63.3
	Master's Degree	10	16.7
	Doctorate	1	1.7
Field of Study	Emergency Medical Services	10	16.7
	Anesthesia	5	8.3
	Nursing	18	30
	Other	25	41.7
Employment Type	Permanent	35	58.3
	Contractual	1	1.7
	Temporary	7	11.7
	Corporate	15	25
	Trainee	1	1.7
Work Experience	1-5 years	11	18.3
	6-10 years	9	15
	11-15 years	8	13.3
	16-20 years	18	30
	21-25 years	10	16.7
	26-30 years	4	6.7

Table 1 provides detailed information on the demographics of the participants.

According to questionnaire analysis, 37.82% of study participants showed resilience when faced with pressures and stresses. This suggests that 60% of participants needed improved workplace resilience. On average, participants rated 28.5% of organizational support as adequate (Table 2). For more information on both scales, refer to Tables 3 and 4.<sup>†</sup>

The normality of the data was statistically tested by applying the Kolmogorov test. The P value was 0.2, indicating that the data were normally distributed. The P value ( $\pm 0.05$ ) lies above the line of randomness, indicating that the data are typically distributed. As the data did not deviate too much or too little from the normal distribution, the Pearson test was used to test for a relationship between resilience and organizational support. The direction of the correlational relationship between resilience and organizational support was positive, and the results were significant according to the test. There was a weak relationship between countries with a correlation coefficient of r=0.161.

 Table 2: Mean of Resilience and Organizational Support Scales

Variable	Mean (%)	Standard Deviation	Minimum Score	Maximum Score
Resilience	37.82	0.5	25	125
Organizational Support	28.5	0.4	8	40

#### Table 3: Status of Resilience Scale from the Perspective of Study Participants

Statements	Completely	Rarely	Sometimes	Often	Always
	Incorrect		Correct	Correct	Correct
	N (%)				
1. When a change occurs, I can adapt to it.	1(1.7)	-	13(21.7)	32(53.3)	14(23.3)
2. There is at least one person whose close and intimate relationship helps me during stressful times.	1(1.7)	5(8.3)	6(10)	24(40)	24(40)
3. When there is no clear solution to my problems, sometimes God or destiny can help.	4(6.7)	3(5)	9(15)	22(36.7)	22(36.7)
4. I can think of a solution for anything that comes my way.	-	2(3.3)	13(21.7)	33(55)	12(20)
5. The successes I have had in the past have given me the confidence to deal with upcoming challenges and problems.	1(1.7)	4(6.7)	12(20)	30(50)	13(21.7)
6. When faced with problems, I also try to see their humor.	2(3.3)	16(26.7)	21(35)	15(25)	6(10)
7. The need to cope with stress makes me stronger.	-	8(13.3)	25(41.7)	17(28.3)	10(16.7)
8. I usually return to normal after illness, injury, and other hardships.	-	4(6.7)	9(15)	30(50)	17(28.3)
9. There is an expediency in every good or bad event.	2(3.3)	4(6.7)	1016.7)	22(36.7)	22(36.7)
10. Regardless of the outcome, I put in my best effort in every task.	-	2(3.3)	14(23.3)	28(46.7)	16(26.7)
11. I believe that despite the existing obstacles, I can achieve my goals.	2(3.3)	6(10)	13(21.7)	27(45)	12(20)
12. Even when things become discouraging, I do not get discouraged.	2(3.3)	6(10)	17(28.3)	23(38.3)	12(20)
13. I know where to go for help in stressful and critical moments.	2(3.3)	7(11.7)	20(33.3)	28(46.7)	3(5)
14. Under pressure, I do not lose focus and think clearly.	1(1.7)	2(3.3)	10(16.7)	28(46.7)	19(31.7)
15. I prefer to solve my problems myself rather than having others make all the decisions.	1(1.7)	3(5)	13(21.7)	33(55)	10(16.7)
16. If I fail, I do not easily get discouraged.	-	-	12(20)	30(50)	18(30)
17. When I struggle with life's challenges and problems, I consider myself capable.	-	4(6.7)	21(35)	26(43.3)	9(15)
18. If necessary, I can make difficult and unexpected decisions that affect others.	-	4(6.7)	21(35)	26(43.3)	9(15)
19. I can control unpleasant feelings such as sadness, fear, and anger.	1(1.7)	4(6.7)	23(38.3)	23(38.3)	-
20. When dealing with life's problems, sometimes acting solely based	3(5)	12(20)	33(55)	12(20)	-
on guesswork is necessary.					
21. I have a strong sense of purpose in life.	1(1.7)	2(3.3)	10(16.7)	28(46.7)	19(31.7)
22. I feel I have control over my life.	2(3.3)	2(3.3)	12(20)	26(43.3)	18(30)
23. I like life's challenges.	1(1.7)	5	29	16	9
24. Regardless of the obstacles, I strive to achieve my goals.	-	1(1.7)	16(26.7)	25(41.7)	18(30)
25. I take pride in my progress.	-	6(10)	6(10)	24(40)	24(40)

Table 4: Status of	Organizational	l Support Sca	ale from the	Perspective of St	tudy Participants
--------------------	----------------	---------------	--------------	-------------------	-------------------

Statement	Completely	Rarely	Sometimes	Often	Always
	Incorrect		Correct	Correct	Correct
	N (%)				
1. The organization values my role in its well-being.	4(6.7)	17(28.3)	16(26.7)	16(26.7)	7(11.7)
2. The organization falls short of appreciating my extraordinary efforts.	18(30)	13(21.7)	16(26.7)	11(18.3)	2(3.3)
3. The organization ignores any complaint from me.	2(3.3)	11(18.3)	16(26.7)	13(21.7)	18(30)
4. The organization cares about my health.	9(15)	17(28.3)	9(15)	15(25)	10(16.7)
5. Even if I did my job to the best of my ability, the organization would	5(8.3)	15(25)	7(11.7)	19(31.7)	14(23.3)
not notice.					
6. The organization cares about my overall job satisfaction.	8(13.3)	17(28.3)	14(23.3)	16(26.7)	5(8.3)
7. The organization shows very little concern for me.	6(10)	14(23.3)	15(25)	13(21.47)	12(20)
8. The organization takes pride in my accomplishments at work.	10(16.7)	18(30)	15(25)	11(18.3)	6(10)

Table 5: Relationships between Resilience and Organizational Support Scales

Variable	Organizational Support	
Resilience	Correlation Coefficient	0.127
	Significance Level	0.33
	Number	60

Table 6: Regression Analysis for Predicting Resilience Scale							
Predictor Variable	R	R^2	Adjusted R Square	Std. Error of the Estimate	F	sig	
Organizational Support	0.127	0.016	-0.01	0.51119	0.955	0.33	

 Table 7: Unstandardized and Standardized Coefficients for Predicting Resilience Scale through Organizational Support Variable

Constant and Predictor Variable	Unstandardized Beta Coefficient	Standard Error	Standardized Beta Coefficient	t-value	Significance
Constant	3.32	0.476	-	6.98	0.000
Organizational Support	0.161	0.165	0.127	0.977	0.33

Predicting the Resilience Scale through the Organizational Support Scale:

Given that the F value is small and the sig value is also greater than 0.05, it can be concluded that the present study's regression model is unsuitable (Tables 5 and 6).

The regression results demonstrated that the support scale of the organizational model could explain 1.61% of the resilience scale, and the result was not significant in terms of the null hypothesis test because the 'sig' value was >0.05. The null hypothesis was not rejected (Table 7). Furthermore, the study of the coherence between the organizational support model and the resilience variables did not support the current investigation.

#### Discussion

The main aim of this research was to investigate the relationship between organizational support and resilience among the Tehran Emergency Organization's administrative department employees. The research results showed that the mean resilience score among the participants was relatively low (mean=37.82, standard deviation=0.5). In addition, the mean of the organizational support scale was also low (mean=28.5, standard deviation=0.4).

To analyze the relationship between the two scales, the Pearson correlation test yielded a P value of 0.33, suggesting a correlation between resilience and organizational support. Moreover, this study revealed a positive and weak relationship between resilience and organizational support, with a Pearson correlation coefficient of 0.127.

A regression analysis was carried out to estimate the resilience scale using the organizational support scale. The results showed that the organizational support scale explained only 1.61% of the variance in resilience. In addition, the level of the organizational support scale prediction formula was insignificant and, therefore, cannot be used.

Providing emergency assistance to needy

patients is the responsibility of operational emergency medical services workers, who are essential to healthcare, public health, and disaster management systems.

Emergency medical services personnel encounter various situations with different patients (28), and patients and casualties are sometimes in critical condition. Compared to other healthcare sectors, the nature of their work in an uncertain and unsafe environment creates more stressful conditions for EMS technicians. These conditions impose excessive psychological pressure on the staff of this department (29), and their constant exposure to stress, anxiety, and their consequences paves the way for psychological consequences on their mental health. It is, therefore, evident that this issue requires particular attention (30, 31).

Esmaeili et al. examined the correlation between perceived stress, spiritual intelligence, and resilience among paramedics in Shahroud during the COVID-19 pandemic. While the research identified moderate and high stress and resilience ratings, our resilience score was low. The research advises managers to enhance resilience via measures (32).

Esfahani and Alipour studied the link between occupational stress and burnout among prehospital emergency medical technicians in Izeh and Baghemalak. The study found a substantial correlation between occupational stress and burnout among prehospital paramedics. Prehospital paramedics often endure physical and psychological illnesses and job burnout due to the demanding nature of their employment, particularly among younger and less experienced personnel. Prehospital emergency services should examine the substantial association between occupational stress and burnout among these professionals (33).

Additionally, Ebadi and Foroutan studied positive coping techniques among prehospital emergency technicians in Mashhad City. This research found that emergency medical staff use beneficial strategies to handle stress, which impacts the quality of prehospital clinical services. Prehospital emergency authorities should emphasize developing and reinforcing good coping techniques among medical staff to avert crippling stress. Implement frequent and dynamic policies to accomplish this (34).

In critical and stressful situations, the

significance of the organization's focus on employees and their morale escalates for the continuity of service delivery, requiring enhanced organizational support. The distinctive working conditions and job characteristics of prehospital emergency personnel are anticipated to necessitate elevated levels of organizational support. This support allows employees to withstand stressful and challenging conditions with enhanced motivation and resilience, ensuring high-quality services are maintained.

Extended inadequate organizational support can gradually deteriorate employee motivation and resilience, negatively impacting service quality. Managing critical and stressful situations is unattainable without a competent and motivated workforce. Consequently, this issue should be viewed as a cautionary indicator for these centers and must be prioritized in strategic planning initiatives.

The findings of the organizational support scale reveal participant dissatisfaction with the support offered by the organization. Certain employees have grown apathetic towards this issue, relinquishing their optimism for enhanced conditions. If the organization neglects to rectify this adverse environment and fails to transform the culture entrenched in discontent and unfulfilled employee needs, it will face significant challenges in the future.

The relationship between organizational support and employee outcomes can be improved. Enhanced organizational support cultivates a positive culture and elevates employee perceptions of the organization's concern for their well-being. An enhanced support system in the workplace can result in increased employee motivation and greater engagement in furthering the organization's objectives. In critical sectors such as healthcare, especially prehospital emergency services, training and developing proficient and effective personnel is essential for safeguarding public health.

This study was confined to the Tehran Emergency Organization. The generalizability of these findings may be constrained by various influencing factors present in other emergency organizations nationwide. It is advisable to conduct future studies with larger sample sizes. Considering the significance of addressing human resource requirements within organizations, increased focus should be directed toward the equitable allocation of personnel, effective workforce management, and the cultivation of a dedicated and specialized managerial strategy as integral to the organization's vision.

To investigate this topic further, it is recommended that qualitative interviews be conducted with all stakeholders in emergency centers, including responsible officials, to ascertain the underlying causes of employee dissatisfaction and formulate effective solutions for enhancing conditions. Essential actions must be implemented to enhance organizational leaders' awareness of employees' psychological and emotional difficulties. This may entail coordinating training sessions, formulating regular guidelines, and distributing resources for employee motivation initiatives.

Considering the substantial influence of organizational support on employee resilience and its subsequent effect on service quality, it is advisable to evaluate the levels of organizational support regularly. Prompt and informed decisionmaking based on these assessments can reduce future costs related to low resilience and improve overall service delivery.

## Conclusion

The findings of the organizational support scale reveal participant dissatisfaction with the support offered by the organization. Certain employees have grown apathetic towards this issue, relinquishing their optimism for enhanced conditions. If the organization neglects to rectify this adverse environment and fails to transform the culture entrenched in discontent and unfulfilled employee needs, it will face significant challenges in the future. The relationship between organizational support and employee outcomes can be improved. Enhanced organizational support cultivates a positive culture and elevates employee perceptions of the organization's concern for their well-being. An enhanced support system in the workplace can result in increased employee motivation and greater engagement in furthering the organization's objectives. In critical sectors such as healthcare, especially prehospital emergency services, training and developing proficient and effective personnel is essential for safeguarding public health.

# Acknowledgment

Special thanks to the staff of the Tehran

Emergency Organization and all the employees participating in the study.

# **Authors' Contribution**

Study concept and design: E.T. and M.T.; analysis and interpretation of data: E.T., L.K., and N.J.; drafting of the manuscript: L.K. and N.J.; critical revision of the manuscript for important intellectual content: A.A., S.M., and M.T.; statistical analysis: E.T., and N.J.

**Ethics Approval and Consent for the Company** This article was approved by the Iran University of Medical Sciences ethics committee under number IR.IUMS.REC.1403.402.

### **Consent for Publication**

The survey was conducted among organization staff. Participation was voluntary and could be withdrawn at any time without consequences. All information was kept strictly confidential. Responses were anonymous, and the identity of staff members was not associated with their answers.

# Artificial Intelligence (AI)-Assisted Technology

Authors who use such technology should describe how they used it in both the cover letter and the submitted work in the appropriate section, if applicable. For example, describe this in the acknowledgment section if AI was used for writing assistance. If AI was used for data collection, analysis, or figure generation, authors should describe this use in the methods.

#### **Conflict of interest**

There are no conflicts of interest.

#### References

- 1. Olani AB, Beza L, Sultan M, Bekelcho T, Alemayehu M. Prehospital emergency medical service utilization and associated factors among critically ill COVID-19 patients treated at centers in Addis Ababa, Ethiopia. *PLOS Glob Public Health*. 2023;3(2):e0001158. doi: 10.1371/journal.pgph.0001158.
- 2. Poomsaidorn S, Laohasiriwong W, Soeung K. Prehospital emergency medical services utilization for critical patients and its determinants in Thailand. *J Southwest Jiaotong University.* 2021;56(5):515-23.
- 3. Martin-Rodriguez F, Sanz-Garcia A,

Castro-Portillo E, Delgado-Benito JF, Del Pozo Vegas C, Ortega Rabbione G, et al. Prehospital troponin as a predictor of early clinical deterioration. *Eur J Clin Invest*. 2021;51(11):e13591. doi: 10.1111/eci.13591.

- 4. Walk CT, Ross A, Kranker L, Whitmill M, Ballester M, Parikh PP, et al. The Oregon District Shooting: Reviewing the Pre-Hospital Protocols and the Role of the Resident During a Multiple Casualty Event. *Am Surg.* 2023;89(12):6215-20. doi: 10.1177/00031348221114044.
- 5. Olave-Rojas D, Nickel S. Modeling a prehospital emergency medical service using hybrid simulation and a machine learning approach. *Simulation Modelling Practice and Theory.* 2021;109:102302.
- 6. Bayram JD. Emergency medicine in Lebanon: overview and prospect. *J Emerg Med.* 2007;32(2):217-22. doi: 10.1016/j. jemermed.2006.12.007.
- 7. Bedard AF, Mata LV, Dymond C, Moreira F, Dixon J, Schauer SG, et al. A scoping review of worldwide studies evaluating the effects of prehospital time on trauma outcomes. *Int J Emerg Med.* 2020;13(1):64. doi: 10.1186/ s12245-020-00324-7.
- 8. He SC, Wu S, Wang C, Wang DM, Wang J, Xu H, et al. Interaction between job stress, serum BDNF level and the BDNF rs2049046 polymorphism in job burnout. *J Affect Disord*. 2020;266:671-7. doi: 10.1016/j.jad.2020.01.181.
- Minnie L, Goodman S, Wallis L. Exposure to daily trauma: The experiences and coping mechanism of Emergency Medical Personnel. A cross-sectional study. *African journal of emergency medicine*. 2015;5(1):12-8.
- 10. Saberi HR, Moravveji SAR, Ghoraishi F, Heidari Z. Post-traumatic stress disorder in Kashan and Arak emergency medicine departments' staffs during 2009. *Feyz Medical Sciences Journal*. 2009;12(5):1-6.
- Kelly M, Soles R, Garcia E, Kundu I. Job Stress, Burnout, Work-Life Balance, Well-Being, and Job Satisfaction Among Pathology Residents and Fellows. *Am J Clin Pathol.* 2020;153(4):449-69. doi: 10.1093/ajcp/aqaa013.
- 12. Dasgupta SA, Suar D, Singh S. Impact of managerial communication styles on employees' attitudes and behaviours. *Employee relations*. 2012;35(2):173-99.
- 13. Havermans BM, Brouwers EPM, Hoek RJA,

Anema JR, van der Beek AJ, Boot CRL. Work stress prevention needs of employees and supervisors. *BMC Public Health*. 2018;18(1):642. doi: 10.1186/s12889-018-5535-1.

- 14. Rabenu E, Yaniv E. Psychological Resources and Strategies to Cope with Stress at Work. *Int J Psychol Res (Medellin).* 2017;10(2):8-15. doi: 10.21500/20112084.2698.
- 15. Southwick SM, Bonanno GA, Masten AS, Panter-Brick C, Yehuda R. Resilience definitions, theory, and challenges: interdisciplinary perspectives. *Eur J Psychotraumatol.* 2014;5. doi: 10.3402/ejpt. v5.25338.
- 16. Ebrahimian A, Keshavarz-Tork A, Akbari-Shahrestanaki Y, Tourdeh M, Fakhr-Movahedi A. Changes in the prehospital emergency technician's resilience during the COVID-19 pandemic: A web-based cross-sectional study. *Health Sci Rep.* 2023;6(4):e1223. doi: 10.1002/hsr2.1223.
- Wayne SJ, Shore LM, Liden RC. Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management journal*. 1997;40(1):82-111.
- Chen T, Hao S, Ding K, Feng X, Li G, Liang X. The impact of organizational support on employee performance. *Employee Relations: The International Journal*. 2020;42(1):166-79.
- 19. Reitz OE, Anderson MA. An overview of job embeddedness. *J Prof Nurs*. 2011;27(5):320-7. doi: 10.1016/j.profnurs.2011.04.004.
- 20. Fatahi Y, Norouzinia R, Aghabarary M. Professional quality of life and resilience in pre-hospital emergency technicians during COVID-19 in Iran: a cross-sectional study. *J Med Ethics Hist Med.* 2022;15:15. doi: 10.18502/jmehm.v15i15.11573.
- Connor KM, Davidson JR. Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). *Depress Anxiety*. 2003;18(2):76-82. doi: 10.1002/da.10113.
- 22. Mohammadi F, Tehranineshat B, Farjam M, Rahnavard S, Bijani M. The correlation between resilience, self-efficacy and illness perception in patients with type 2 diabetes: a cross-sectional study. *Clinical Diabetology*. 2022;11(3):175-82.
- 23. Keyhani M, Taghvaei D, Rajabi A, Amirpour B. Internal consistency and confirmatory

factor analysis of the Connor-Davidson Resilience Scale (CD-RISC) among nursing female. *Iranian journal of medical education*. 2015;14(10):857-65.

- 24. Eisenberger R, Huntington R, Hutchison S, Sowa D. Perceived organizational support. *Journal of Applied psychology*. 1986;71(3):500.
- 25. Eyni S, Ebadi M, Hashemi Z. Corona anxiety in nurses: The predictive role of perceived social support and sense of coherence. *Iranian Journal of Psychiatry and Clinical Psychology*. 2020;26(3):320-31.
- 26. Hellman CM, Fuqua DR, Worley J. A reliability generalization study on the survey of perceived organizational support: The effects of mean age and number of items on score reliability. *Educational and psychological measurement*. 2006;66(4):631-42.
- 27. Poorsoltani H, Aghaei N, Asgari B. Relationship perceived organizational support with Organizational commitment among staff. *Sport Management Studies*. 2016;8(35):183-98.
- 28. Sahebi A, Jahangiri K, Sohrabizadeh S, Golitaleb M. Prevalence of Workplace Violence Types against Personnel of Emergency Medical Services in Iran: A Systematic Review and Meta-Analysis. *Iran J Psychiatry.* 2019;14(4):325-34.
- 29. van der Ploeg E, Kleber RJ. Acute and chronic

job stressors among ambulance personnel: predictors of health symptoms. *Occup Environ Med.* 2003;60 Suppl 1(Suppl 1):i40-6. doi: 10.1136/oem.60.suppl\_1.i40.

- 30. Ebrahimi H, Navidian A, Ameri M, Sadeghi M. Burnout, dimensions and its related factors in the operational staff of medicine emergency. *Journal of Health Promotion Management*. 2014;3(3):16-26.
- 31. Froutan R, Mahroughi N, Malekzadeh J, Mazlom SR. The effect of stress management training on anxiety and resilience of emergency medical staff. *Iranian Journal of Psychiatric Nursing*. 2018;6(3):46-53.
- 32. Esmaeili S-M, Sadeghi M, Abbasi M, Bahonar E, Sbakian Bandpey B, Ehsani M. The Relationship Between Perceived Stress and Spiritual Intelligence and Resilience of Emergency Medical Technicians. *Health, Spirituality and Medical Ethics.* 2022;9(4):177-86.
- 33. Aalipoor S, Esfahani H. The Relationship Between Occupational Stress And Burnout In The Pre-Hospital Staff. *International Journal of Medical Investigation*. 2022;11(1):154-62.
- 34. Ebadi A, Froutan R. Positive Coping: A Unique Characteristic to Pre-Hospital Emergency Personnel. *Electron Physician*. 2017;9(1):3575-83. doi: 10.19082/3575.