

The Effect of Perception of Safety Against Violence and Resilience on Emotional Exhaustion

Şiddete Karşı Güvenlik Algısı ve Psikolojik Sağlamlığın Duygusal Tükenme Üzerine Etkisi

İbrahim TÜRKMEN¹

Emine ÇETİN^{2*}

¹ Uşak University, ibrahim.turkmen@usak.edu.tr, ORCID: 0000-0002-1826-5336

² İzmir Bakırçay University, emine.aslan@bakircay.edu.tr, ORCID: 0000-0003-4326-2070

* Yazışılan Yazar/Corresponding author

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Abstract

Violence against healthcare workers has become a significant problem in Türkiye and around the world. Violence in the health sector puts healthcare professionals in a difficult situation physically, psychologically, and socially and can cause emotional burnout. The aim of this study was to determine the effect of perception of safety against violence and psychological resilience on emotional exhaustion in nurses. A cross-sectional quantitative research design was used in the study, using the perception of safety against violence, psychological resilience, and emotional exhaustion scales. The universe of the research consists of nurses working in public hospitals in Türkiye. An online survey form created in Google Forms was sent to nurses who agreed to participate in the study voluntarily. Research data were obtained from 298 nurses. Research hypotheses were tested using structural equation modelling. According to the research results, perception of safety against violence and psychological resilience among nurses have a statistically significant and negative effect on emotional exhaustion. As a result, nurses' perception of safety and psychological resilience against violence should be improved to prevent and reduce emotional exhaustion.

Keywords: Perception of Safety Against Violence, Emotional Exhaustion, Resilience, Nurses.

Jel Codes: M10, M12.

Öz

Türkiye'de ve dünyada sağlık çalışanlarına yönelik şiddet önemli bir sorun haline gelmiştir. Sağlık sektöründeki şiddet, sağlık çalışanlarını fiziksel, psikolojik ve sosyal açıdan zor duruma sokuyor ve duygusal tükenmişliğe yol açabiliyor. Bu çalışmanın amacı hemşirelerde, şiddete karşı güvenlik algısı ve psikolojik sağlamlığın duygusal tükenme üzerindeki etkisinin tespit edilmesidir. Araştırmada şiddete karşı güvenlik algısı, psikolojik sağlamlık ve duygusal tükenme ölçeği kullanılarak, kesitsel tipte nicel bir araştırma tasarımı kullanılmıştır. Araştırmanın evrenini Türkiye'de kamu hastanelerinde görev yapan hemşireler oluşturmaktadır. Araştırmaya gönüllü olarak katılmayı kabul eden hemşirelere Google Forms'ta oluşturulan çevrimiçi anket formu gönderilmiştir. Araştırma verileri 298 hemşireden elde edilmiştir. Araştırma hipotezleri yapısal eşitlik modellemesi kullanılarak test edilmiştir. Araştırma sonuçlarına göre, hemşirelerde şiddete karşı güvenlik algısı ve psikolojik sağlamlık, duygusal tükenme üzerinde istatistiksel olarak anlamlı ve negatif bir etkiye sahiptir. Sonuç olarak hemşirelerin duygusal olarak tükenmelerin önlenmesi ve azaltılması için şiddete karşı güvenlik algısı ve psikolojik sağlamlıklarını geliştirilmelidir.

Anahtar Kelimeler: Şiddete Karşı Güvenlik Algısı, Duygusal Tükenme, Psikolojik Sağlamlık, Hemşireler.

Jel Kodları: M10, M12.

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1. INTRODUCTION

Violence is one of the negative situations that every living being can be exposed to during their life. The World Health Organization (WHO) estimates that more than one million people lose their lives each year because of the violence they are exposed to (Dahlberg & Krug, 2002: 278). Unfortunately, incidents of violence have become a common occurrence in business life. Healthcare workers are particularly at risk of workplace violence. Healthcare workers are 16 times more likely to be subjected to violence than other service sector workers. (Elliott, 1997: 38; Kingma, 2001: 129).

According to the WHO, 8% to 38% of healthcare workers are subjected to physical violence. Verbal violence is much more common (WHO, 2020). According to a study conducted in Türkiye, 85% of emergency service workers had been subjected to verbal violence and 35% to physical violence (Türkmen and Doğan, 2020: 848). Violence against healthcare workers is often perpetrated by patients and their relatives. One of the groups most at risk of violence among healthcare workers is nurses (WHO, 2020). Although healthcare workers are frequently exposed to violence, it is observed that they generally do not officially report the violence they experience and do not initiate legal proceedings due to social and cultural factors (Ayrancı et al., 2006: 285; Lafta and Falah, 2019: 70). For this reason, violence in healthcare is revealed through scientific research rather than official reports (Berlanda et al., 2019: 1).

Following violence against healthcare professionals negative effects can occur including; physical (injury, etc.), psychological (stress, depression, anxiety, etc.), emotional (anger, fear, sadness, disappointment, etc.), work-related (sick leave, decrease in job satisfaction, intention to leave, etc.), relationship with patients/quality of care (fear of patients, avoidance of communication, etc.), social/personal life (social isolation, avoidance of the community, etc.) and financial. The most important consequences of workplace violence are emotional, psychological, and related to the functioning of the job (Lanctot and Guay, 2014: 499). Emotional exhaustion increases in healthcare workers after violence (Atan and Tekingündüz, 2014: 63). For these reasons, it is important to improve the perception of safety of healthcare professionals against violence in the workplace.

In addition to creating a perception of safety against violence, resilience, which is an individual characteristic, plays an important role in reducing emotional exhaustion. Resilience refers to the individual's ability to positively adapt to loss and trauma, the death of a close relationship, violent or life-threatening situations (Bonanno, 2004: 102). Protecting healthcare professionals from violent incidents and developing their perception of safety, transforming healthcare institutions into safe working environments will contribute significantly to increasing the psychological resilience of healthcare professionals and reducing their emotional exhaustion levels. This study aimed to reveal the role of nurses' resilience in the effect of their perception of safety against workplace violence on their emotional exhaustion levels.

2. CONCEPTUAL FRAMEWORK

2.1. Perception of Security Against Violence

The increasing violence against healthcare workers has become a significant problem. Violence in health institutions is defined as "any incident which puts a health care worker at risk and includes verbal abuse, threatening behaviour or assault by a patient or member of the public" (Saines, 1999: 8). In the research conducted by Vrablik et al. (2019: 5), healthcare workers stated that they see violence as an inevitable occupational hazard. However, this "inevitable danger" (violence) causes consequences such as emotional exhaustion, desensitization, decreased personal effectiveness, and decreased job satisfaction in healthcare workers.

Healthcare workers state that they do not receive enough support from the organizations they work for when they are exposed to violence at work. The sources of support for healthcare workers who are subjected to violence are themselves, their families, their friends, and their closest colleagues. This situation reduces the perception of safety of healthcare professionals in the work environment. In fact, their expectation is to receive more support from their institutions and society. To support healthcare professionals, institutions should establish appropriate violence reporting systems, provide psychological care, support sue processes for employees who have been subjected to violence; and train all employees to develop their competencies in responding to violence, taking a strict zero-tolerance stance against threats or any form of violence against them. In addition, society should adopt a protective and supportive attitude towards health workers (Zhao et al., 2015: 14439). Also, healthcare workers who are subjected to violence should be encouraged to report violent incidents and should be provided with the necessary training. Managers and supervisors should support those who report violence and protect them against negative reactions. Institution managers should follow up on reported violence, take precautions against perpetrators, and provide feedback to victims (Alsalem et al., 2018: 192-193).

All employees have the right to work in a safe environment. Protecting the health and safety of healthcare professionals is as important and prioritized as protecting the health and safety of patients. Violence in healthcare negatively affects patient health and satisfaction, service quality, and employee safety. It also causes healthcare professionals to feel unsafe in their work environment (Pinar and Pinar, 2013: 322). Verbal, physical, and psychological violence that healthcare professionals in hospitals are exposed to negatively affects employee safety and disrupts hospital operations and healthcare services. It has been observed that healthcare professionals do not feel safe due to the violence they encounter and that their ability to manage their experiences after violence is low. Therefore, legal regulations should be made to prevent violence in healthcare, necessary security measures should be taken, and healthcare professionals should be provided with a safe working environment and made to feel safe (Yural, Acuner and Çevik Akkuş, 2024: 89).

Reducing workplace violence and ensuring that employees feel safe and supported afterward is an obligation of hospitals to their employees and patients (Partridge and Affleck, 2017: 143). In healthcare institutions, some measures are taken to create a sense of security against violence among healthcare professionals and patients. For example, increasing the number of security personnel and security cameras, using X-ray devices and

metal detectors, making deterrent legal arrangements, and increasing awareness of violence in society are being implemented to provide healthcare services in a safe environment. Studies have shown that the use of metal detectors in emergency departments makes healthcare workers and patients feel safe and satisfied with the level of security (McNamara, Yu and Kelly, 1997: 41; Mattox, Wright and Bracikowski, 2000: 164-165).

Research shows that security measures taken in health institutions increase the employee's perceptions of security. The study conducted by Blando et al. (2012: 496) determined that the presence of security personnel, security cameras, and equipment in the hospital and timely intervention in violent incidents positively affected nurses' perceptions of security. The visibility of security officers and the rapid intervention in violence in hospitals make nurses feel safe (Partridge and Affleck, 2017: 139). In addition to the presence of security guards in hospitals, the accessibility of security guards before a violent occurs and the ability of security guards to deal with violent situations are important (Gillespie et al., 2012: 23). Hospitals need to develop plans to respond to violence and improve the effectiveness of police officers, security personnel, and security equipment. In addition, adequate numbers of healthcare workers should be employed to support a safe patient care environment (Catlette, 2005: 525).

Nurses believe that safety precautions are inadequate and that this makes healthcare workers vulnerable to violence in the workplace. Providing appropriate training to healthcare workers on violence prevention strategies and listening to their concerns is important so that changes can be made to increase safety (Catlette, 2005: 525). Training in healthcare facilities can make nurses more prepared to deal with potentially violent incidents and significantly reduce the frequency of aggression in the workplace. Nurses need to be made more aware of the nature of violence, their knowledge and skills in managing aggressive behaviors need to be improved, and their attitudes toward potentially violent patients need to be improved (Deans, 2007: 18). Mahoney (1991: 282) recommends that nursing schools provide nursing students with training in preventing and coping with violence in the workplace.

2.2. Resilience

The concept of resilience is currently accepted as a personal characteristic in several academic disciplines such as psychology, psychiatry, trauma studies, education, social work, and epidemiology (Atkinson et al., 2009: 139). Resilience is accepted as a positive characteristic of the individual who develops in the process of successfully adapting to the negativities encountered in our social and business lives (Zautra, Hall and Murray, 2010: 6). The concept of resilience is also defined as a developmental process. According to this approach, resilience is defined as "the process of adaptation of individuals and societies to serious threats and problems they encounter in life" (Lee et al., 2013: 269; Richardson, 2002: 310). When resilience is evaluated as a personal characteristic or process, there are two basic conditions for psychological resilience. The first is that the individual is exposed to significant threat, stress, or trauma. The second is that the individual has coped with negative situations such as threat, violence, stress and trauma and achieved positive results (Masten, 2001: 227). The resilience of individuals occurs when they increase their ability to

positively adapt to negative situations they experience and return to normal (Buzzanell, 2010: 9).

It is emphasized that healthcare professionals experience problems such as burnout/emotional exhaustion, job dissatisfaction, psychological problems, work-social life imbalance, and anxiety due to the stress caused by working in dangerous and negative conditions (Atan and Tekingündüz, 2014: 65; Kızıl et al., 2016: 52). Developing resilience makes it easier for healthcare professionals to cope with stressful and challenging situations (Gillespie, Chaboyer and Wallis, 2009: 974; Zanatta, Maffoni and Giardini, 2020: 976). The ability of healthcare professionals to cope with difficulties and pressures in the workplace is very important not only in terms of preventing stress, burnout, and anxiety but also in terms of reducing professional errors that may lead to negative consequences (Murden et al., 2018: 789). In other words, resilience contributes to the development of healthcare professionals' mental health as well as their application skills (Arrogante and Aparicio-Zaldivar, 2017: 114).

Resilient adults have the capacity to bond with a group, cooperate, share information, help each other, show sacrifice, tolerate fear, and perform effectively (Charney, 2004: 204). Employees with high resilience will use resilience as a psychological resource and react more positively to events, problems, disruptions, and change (Shin, Taylor and Seo, 2012: 732). It has the potential to contribute to employees' psychological capital, attitudes, behaviours, and organizational performance (Bardoel et al., 2014: 285). Therefore, the resilience of employees has received increasing attention in many organizations.

Protective factors such as life satisfaction, optimism, positivity, self-efficacy, self-esteem, and social support; risk factors such as anxiety, depression, negative affect, and stress; and demographic factors such as age, gender, marital status, and education have an impact on the development of resilience. The least effect on the development of resilience comes from demographic factors and the greatest effect comes from protective factors. For this reason, an individual need to develop qualities such as optimism, positivity, self-esteem, and self-competence for the development of resilience (Lee et al., 2013: 270). It is a change process that develops based on cooperation and in which family, school, workplace, and community members contribute (Buzzanell, 2010: 3). It is recommended that practices such as work-life balance, organizational support, workplace social support, psychological support, occupational health and safety systems, risk and crisis management, and flexible working be used in organizations to develop the resilience of employees (Bardoel et al., 2014: 283-284).

2.3. Emotional Exhaustion

Healthcare workers work in a stressful environment. When the stress levels at work exceed the individual's ability to cope over a long period, emotional exhaustion can occur (Koolhaas et al., 2011: 1297). Exhaustion, as a long-term response to chronic work-related stressors (Maslach et al., 2001: 399), is of particular importance in healthcare settings, where employees experience both psychological and physical stress (Piko, 2006: 316). Emotional exhaustion can be considered the final stage of adaptation resulting from long-term demand and resource imbalance and therefore long-term job stress. Freudenberger (1974: 165) defined exhaustion as fatigue that occurs when individuals gradually run out of energy and experience a loss of motivation and commitment accompanied by a wide range of mental and physical symptoms.

Exhaustion is a psychological syndrome consisting of the dimensions of emotional exhaustion, depersonalization, and decreased personal accomplishment that can occur in individuals who work with other people. An important aspect of the exhaustion syndrome is increased feelings of emotional exhaustion. Emotional exhaustion represents the basic individual stress dimension of burnout and is the expression of a person's feelings of being deprived of emotional and physical resources. Another aspect of the exhaustion syndrome is the development of depersonalization. Depersonalization represents the interpersonal dimension of exhaustion and can cause the person to display negative, cynical attitudes and feelings about customers/patients. The third dimension of the exhaustion syndrome, the decreased effectiveness or accomplishment component, represents the self-evaluation dimension of exhaustion. It causes the employee to feel inadequacy, lack of success, and productivity at work (Maslach et al., 2001: 402; Maslach et al., 1997: 192). These three dimensions may be related to different conditions in the workplace. In general, exhaustion and depersonalization tend to occur as a result of excessive workload and social conflict, while; diminished personal accomplishment is a feeling of inefficiency resulting from a lack of resources needed to do the job (Maslach, 2003: 190).

Unlike stress, in the case of exhaustion, individuals can't adapt to life without external help or environmental rearrangement (Brill, 1984: 15). Every person can experience stress in their work life, but exhaustion occurs in employees with high goals and expectations. Employees who do not have high expectations experience work stress instead of exhaustion. Accordingly, exhaustion is a specific type of work stress characterized by its chronic and multifaceted nature (Schaufeli and Buunk, 2003: 389). Physical signs of burnout are feeling exhausted, insomnia, long-lasting common cold, frequent headaches, and stomach aches. Behavioural signs are quick to temper, sudden anger, disappointment, constant crying, emotional reactions, negative attitudes, and stubborn and rigid behaviors (Freudenberger, 1974: 160). Emotional exhaustion develops gradually and may not be noticed for a long time. It first appears as distress, decreased sense of effectiveness, and low motivation. In the subsequent process, the development of dysfunctional attitudes and behaviors at work results in a constant feeling of fatigue and a persistent negative mood about work (Ruotsalainen et al., 2014: 6).

Emotional exhaustion is common among healthcare professionals. Factors such as working conditions, workload, responsibility, management of complex and uncertain situations, excessive demands from patients, the psychological burden of the profession, and lack of social and psychological support increase the stress and burnout experienced by healthcare professionals (Mattei et al., 2017: 4). High job stress and burnout among healthcare professionals lead to decreased patient satisfaction and quality of care, and increased staff turnover. In addition, exhaustion negatively affects healthcare professionals' public service motivation and job performance. Therefore, healthcare institutions, managers, and policymakers need to take proactive steps to develop programs aimed at preventing and reducing stress and burnout for healthcare professionals (Yang, Meredith and Khan, 2015: 5; Deng et al., 2019: 10-11; Saravanabavan, Sivakumar and Hisham, 2019: 465).

2.4. Research Hypotheses

The feeling of burnout experienced by nurses is an occupational hazard that affects not only themselves but also patients, health service quality, and society in general. The emotional exhaustion of nurses reduces the quality of healthcare, patient satisfaction, organizational commitment, and productivity of nurses. Therefore, burnout should be considered an organizational and collective phenomenon, not only an individual problem (Jun et al., 2021: 10). Studies show that one of the most important reasons affecting nurses' emotional exhaustion is the violence they are exposed to at work (Kim, Mayer and Jones, 2021: 43). Exposure to violence in the workplace increases nurses' stress levels (Atan and Tekingündüz, 2014: 60), burnout (Rees et al., 2018: 457; Liu et al., 2019: 562; Li et al., 2020: 606; Wu et al., 2020: 500), and fear or insecurity feelings in the workplace (Najafi et al., 2018: e123).

Nurses believe that adequate safety measures are not taken in healthcare institutions and that this makes healthcare professionals vulnerable to violence in the workplace (Catlette, 2005: 524). One of the most basic responsibilities of hospital management is to reduce workplace violence and ensure that employees feel safe and supported (Partridge and Affleck, 2017: 143). Necessary measures should be taken to reduce emotional exhaustion and strengthen the resilience of nurses (Kim et al., 2021: 44). The study conducted by Zadow et al. (2017: 566) determined that healthcare professionals' belief that the work environment does not have a psychosocial safety climate is one of the main sources of emotional exhaustion. When a healthcare professional feels fear of future violence in the hospital environment, they tend to experience stronger emotional exhaustion (Portoghese et al., 2017: 44). The study conducted by Özel, Balsak, and Yıldız (2024: 106) concluded that the sense of security and trust in the work environment of healthcare workers reduced emotional exhaustion. Similarly, Copeland and Henry (2018: 31) found that emergency service workers who felt safe had lower levels of emotional exhaustion than those who did not feel safe. When emergency department workers perceived a higher safety climate in the work environment, they reported lower levels of emotional exhaustion (Lee et al., 2024: 224). These findings suggest that the development of a safe working environment and employees feeling safe from violence are important predictors of reducing emotional exhaustion. In this context, the first hypothesis of the study was developed.

H1: Perception of safety against violence has a negative and statistically significant effect on emotional exhaustion.

It is emphasized that healthcare professionals experience psychological problems such as stress, anxiety, burnout, and dissatisfaction due to working conditions. Developing resilience supports healthcare professionals in coping with stressful and challenging working conditions (Gillespie et al., 2009: 974; Zanatta et al., 2020: 976). The ability of healthcare professionals to cope with workplace challenges and violence is very important in reducing burnout levels (Murden et al., 2018: 789). In other words, resilience contributes to the development of healthcare professionals' mental health (Arrogante and Aparicio-Zaldivar, 2017: 114). It is recommended to increase the resilience of nurses to effectively reduce burnout, which is quite common among nurses. It has been determined that emotional exhaustion levels decrease as a result of a multidimensional resilience training program for intensive care nurses (Mealer et al., 2014: e103).

In a study conducted on nurses working in 22 hospitals in China, it was found that resilience was negatively correlated with emotional exhaustion, and emotional exhaustion decreased as resilience increased (Yang et al., 2018: 2909). The results of a study conducted on nurses in Oman show that increasing resilience can reduce the effect of burnout syndrome among nurses (Al-Harrasi et al., 2024: 201). In a study conducted on physicians in Canada, a negative relationship was found between resilience and emotional exhaustion (Wang et al., 2020: 11). The study by Guo et al., (2018: 441), it was concluded that the psychological resilience of nurses was an important predictor of burnout. According to the results of the studies, it was seen that nurses who were more psychologically resilient experienced less emotional exhaustion. In this context, the second hypothesis of the study was developed.

H2: Resilience has a negative and statistically significant effect on emotional exhaustion.

3. METHOD

The study was designed as cross-sectional quantitative research.

3.1. Aim of the Research

This study aims to determine the effect of nurses' perception of safety against violence and psychological resilience on emotional exhaustion.

3.2. Sampling and Procedure

The universe of the research consists of nurses working in public hospitals in Türkiye. The data were collected from nurses working in all provinces and public hospitals in Türkiye that the researchers could reach. Nurses from 38 provinces participated in the study. The highest participation was from Ankara (79), Izmir (42), and Hatay (30). An online survey form created in Google forms was sent to nurses who agreed to participate in the study voluntarily. The survey form was delivered to the participants via e-mail and WhatsApp. In addition, participants were also asked to share the survey form with other healthcare professionals. Answering the survey takes approximately 3-5 minutes. Research data were collected between 18-25 September 2024.

3.3. Data collection tools

Research data was collected through a questionnaire. The survey consists of questions regarding the demographic characteristics of the participants, a scale of perception of safety against violence, a psychological resilience scale, and an emotional exhaustion scale. All scales used in the research are 5-point Likert (1= completely disagree, 5= completely agree).

Scale of Safety Against Violence: The scale was developed to measure how safe emergency service workers feel by Kowalenko et al. (2013). There are 3 statements in the scale. Cronbach's alpha ($C\alpha$) of the scale is 0.75. Items 2 and 3 are reverse scored. The adaptation of the scale to Turkish culture was made by Şengül et al. (2019). In the current study, the first expression in the original scale was applied as two expressions. Thus, the number of statements in the scale was increased from three to four. Sample statements related to the scale: "I feel safe while working in a hospital", "I am not subjected to violence because of the work I do".

Brief Resilience Scale: It was developed by Smith et al. (2008) to determine the resilience levels of individuals. Statements in the scale are expressed as 1, 3, and 5 positively, and 2, 4, and 6 negatively. Negative statements were reverse coded. The scale was applied to four different samples and $C\alpha$ coefficient was found between 0.80-0.91. A single subfactor was obtained on all sample groups, and the variance explanation rates were 55-67%. The adaptation of the brief resilience scale to Turkish culture was made by Doğan (2015). The internal consistency coefficient ($C\alpha$) of the scale was found to be 0.83. A sample statement about the scale is "I can quickly pull myself together after difficult times."

Emotional Exhaustion Scale: In this study, the Maslach Burnout Scale developed by Maslach and Jackson (1981) was used to determine the emotional exhaustion levels of healthcare professionals. The scale was adapted into Turkish by Ergin (1992), and the $C\alpha$ coefficient was found to be 0.83. In the current study, the emotional exhaustion dimension of the scale, consisting of 4 statements, was used. An example statement in the scale is "I feel emotionally drained from my work".

3.4. Ethical considerations

Ethics committee approval was received from the İzmir Bakırçay University Non-Interventional Clinical Research Ethics Committee (Date: 18.09.2024 and number: 1754). The research was conducted by the ethical standards of the 1964 Helsinki Declaration and the National Research Committee. Before the data collection, all participants were informed that the data to be collected within the scope of the study would be used only for scientific purposes and that their names would be kept confidential. Informed consent was obtained from the participants stating that they participated in the study voluntarily.

3.5. Data analysis

The research data were analysed using SPSS and AMOS programs. In the analyses, frequency analysis for the demographic characteristics of the participants, Confirmatory Factor Analysis (CFA) for the validity of the scales, reliability analysis ($C\alpha$ coefficient, Average Variance Extracted (AVE), and Composite Reliability (CR) values) were performed. Correlation and regression analysis were performed to determine the relationships between variables and to test the hypotheses. In the evaluation of the reliability of the scales, threshold values of $C\alpha > 0.70$ (Nunnally and Bernstein, 1994), AVE value, ≥ 0.50 and $CR \geq 0.70$ (Hair et al., 2014) were taken. Skewness and Kurtosis values (± 1.500) were taken in the normality assumption (Tabachnick and Fidell, 2013). The significance level of <0.05 and a confidence level of 95% were considered.

4. RESULTS

4.1. Descriptive Characteristics of Participants

Descriptive statistics of the nurses who participated in the study are summarized in Table 1. As seen in Table 1, 88.6% of the nurses participating in the study were female, 29.5% were in the 41-45 age group, and 20.1% had more than 26 years of work experience.

Table 1. Descriptive Characteristics (n = 298)

| Demographic Variables | | Frequency | Percent |
|---|-------|-----------|---------|
| Gender | Women | 264 | 88.6 |
| | Men | 34 | 11.4 |
| Age (min= 21, max= 58, mean= 37.77, sd= 8.39) | 20-25 | 37 | 12.4 |
| | 26-30 | 39 | 13.1 |
| | 31-35 | 32 | 10.8 |
| | 36-40 | 54 | 18.1 |
| | 41-45 | 88 | 29.5 |
| | ≥46 | 48 | 16.1 |
| Working Time in the Profession (min= 1, max= 44, mean= 16.70, sd= 9.53) | 1-5 | 45 | 15.1 |
| | 6-10 | 46 | 15.4 |
| | 11-15 | 49 | 16.5 |
| | 16-20 | 51 | 17.1 |
| | 21-25 | 47 | 15.8 |
| | ≥26 | 60 | 20.1 |

The age of the participants in the study ranged from 20 to 58 years, with an average of 37.8 years. The working time in the profession ranged from 1 to 44 years, and the average was 16.7 years. All of the nurses participating in the study had a bachelor's degree.

4.2. Validity and Reliability Analyses

The validity of the scales used in the study was evaluated by confirmatory factor analysis and the results are given in Figure 1 and Table 2.

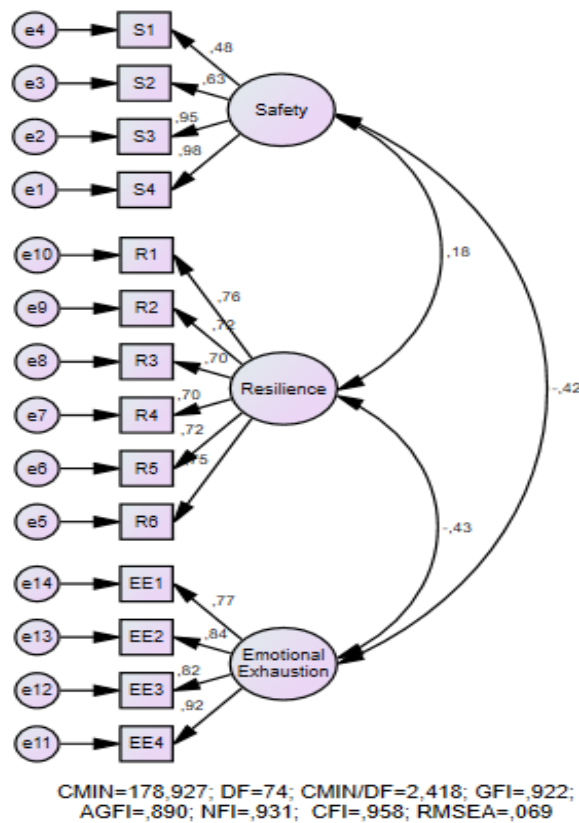


Figure 1. Confirmatory Factor Analysis of Scales

Table 2. Acceptable, Goodness-of-fit, and Actual Values of Scales

| Fit Values* | Acceptable Fit* | Good Fit* | Actual fit |
|--------------------|-----------------|-----------|------------|
| X ² /df | ≤ 5 | ≤ 2 | 2.418 |
| GFI | ≥ 0.90 | ≥ 0.95 | 0.922 |
| AGFI | ≥ 0.85 | ≥ 0.90 | 0.890 |
| CFI | ≥ 0.95 | ≥ 0.97 | 0.958 |
| NFI | ≥ 0.90 | ≥ 0.95 | 0.931 |
| RMSEA | ≤ 0.08 | ≤ 0.05 | 0.069 |
| SRMR | ≤ 0.10 | ≤ 0.05 | 0.0727 |

* **Reference:** Wheaton et al., (1977); Schermelleh-Engel et al., (2003).

As a result of the CFA of scales, it was found that it had acceptable fit index values of x²/df (2.418), GFI (0.922), AGFI (0.890), CFI (0.958), NFI (0.931), RMSEA (0.069), SRMR (0.0727).

Mean, standard deviation, Skewness, Kurtosis, CR, AVE, and C α values of the study variables are given in Table 3. The mean scores of the nurses who participated in the study were as follows: perception of safety against violence was 2.38±0.91, psychological resilience was 3.09±0.85, and emotional exhaustion levels were 3.62±1.03. Scale means were evaluated with 4/5=0.80 cut-off points used in five-point Likert-type scales. Accordingly, means were evaluated at five levels as "1.00-1.79=very low, 1.80-2.59=low, 2.60-3.39=medium, 3.40-4.19=high, and 4.20-5.00=very high" (Balay et al., 2014). When the scale means are examined, it is seen that nurses' perception of safety against violence is "low", their psychological resilience levels are "medium" and their emotional exhaustion levels are "high".

Table 3. Descriptive Statistics and Reliability Analysis of the Scales (n=298)

| Scales | Mean | Sd | Skewness | Kurtosis | CR | AVE | C α |
|---------------------------------------|------|------|----------|----------|------|------|------------|
| Perception of Safety Against Violence | 2.38 | .91 | .367 | -.238 | .858 | .621 | .848 |
| Resilience | 3.09 | .85 | .028 | -.446 | .870 | .528 | .870 |
| Emotional Exhaustion | 3.62 | 1.03 | -.452 | -.603 | .905 | .705 | .901 |

Since the Skewness and Kurtosis values of the scales are in the range of ±1.500, the research data show a normal distribution (Tabachnick and Fidell, 2013). The CR value of the perception of safety against violence scale is 0.858, the AVE value is 0.621 and the C α coefficient is 0.848. The CR value of the psychological resilience scale is 0.870, the AVE value is 0.528 and the C α coefficient is 0.870. The CR value of the emotional exhaustion scale is 0.905, the AVE value is 0.705 and the C α coefficient is 0.901. Since CR>0.70, AVE>0.50, and C α >0.70 for the three scales used in the study, the scales have high reliability (Table 3).

4.3. Correlation Analysis

The relationships between the variables of perception of safety against violence, psychological resilience and emotional exhaustion were examined through correlation analysis. It was found that there was a positive statistically significant relationship between the perception of safety against violence and psychological resilience ($r= 0.197$, $p<0.01$) and a negative statistically significant relationship between emotional exhaustion ($r= -0.473$,

p<0.01). There was a negative statistically significant relationship between psychological resilience and emotional exhaustion (r= -0.400, p<0.01) (Table 4).

Table 4. Results of Correlation Analysis for Relationships Between Variables

| Variables | 1 | 2 | 3 |
|---|---------|---------|---|
| 1 Perception of Safety Against Violence | 1 | | |
| 2 Resilience | .197** | 1 | |
| 3 Emotional Exhaustion | -.473** | -.400** | 1 |

*p<0.05, **p<0.01

4.4. Regression Analysis

Regression analysis was conducted to determine the effect of perception of safety against violence and resilience on emotional exhaustion. Since the correlation coefficients between the independent variables were less than 0.7, the Variance Inflation Factor (VIF) value was less than 1.5 and the tolerance value was greater than 0.6, it was determined that there was no multicollinearity (Hair et al., 2014). The analysis results are given in Table 5.

The multiple regression model established to determine the effect of perception of safety against violence and resilience on emotional exhaustion is statistically significant (F= 69.982, p<0.01). According to the regression model, perception of safety against violence (β = -0.463, p<0.01) and resilience (β = -0.385, p<0.01) affect emotional exhaustion statistically significantly and positively. Perception of safety against violence and resilience variables explain 31.7% of the change in emotional exhaustion, which is the dependent variable (Adj. R²= 0.317). According to these results, evidence supporting hypotheses H1 and H2 has been provided.

Table 5. Regression Analysis Results for Hypothesis Testing

| Variables | Emotional Exhaustion | | | | | | | | |
|---------------------------------------|----------------------|------|--------|--------|------|----------------|---------------------|-----------|-------|
| | β | p | t | F | R | R ² | Adj. R ² | Tolerance | VIF |
| Constant | 5.911 | .000 | 28.346 | 69.982 | .567 | .322 | .317 | - | - |
| Perception of Safety Against Violence | -.463 | .000 | -8.386 | | | | | .961 | 1.041 |
| Resilience | -.385 | .000 | -6.526 | | | | | .961 | 1.041 |

5. DISCUSSION

Although workplace violence is a general concept, it frequently occurs in hospitals. Among healthcare professionals, nurses are at greater risk than other professional groups. A study conducted in Thailand shows that 92.9% of emergency room nurses have been exposed to violence in the last 2 years (Lee et al., 2020: 67). Another study shows that violence is a common and almost normal situation for healthcare professionals, stating that they largely respond positively to the statement that "verbal and physical violence is an expected part of the job" (Copeland and Henry, 2017: 71). Despite the prevalence of workplace violence, it is

thought that the perception of safety against violence and related factors has not been sufficiently researched in Turkish and foreign literature.

Healthcare workers often experience emotional exhaustion due to various factors such as the difficulty of providing a public service, the responsibility of meeting patient expectations, long working hours, the obligation to provide high-quality service, close contact with patients, and the moral burden of losing a patient (Bazmi et al., 2019: 309; López-Cabarcos et al., 2021: 387). Work-related exhaustion can cause negative situations such as low morale or staff deterioration, stress, anxiety, psychosomatic complaints, sleep disturbance, and weak organizational commitment (Bazmi et al., 2019: 309), and quitting their jobs (Lee et al., 2020: 67; López-Cabarcos et al., 2021: 388). The addition of physical and/or verbal violence to the difficult working conditions of nurses causes an increase in the incidence of exhaustion. Lu et al. (2023: 708) showed that 31.7% of participants in a group of workers where violence was frequently experienced burnout symptoms at least once a week.

According to the current research findings, nurses' perception of safety against violence in the workplace reduces the level of emotional exhaustion. Similar results were reached in studies conducted on nurses by Zadow et al., (2017: 563), Lee et al., (2024), Özel et al., (2024). It is expected that nurses' belief that sufficient safety measures are taken in the work environment, their feeling of safety, and their thinking that violent incidents will be prevented positively affect their psychological health and reduce burnout.

Another finding of the study is that nurses' resilience reduces emotional exhaustion levels. In other studies, conducted on nurses (Arrogante and Aparicio-Zaldivar, 2017: 112; Guo et al., 2018; Murden et al., 2018; Yang et al., 2018; Wang et al., 2020; Al-Harrasi et al., 2024), also found that resilience reduces emotional exhaustion. Increasing the resilience of nurses will reduce emotional exhaustion. So that increasing the resilience of nurses is recommended to reduce burnout, which is quite common among nurses (Mealer et al., 2014: 103).

6. CONCLUSION AND RECOMMENDATIONS

Nurses experience more emotional exhaustion than other sector employees due to their difficult working conditions. Exhaustion has negative effects on nurses' general health, job success, and the health services they provide. Therefore, determining and preventing exhaustion levels may be valuable for public health.

Nurse burnout has become a global issue, not just an individual or organizational challenge or a concern for policymakers. Understanding nurse burnout, perceptions of safety, and its relationship with resilience is an important way to improve mental and physical health and the quality of clinical care among nurses. Many studies have attempted to explore important predictors that can explain burnout among nurses. These predictors include job stress, work-family conflict, work environment, and personality traits. This study emphasized the important role of nurses' perceptions of safety and resilience against violence in reducing emotional exhaustion. The study results contribute to the limited literature (Guo et al., 2018: 442) on the relationship between perceptions of safety against violence, resilience, and emotional exhaustion.

Resilience and developing perceptions of safety against violence are effective factors in reducing burnout in nurses. To benefit from the positive effects of these two factors, it is

recommended that nurses be provided training in their education and work life and that measures be taken to increase their perceptions of safety against violence to improve their resilience.

It has been observed that there are few studies in the literature investigating the relationship between the perception of security and the perception of resilience. It is thought that examining this issue from different dimensions in future studies will be useful in terms of developing academic knowledge and producing recommendations for practitioners. In addition, perceptions of safety and resilience may change over time. This situation may limit the generalizability of the results of this cross-sectional field study. It is recommended that future studies be planned longitudinally.

DECLARATION OF THE AUTHORS

Ethical considerations Ethics committee approval was received from the İzmir Bakırçay University Non-Interventional Clinical Research Ethics Committee (Date: 18.09.2024 and number: 1754).

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REFERENCES

- Al-Harrasi, S., Sabei, S. A., Omari, A. O., & Arawi, U. A. (2024). Nurses' job burnout and resilience in neonatal intensive care units. *The Journal of Perinatal & Neonatal Nursing*, 38(2), 201-211. <https://doi.org/10.1097/JPN.0000000000000817>
- Alsalem, S. A., Alsabaani, A., Alamri, R. S., Hadi, R. A., Alkhayri, M. H., Badawi, K. K., ... & Al-Bishi, A. M. (2018). Violence towards healthcare workers: A study conducted in Abha City, Saudi Arabia. *Journal of Family and Community Medicine*, 25(3), 188-193.
- Arrogante, O., & Aparicio-Zaldivar, E. (2017). Burnout and health among critical care professionals: The mediational role of resilience. *Intensive and Critical Care Nursing*, 42, 110-115. <https://doi.org/10.1016/j.iccn.2017.04.010>
- Atan, M., & Tekingündüz, S. (2014). Ambulans çalışanlarının (112) tükenmişlik, algılanan iş stresi ve iş tatminlerinin kişisel özelliklere göre incelenmesi. *NWSA-Social Sciences*, 54-69. <https://doi.org/10.12739/NWSA.2014.9.3.3C0121>
- Atkinson, P. A., Martin, C. R., & Raknin, J. (2009). Resilience revisited. *Journal of Psychiatric and Mental Health Nursing*, 16, 137-145. <https://doi.org/10.1111/j.1365-2850.2008.01341.x>
- Ayrancı, Ü., Yenilmez, Ç., Balcı, Y., & Kaptanoğlu, C. (2006). Identification of violence in Turkish health care settings. *Journal of Interpersonal Violence*, 21(2), 276-296. <https://doi.org/10.1177/0886260505282565>
- Balay, R., Kaya, A., & Geçdoğan Yılmaz, R. (2014). Eğitim yöneticilerinin hizmetkar liderlik yeterlilikleri ile farklılıkları yönetme becerileri arasındaki ilişki. *Eğitim Bilimleri Araştırma Dergisi*, 4(1), 229-249.

- Bazmi, E., Alipour, A., Yasamy, M. T., Kheradmand, A., Salehpour, S., Khodakarim, S., & Soori, H. (2019). Job burnout and related factors among health sector employees. *Iranian Journal of Psychiatry, 14*(4), 309–316. <https://doi.org/10.18502/ijps.v14i4.1982>
- Bardoel, E., Pettit, T. M., De Cieri, H., & McMillan, L. (2014). Employee resilience: An emerging challenge for HRM. *Asia Pacific Journal of Human Resources, 279-297*. <https://doi.org/10.1111/1744-7941.12033>
- Berlanda, S., Pedrazza, M., Fraizzoli, M., & Cordova, F. (2019). Addressing risks of violence against healthcare staff in emergency departments: The effects of job satisfaction and attachment style. *Hindawi BioMed Research International, 1-12*. <https://doi.org/10.1155/2019/5430870>
- Blando, J. D., O'Hagan, E., Castel, C., Nocera, M. A., & Peek-Asa, C. (2012). Impact of hospital security programmes and workplace aggression on nurse perceptions of safety. *Journal of Nursing Management, 21*(3), 491-498. <https://doi.org/10.1111/j.1365-2834.2012.01416.x>
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: We underestimated the human capacity to thrive after extremely aversive events? *American Psychologist, 59*(1), 20-28. <https://doi.org/10.1037/0003-066X.59.1.20>
- Brill, P. L. (1984). The Need for an operational definition of burnout. *Family & Community Health, 6*(4), 12-24. <https://doi.org/10.1097/00003727-198402000-00005>
- Buzzanell, P. M. (2010). Resilience: Talking, resisting, and imagining new normalcies into being. *Journal of Communication, 60*(1), 1-14. <https://doi.org/10.1111/j.1460-2466.2009.01469.x>
- Catlette, M. (2005). A descriptive study of the perceptions of workplace violence and safety strategies of nurses working in level I trauma centers. *Journal of Emergency Nursing, 31*(6), 519-525. <https://doi.org/10.1016/j.jen.2005.07.008>
- Charney, D. S. (2004). Psychobiological mechanisms of resilience and vulnerability: Implications for successful adaption to extreme stress. *The American Journal of Psychiatry, 195-216*. <https://doi.org/10.1176/appi.ajp.161.2.195>
- Copeland, D., & Henry, M. (2018). The relationship between workplace violence, perceptions of safety, and professional quality of life among emergency department staff members in a level I trauma centre. *International Emergency Nursing, 39, 26-32*. <https://doi.org/10.1016/j.ienj.2018.01.006>
- Dahlberg, L. L., & Krug, E. G. (2002). *Violence - A global public health problem*. World Health Organization.
- Deans, C. (2007). The effectiveness of a training program for emergency department nurses in managing violent situations. *The Australian Journal of Advanced Nursing, 21*(4), 17-22.

- Deng, J., Guo, Y., Ma, T., Yang, T., & Tian, X. (2019). How job stress influences job performance among Chinese healthcare workers: A cross-sectional study. *Environmental Health and Preventive Medicine*, 24, 1-11. <https://doi.org/10.1186/s12199-018-0758-4>
- Doğan, T. (2015). Kısa psikolojik sağlık ölçeği'nin Türkçe uyarlaması: Geçerlik ve güvenilirlik çalışması. *The Journal of Happiness & Well-Being*, 3(1), 93-102.
- Elliott, P. P. (1997). Violence in health care. What nurse managers need to know. *Nursing Management*, 28(12), 38-41.
- Ergin, C. (1992). Doktor ve hemşirelerde tükenmişlik ve Maslach tükenmişlik ölçeğinin uyarlanması. VII. Ulusal Psikoloji Kongresi Bilimsel Çalışmaları, 22-25 Eylül 1992, Hacettepe Üniversitesi, Ankara: VII. Ulusal Psikoloji Kongresi Düzenleme Kurulu ve Türk Psikologlar Derneği Yayını, 143-154
- Freudenberger, H. J. (1974). Staff burn-out. *Journal of Social Issues*, 30(1), 159-165. <https://doi.org/10.1111/j.1540-4560.1974.tb00706.x>
- Gillespie, B. M., Chaboyer, W., & Wallis, M. (2009). The influence of personal characteristics on the resilience of operating room nurses: A predictor study. *International Journal of Nursing Studies*, 46(7), 968-976. <https://doi.org/10.1016/j.ijnurstu.2007.08.006>
- Gillespie, G. L., Gates, D. M., Miller, M., & Howard, P. K. (2012). Emergency department workers' perceptions of security officers' effectiveness during violent events. *Work*, 42(1), 21-27. <https://doi.org/10.3233/WOR-2012-1327>
- Guo, Y.-F., Luo, Y.-H., Lam, L., Cross, W., Plummer, V., & Zhang, J.-P. (2018). Burnout and its association with resilience in nurses: A cross-sectional study. *Journal of Clinical Nursing*, 27(1-2), 441-449. <https://doi.org/10.1111/jocn.13952>
- Hair, J. J., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis Seventh Edition*. Pearson Education Limited.
- Jun, J., Ojemeni, M. M., Kalamani, R., Tong, J., & Crecelius, M. L. (2021). Relationship between nurse burnout, patient and organizational outcomes: Systematic review. *International Journal of Nursing Studies*, 119, 1-11. <https://doi.org/10.1016/j.ijnurstu.2021.103933>
- Kim, S., Mayer, C., & Jones, C. B. (2021). Relationships between nurses' experiences of workplace violence, emotional exhaustion and patient safety. *Journal of Research in Nursing*, 26(1-2), 35-46. <https://doi.org/10.1177/1744987120960200>
- Kingma, M. (2001). Workplace violence in the health sector: A problem of epidemic proportion. *International Nursing Review*, 48, 129-130. <https://doi.org/10.1046/j.1466-7657.2001.00094.x>
- Kızıl, M., Üstünkarlı, N., Erginer, D., & Şemin, M. İ. (2016). İzmir 112 ambulanslarında çalışan paramedik ve acil tıp teknisyenlerinin anksiyete düzeyleri ve iş stresörleri. *Hastane Öncesi Dergisi*, 1(1), 4354.

- Koolhaas, J. M., Bartolomucci, A., Buwalda, B., de Boer, S. F., Flügge, G., Korte, S. M., ... & Fuchs, E. (2011). Stress revisited: A critical evaluation of the stress concept. *Neuroscience & Biobehavioral Reviews*, 35(5), 1291-1301. <https://doi.org/10.1016/j.neubiorev.2011.02.003>
- Kowalenko, T., Gates, D., Gillespie, G. L., Succop, P., & Mentzel, T. K. (2013). Prospective study of violence against ED workers. *American Journal of Emergency Medicine*, 31, 197-205. <https://doi.org/10.1016/j.ajem.2012.07.010>
- Lafta, R. K., & Falah, N. (2019). Violence Against health-care workers in a conflict affected city. *Medicine, Conflict and Survival* 35(1), 65-79. <https://doi.org/10.1080/13623699.2018.1540095>
- Lanctot, N., & Guay, S. (2014). The aftermath of workplace violence among healthcare workers: A systematic literature review of the consequences. *Aggression and Violent Behavior*, 19, 492-501. <https://doi.org/10.1016/j.avb.2014.07.010>
- Lee, H. L., Han, C. Y., Redley, B., Lin, C. C., Lee, M. Y., & Chang, W. (2020). Workplace violence against emergency nurses in Taiwan: A cross-sectional study. *Journal of Emergency Nursing*, 46(1), 66-71.e4. <https://doi.org/10.1016/j.jen.2019.09.004>
- Lee, J. H., Nam, S. K., Kim, A.-R., Kim, B., Lee, M. Y., & Lee, S. M. (2013). Resilience: A meta-analytic approach. *Journal of Counseling & Development*, 269-279. <https://doi.org/10.1002/j.1556-6676.2013.00095.x>
- Lee, J., Resick, C. J., Allen, J. A., Davis, A. L., & Taylor, J. A. (2024). Interplay between safety climate and emotional exhaustion: Effects on first responders' safety behavior and wellbeing over time. *Journal of Business and Psychology*, 39, 209-231. <https://doi.org/10.1007/s10869-022-09869-1>
- Li, M., Liu, J., Zheng, J., Liu, K., Wang, J., Ross, A. M., ... & You, L. (2020). The relationship of workplace violence and nurse outcomes: Gender difference study on a propensity score matched sample. *Journal of Advanced Nursing*, 76(2), 600-610. <https://doi.org/10.1111/jan.14268>
- Liu, J., Zheng, J., Liu, K., Liu, X., Wu, Y., Wang, J., & You, L. (2019). Workplace violence against nurses, job satisfaction, burnout, and patient safety in Chinese hospitals. *Nursing Outlook*, 67(5), 558-566. <https://doi.org/10.1016/j.outlook.2019.04.006>
- López-Cabarcos, M. Á., López-Carballeira, A., & Ferro-Soto, C. (2021). Is public healthcare healthy? The role of emotional exhaustion. *Baltic Journal of Management*, 16(3), 386-406. <https://doi.org/10.1108/BJM-04-2020-0136>
- Lu, D. W., Zhan, T., Bilimoria, K. Y., Reisdorff, E. J., Barton, M. A., Nelson, L. S., Beeson, M. S., & Lall, M. D. (2023). Workplace mistreatment, career choice regret, and burnout in emergency medicine residency training in the United States. *Annals of Emergency Medicine*, 81(6), 706-714. <https://doi.org/10.1016/j.annemergmed.2022.10.015>
- Mahoney, B. S. (1991). The extent, nature, and response to victimization of emergency nurses in Pennsylvania. *Journal of Emergency Nursing*, 17(5), 282-291

- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science*, 12(5), 189-192. <https://doi.org/10.1111/1467-8721.01258>.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2, 99-113. <https://doi.org/10.1002/job.4030020205>
- Maslach, C., Jackson, S. E., & Leiter, M. (1997). The Maslach burnout inventory manual. In C. P. Zalaquett, & R. J. Wood, *Evaluating Stress: A Book of Resources* (pp. 191-218). The Scarecrow Press.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- Masten, A. S. (2001). Masten, ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238. <https://doi.org/10.1037/0003-066X.56.3.227>
- Mattei, A., Fiasca, F., Mazzei, M., Necozone, S., & Bianchini, V. (2017). Stress and burnout in health-care workers after the 2009 L'Aquila Earthquake: A cross-sectional observational study. *Frontiers in Psychiatry*, 8, 1-8. <https://doi.org/10.3389/fpsy.2017.00098>
- Mattox, E., Wright, S., & Bracikowski, A. (2000). Metal detectors in the pediatric emergency department: Patron attitudes and national prevalence. *Pediatric Emergency Care*, 16(3), 163-165. <https://doi.org/10.1097/00006565-200006000-00006>
- McNamara, R., Yu, D. K., & Kelly, J. J. (1997). Public perception of safety and metal detectors in an urban emergency department. *The American Journal of Emergency Medicine*, 15(1), 40-42. [https://doi.org/10.1016/S0735-6757\(97\)90045-0](https://doi.org/10.1016/S0735-6757(97)90045-0)
- Mealer, M., Conrad, D., Evans, J., Jooste, K., Solyntjes, J., Rothbaum, B., & Moss, M. (2014). Feasibility and acceptability of a resilience training program for intensive care unit nurses. *American Journal of Critical Care*, 23(6), e97-e105. <https://doi.org/10.4037/ajcc2014747>
- Murden, F., Bailey, D., Mackenzie, F., Oepen, R. S., & Brennan, P. A. (2018). The impact and effect of emotional resilience on performance: an overview for surgeons and other healthcare professionals. *British Journal of Oral and Maxillofacial Surgery*, 56(9), 786-790. <https://doi.org/10.1016/j.bjoms.2018.08.012>
- Najafi, F., Fallahi-Khoshknab, M., Ahmadi, F., Dalvandi, A., & Rahgozar, M. (2018). Antecedents and consequences of workplace violence against nurses: A qualitative study. *Journal of Clinical Nursing*, 27(1-2), e116-e128. <https://doi.org/10.1111/jocn.13884>
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory (Third Edition)*. McGraw-Hill.
- Özel, M., Balsak, H., & Yıldız, T. (2024). Healthcare workers' safety and emotional exhaustion: Exploring the impact of violence and trust in emergency departments. *Journal of Patient Safety and Risk Management*, 29(2), 106-114. <https://doi.org/10.1177/25160435241240517>

- Partridge, B., & Affleck, J. (2017). Verbal abuse and physical assault in the emergency department: Rates of violence, perceptions of safety, and attitudes towards security. *Australasian Emergency Nursing Journal*, 20(3), 139-145. <https://doi.org/10.1016/j.aenj.2017.05.001>
- Pınar, T., & Pınar, G. (2013). Sağlık çalışanları ve işyerinde şiddet. *TAF Preventive Medicine Bulletin*, 12(3), 315-326. <https://doi.org/10.5455/pmb.1-1368188150>
- Piko, B. F. (2006). Burnout, role conflict, job satisfaction and psychosocial health among hungarian health care staff: A questionnaire survey. *International Journal of Nursing Studies*, 43(3), 311-318. <https://doi.org/10.1016/j.ijnurstu.2005.05.003>
- Portoghese, I., Galletta, M., Leitter, M. P., Cocco, P., A'Aloja, E., & Compagna, M. (2017). Fear of future violence at work and job burnout: A diary study on the role of psychological violence and job control. *Burnout Research*, 7, 36-46. <https://doi.org/10.1016/j.burn.2017.11.003>
- Rees, C., Wirihana, L., Eley, R., Ossieran-Moisson, R., & Hegney, D. (2018). The effects of occupational violence on the well-being and resilience of nurses. *The Journal of Nursing Administration*, 48(9), 452-458. <https://doi.org/10.1097/NNA.0000000000000648>
- Richardson, G. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 307-321. <https://doi.org/10.1002/jclp.10020>
- Ruotsalainen, J. H., Verbeek, J. H., Mariné, A., & Serra, C. (2014). Preventing occupational stress in healthcare workers. *Cochrane Database of Systematic Reviews*, 1-115. <https://doi.org/10.1002/14651858.CD002892.pub3>
- Saines, J. C. (1999). Violence and aggression in A&E: Recommendations for action. *Accident & Emergency Nursing*, 7(1), 8-12. [https://doi.org/10.1016/s0965-2302\(99\)80094-0](https://doi.org/10.1016/s0965-2302(99)80094-0)
- Saravanabavan, L., Sivakumar, S. M., & Hisham, M. (2019). Stress and burnout among intensive care unit healthcare professionals in an Indian Tertiary Care Hospital. *Indian Journal of Critical Care Medicine*, 23(10), 462-466. <https://doi.org/10.5005/jp-journals-10071-23265>
- Schaufeli, W. B., & Buunk, B. P. (2003). Burnout: An overview of 25 years of research and theorizing. In M. J. Schabracq, J. A. Winnubst, & C. L. Cooper, *The Handbook of Work and Health Psychology, Second Edition* (pp. 383-425). John Wiley & Sons.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003 8(2)). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 23-74.
- Shin, J., Taylor, M. S., & Seo, M.-G. (2012). Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal*, 55(3), 727-748. <https://doi.org/10.5465/amj.2010.0325>

- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine, 15*(3), 194-200. <https://doi.org/10.1080/10705500802222972>
- Şengül, H., Bulut, A., & Özgüleş, B. (2019). Testing the validity and reliability of the Turkish version of the health and safety scale against violence with the structural equation model. *The Journal of International Social Research, 12*(67), 973-979. <http://dx.doi.org/10.17719/jisr.2019.3785>
- Tabachnick, B. G., & Fidell, L. (2013). *Using multivariate statistics* (6th ed.). Pearson.
- Türkmen, İ., & Doğan, H. Y. (2020). 112 Acil Sağlık hizmetleri çalışanlarının şiddete maruz kalma durumu ile iş doyumunu arasındaki ilişki. *18. Uluslararası Türk Dünyası Sosyal Bilimler Kongresi*, (s. 845-851). Sakarya, Türkiye.
- Vrablik, M. C., Chipman, A. K., Rosenman, E. D., Simcox, N. J., Huynh, L., Moore, M., & Fernandez, R. (2019). Identification of processes that mediate the impact of workplace violence on emergency department healthcare workers in the USA: Results from a Qualitative Study. *BMJ Open, 9*, e031781. <https://doi.org/10.1136/bmjopen-2019-031781>
- Wang, C., Grassau, P., Lawlor, P. G., Webber, C., Bush, S. H., Gagnon, B., ... & Spilg, E. G. (2020). Burnout and resilience among Canadian palliative care physicians. *BMC Palliative Care, 19*(1), 169. <https://doi.org/10.1186/s12904-020-00677-z>
- Wheaton, B., Muthén, B., Alwin, D. F., & Summers, G. F. (1977). Assessing reliability and stability in panel models. *Sociological Methodology, 8*, 84-136. <https://doi.org/10.2307/270754>
- WHO. (2020). *World Health Organization: Violence and injury prevention, violence against health workers.* World Health Organization: https://www.who.int/violence_injury_prevention/violence/workplace/en/ (Access Date: 08.10.2024).
- Wu, Y., Wang, J., Liu, J., Zheng, J., Liu, K., Judith, G. B., ... & You, L. (2020). The impact of work environment on workplace violence, burnout and work attitudes for hospital nurses: A structural equation modelling analysis. *Journal of Nursing Management, 28*(3), 495-503. <https://doi.org/10.1111/jonm.12947>
- Yang, G., Liu, J., Liu, L., Wu, X., Ding, S., & Xie, J. (2018). Burnout and resilience among transplant nurses in 22 hospitals in China. *Transplantation proceedings, 50*(10), 2905-2910. <https://doi.org/10.1016/j.transproceed.2018.04.033>
- Yang, S., Meredith, P., & Khan, A. (2015). Stress and burnout among healthcare professionals working in a mental health setting in Singapore. *Asian Journal of Psychiatry, 15*, 15-20. <https://doi.org/10.1016/j.ajp.2015.04.005>
- Yural, B., Acuner, D., & Çevik Akkuş, G. (2024). Sağlık çalışanlarının şiddete karşı güvenlik ve güven algılarının incelenmesi. *Sağlık ve Hemşirelik Yönetim Dergisi, 11*(1), 82-90. <https://doi.org/10.54304/SHYD.2024.02438>

- Zadow, A. J., Dollard, M. F., Mclinton, S. S., Lawrence, P., & Tuckey, M. R. (2017). Psychosocial safety climate, emotional exhaustion, and work injuries in healthcare workplaces. *Stress and Health, 33*(5), 558-569. <https://doi.org/10.1002/smi.2740>
- Zanatta, F., Maffoni, M., & Giardini, A. (2020). Resilience in palliative healthcare professionals: a systematic review. *Supportive Care in Cancer, 28*, 971-978. <https://doi.org/10.1007/s00520-019-05194-1>
- Zautra, A. J., Hall, J. S., & Murray, K. E. (2010). Resilience: A new definition of health for people and communities. J. R. Reich, A. J. Zautra, & J. S. Hall içinde, *Handbook of Adult Resilience* (pp. 3-30). The Guilford Press.
- Zhao, S., Liu, H., Ma, H., Jiao, M., Li, Y., Hao, Y., ... & Qiao, H. (2015). Coping with workplace violence in healthcare settings: Social support and strategies. *International Journal of Environmental Research and Public Health, 12*, 14429-14444. <https://doi.org/10.3390/ijerph121114429>