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Effect of a stress coping training on nurses' coping strategies and job satisfaction

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ABSTRACT

Aims: This study aimed to evaluate the impact of a structured stress management training program on coping strategies and job satisfaction among nurses.

Methods: A quasi-experimental pre-post single-group design was used. The sample included 23 nurses working at Van Training and Research Hospital and Dursun Odabaş Medical Center who completed a six-session psychoeducation program. Data were collected using a sociodemographic form, the Brief COPE Inventory, and the Nursing Job Satisfaction Scale. Paired samples t-tests and effect size analyses were conducted.

Results: Post-intervention results indicated a significant decrease in the maladaptive coping strategies related to substance use, with mean scores dropping from 4.08 (SD=0.99) to 2.56 (SD=1.19). Results also revealed a significant increase in positive reinterpretation, with mean scores rising from 4.69 (SD=0.97) to 5.95 (SD=1.36); t(df)=-3.568, p=.001, η^2=.74. However, no statistically significant change was found in job satisfaction scores.

Conclusion: The training effectively enhanced coping strategies but did not affect job satisfaction. These results emphasize the importance of integrating individual-level interventions with organizational efforts to improve nurses' well-being.

Keywords: Stress coping training, coping strategies, job satisfaction

INTRODUCTION

Nursing is a discipline that encompasses care services aimed at supporting individuals' physical, psychological, and social integrity. It plays a critical role in meeting health needs and requires a high level of knowledge, skill, and emotional labor. The challenges faced by nurses in the workplace stem not only from patient care responsibilities but also from long working hours, heavy workloads, emotional exhaustion, organizational pressures, and professional responsibilities (Yüksel Kaçan et al., 2016). These stressors negatively affect nurses' physical and mental health, often resulting in burnout, job dissatisfaction, and compassion fatigue (Çögenli & Erdal, 2018). Nurses working in high-stress environments such as emergency rooms, intensive care units, and oncology departments are particularly vulnerable to anxiety, depression, and burnout (Jachmann et al., 2025; Ramírez-Elvira et al., 2021; Salehi et al., 2025). Additionally, shift work has been shown to increase stress levels and promote helpless coping styles among nurses (Aksu & Erdim, 2018).

Persistent stress in the workplace can reduce job satisfaction and compromise the quality of patient care, thereby affecting the overall effectiveness of healthcare services (Fortney et al., 2013). Wazqar et al. (2017) demonstrated a consistent negative correlation between workload and job satisfaction, emphasizing the critical importance of equipping nurses with effective coping mechanisms to enhance job performance and overall well-being.

Coping is a multidimensional process involving cognitive, emotional, and behavioral responses to stress-inducing events. Effective coping strategies are essential for nurses to manage the numerous challenges they face in their professional lives. Khamisa et al. (2016) reported that nurses exposed to lower levels of occupational stress had higher job satisfaction, suggesting that managing stress effectively directly influences motivation and job experience. Nurses with stronger coping skills demonstrate greater resilience to workplace stressors, which positively impacts the quality of patient care (Liu et al., 2025; Sacgaca et al., 2023; Zengin & Taş, 2023). Moreover, social support has been shown to enhance coping abilities and positively affect job satisfaction (Üstündağ et al., 2019).

Various intervention programs have been developed to strengthen nurses' coping skills, including cognitive-behavioral therapy-based approaches, mindfulness-based

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interventions, and psychoeducational training programs (Bagheri et al., 2019). These programs can support nurses in developing more adaptive coping strategies and improving psychological resilience (Yang et al., 2018). However, many existing studies focus on short-term interventions without evaluating long-term outcomes (Lin et al., 2019; Montanari et al., 2019; Sulosaari et al., 2022).

The existing literature suggests that structured stress management programs can enhance nurses' psychological resilience and reduce occupational stress (Erdilek Karabay, 2015; Liu et al., 2025; Sacgaca et al., 2023). Nevertheless, few studies have examined the feasibility and combined impact of such programs on both coping strategies and job satisfaction (Ghawadra et al., 2020; Lin et al., 2019).

This study aims to evaluate the effects of a structured stress coping training program on nurses' coping strategies and job satisfaction through a feasibility approach. The findings are expected to inform the development of sustainable and effective training programs that enhance nurses' professional quality of life and guide healthcare institutions in addressing burnout and improving workplace well-being.

In this context, the research questions are as follows:

Main research question:

1. What are the effects of a structured stress coping training program on nurses' coping strategies and job satisfaction?

Sub-questions:

1. Does the structured stress coping training program significantly improve nurses' coping strategies compared to baseline?
2. Does participation in the program significantly increase nurses' job satisfaction levels?
3. Is there a statistically significant relationship between changes in coping strategies and changes in job satisfaction following the training program?

METHODS

Ethics

The study received ethical approval from the Non-interventional Researches Ethics Committee of Van Yüzüncü Yıl University (Date: 10.11.2023, Decision No: 2023/11-23) and institutional permission from Dursun Odabaş Medical Center (Date: 25.12.2023, Decision No: E-54355720-302.14.01-464370). Nurses who volunteered to participate in the research filled out the relevant forms and the scale during data collection face-toface. Permission was received via email from the individuals who performed the Turkish validity and reliability study of the scales. The ethical requirements specified in the Declaration of Helsinki were fulfilled throughout the study

Study Design

This study employed a pre-post single-group quasi-experimental design. The design included pre-intervention and post-intervention assessments to evaluate the effects of the stress coping training program.

Participants

The study was announced through an informational poster distributed by education nurses within the participating hospitals. Following the announcement, 30 nurses expressed interest and completed the pre-test assessments. However, 7 participants were excluded due to irregular attendance or incomplete questionnaire responses. Thus, the final sample consisted of 23 nurses working at Van Training and Research Hospital and Dursun Odabaş Medical Center. These participants were recruited through purposive sampling based on their active employment and voluntary participation.

Inclusion Criteria

Participants were eligible for the study if they:

- Were employed as registered nurses at Van Training and Research Hospital or Dursun Odabaş Medical Center,
- Had at least six months of work experience,
- Agreed to participate voluntarily and provided informed consent,
- Attended all training sessions of the intervention,
- Completed both the pre-test and post-test questionnaires in a valid and reliable manner.

Exclusion Criteria

Participants were excluded if they:

- Failed to attend the full training program,
- Submitted incomplete or inconsistent questionnaire responses,
- Withdrew from the study at any point during the intervention period (Table 1).

Table 1. Sociodemographic characteristics of participants (n=23)

Variable	Category	n	%
Gender	Female	12	52.2
	Male	11	47.8
Marital status	Married	11	47.8
	Single	12	52.2
Satisfaction with working conditions	Yes	8	34.8
	No	15	65.2
Years of work experience	1–5 years	8	34.8
	6–10 years	9	39.1
	More than 10 years	6	26.1
Working pattern	Day shift	6	26.1
	Rotational shift	17	73.9
Enjoys the profession	Yes	17	73.9
	No	6	26.1
Perceives profession as contributing to personal development	Yes	17	73.9
	No	6	26.1
Income level	Income less than expenses	17	73.9
	Income equal to expenses	6	26.1
Educational level	High School	2	8.7
	Bachelor's degree	18	78.3
	Graduate education	3	13.0

Study Setting and Timeframe

The study was conducted at Dursun Odabaş Medical Center between February and March 2024. Data collection took place between January and March 2024, following the receipt of ethical approval and institutional permissions. Data were collected by the researchers using a self-report method through structured questionnaires.

All participants were formally informed about the purpose and procedures of the study in accordance with the principles outlined in the Declaration of Helsinki. Written and verbal informed consent was obtained from each participant prior to their inclusion in the study (Figure).

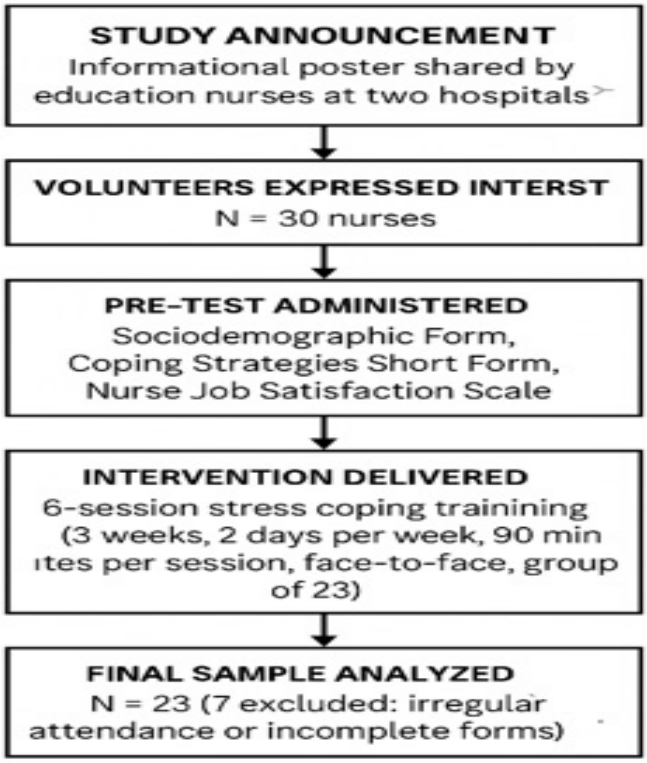

Figure. Flow diagram of study

Measures

Before the intervention, participants completed a pre-test that included a sociodemographic data form, the Brief COPE Inventory, and the Nursing Job Satisfaction Scale. The same instruments were re-administered as a post-test following the completion of the training program.

Sociodemographic Data Form: This form was developed by the researchers based on a literature review (Bacanlı et al., 20213; Khamisa et al., 2016; Öztürk, 2021). It included items related to participants' age, gender, educational background, marital status, clinical unit, satisfaction with working conditions, years of professional experience, work schedule (day vs. rotational shifts), enjoyment of the profession, perceived contribution of the profession to personal development, and income level.

Brief COPE Inventory: The Brief COPE Inventory is a shortened version of the original COPE Inventory developed by Carver et al. (1989) and later adapted by Carver (1997) to assess individuals' coping responses to stress. The Turkish adaptation and psychometric validation were conducted by Bacanlı et al. (2013). The scale consists of 28 items covering 14 coping dimensions, with two items per dimension. The sub-dimensions as below: use of instrumental social support; humor; focusing on and expressing emotions; substance use; acceptance; disengagement from other activities; turning to religion; denial; behavioral disengagement; mental disengagement; self-restraint; positive reinterpretation; use of emotional social support; planning. Each item is rated on a 4-point Likert scale. Reported Cronbach's alpha coefficients for the subscales range between .39 and .92 (Bacanlı et al., 2013). In the present study, the overall Cronbach's alpha was found to be .669.

Nursing Job Satisfaction Scale: The Nursing Job Satisfaction Scale (NJSS) was originally developed in Japan by Muyo et al. (2014) to assess nurses' job satisfaction levels. The Turkish adaptation and validation were conducted by Yıldırım and Yılmaz (2016). The scale consists of 27 items and includes four subscales: (1) Positive feelings about the job, (2) Perceived support from supervisors, (3) Perceived importance in the workplace, and (4) Pleasant work environment. It uses a 5-point Likert-type response format, with items 7 and 21 reverse-scored. The total score ranges from 35 to 135, with no established cut-off value. The Cronbach's alpha for the original version was reported as .903 (Muyo et al., 2014), and the reliability coefficient in this study was .869.

Intervention

As part of the study, a structured psychoeducational stress management training program was implemented for the participating nurses. The training was delivered face-to-face over a period of three weeks, with two sessions per week, totalling six sessions. Each session lasted approximately 90 minutes and was conducted in a group format with 23 participants.

The training modules were developed based on a comprehensive literature review and finalized after receiving expert feedback to ensure content validity (Ceravolo & Raines, 2019; Dos Santos et al., 2016; Koç et al., 2017). The content of each session is outlined below (Table 2):

Table 2. The contents of sessions

Session	Content
Session 1	- Participant introductions - Definition and nature of stress (positive and negative aspects) - Stress-related emotions (e.g., anger, fear, anxiety), stressors, key symptoms, and consequences
Session 2	- Models of stress within biological, environmental, and person–environment interaction frameworks
Session 3	- Management of stressful situations and coping processes (definitions and scope)
Session 4	- Stress vulnerability and resilience
Session 5	- Relaxation techniques in stress management
Session 6	- Behavioral approaches in stress management

Data Collection

Data were collected at Dursun Odabaş Medical Center between January and March 2024, following the approval of the institutional ethics committee and administrative permissions. Before data collection, all participants were informed about the purpose and scope of the study, and both verbal and written informed consent were obtained in accordance with ethical research standards.

The data were collected using a self-report method through pre-test and post-test assessments administered before and after the stress coping training. Completing the questionnaires took approximately 15 minutes per session. Additional time was provided for participants to ask questions or share relevant comments. All completed forms were collected by the researchers.

Statistical Analysis

Descriptive statistics including means, standard deviations, frequencies, and percentages were used to summarize the data. To evaluate the effectiveness of the intervention, paired Samples t-tests were conducted to compare pre-test and post-test scores. In addition, eta squared (η^2) was calculated to determine the effect size of the intervention.

All statistical analyses were performed using SPSS version 26.0, and the level of statistical significance was set at $p<.05$.

RESULTS

Participants Characteristics

The participants consisted of 23 nurses, with a mean age of 30.21 years (SD=5.56). The majority of participants were female (52.2%) and single (52.2%). Most of the nurses reported dissatisfaction with their working conditions (65.2%) and worked in rotational shifts (73.9%). A large proportion indicated that they enjoyed their profession (73.9%) and perceived it as contributing to their personal development (73.9%). Regarding income, 73.9% stated that their income was less than their expenses. In terms of education, most participants held a bachelor's degree (78.3%), followed by graduate education (13.0%) and high school (8.7%). Nearly 40% had 6–10 years of work experience.

The Effect of A Structured Psychoeducational Stress Management Training Program on coping Strategies and Job Satisfaction

Paired Samples t-test results revealed a statistically significant decrease in substance use coping strategies following the intervention, with mean scores dropping from 4.08 (SD=0.99) to 2.56 (SD=1.19), t(df)=-3.805, p=.001, η=.79. Similarly, positive reinterpretation significantly increased post-intervention, with mean scores rising from 4.69 (SD=0.97) to 5.95 (SD=1.36), t(df)=-3.568, p=.001, η=.74. These results indicate that the psychoeducational intervention had a large effect on reducing maladaptive coping (i.e., substance use) and enhancing adaptive coping (i.e., positive reinterpretation).

No statistically significant differences were observed in the remaining coping strategies, as all other comparisons yielded p=1.00 and η=.00, indicating no change in these domains (Table 3).

Paired samples t-tests revealed no statistically significant changes in job satisfaction scores following the stress coping training. The total score of the Job Satisfaction Scale remained stable from pre-test (M=81.82, SD=10.31) to post-test (M=81.26, SD=12.80), p=.780. Similarly, there were no significant differences across subdimensions: positive feelings about the job (p=.533), perceived support from supervisors (p=.871), perceived importance in the workplace (p=.798), and pleasant work environment (p=.686). These results suggest that the training did not lead to measurable changes in job satisfaction among the participants (Table 4).

Table 3. Pre- and post-test means, t-values, p-values, and effect sizes (η) for nurses' coping strategies before and after stress coping training

Coping strategy	Pre-test (M±SD)	Post-test (M±SD)	t/p	Eta (η)
Use of instrumental social support	5.91±1.23	5.91±1.23	.000/1.00	.00
Humor	4.43±1.87	4.73±1.88	.000/1.00	.00
Focusing on and expressing emotions	5.47±1.41	5.47±1.41	.000/1.00	.00
Substance use	4.08±0.99	2.56±1.19	-3.805/.001*	.79
Acceptance	6.04±1.39	6.04±1.39	.000/1.00	.00
Disengagement from other activities	5.30±1.01	5.30±1.01	.000/1.00	.00
Turning to religion	6.86±1.09	6.86±1.09	.000/1.00	.00
Denial	3.78±1.20	3.78±1.20	.000/1.00	.00
Behavioral disengagement	3.65±1.26	3.65±1.26	.000/1.00	.00
Mental disengagement	5.13±1.42	5.13±1.42	.000/1.00	.00
Self-restraint	5.26±1.05	5.26±1.05	.000/1.00	.00
Positive reinterpretation	4.69±0.97	5.95±1.36	-3.568/.001*	.74
Use of emotional social support	5.34±1.22	5.34±1.22	.000/1.00	.00
Planning	6.30±1.29	6.30±1.29	.000/1.00	.00

SD: Standard deviation, *Paired samples test

Table 4. Pre- and post-test means and p-values for job satisfaction and its subdimensions

Job satisfaction dimension	Pre-test (M±SD)	Post-test (M±SD)	p-value
Total score	81.82±10.31	81.26±12.80	.780
Positive feelings about the job	23.69±3.94	23.00±3.96	.533
Perceived support from supervisors	16.73±4.58	16.91±6.07	.871
Perceived importance in the workplace	27.78±2.82	27.91±2.69	.798
Pleasant work environment	13.60±2.99	13.43±3.35	.686

SD: Standard deviation

DISCUSSION

The findings of this quasi-experimental study indicate that a structured stress management training program provided to nurses yielded notable effects on their coping strategies, though it did not produce significant changes in job satisfaction levels.

Analysis of the Brief COPE Inventory results revealed significant changes in two specific subscales: a decrease in maladaptive coping through substance use and an increase in adaptive coping through positive reinterpretation. These findings support the effectiveness of psychoeducation-based interventions in enhancing nurses' emotional resilience and promoting healthier stress management behaviors. The training likely facilitated a greater awareness of stressors and encouraged constructive reframing of challenging situations, consistent with previous literature that emphasizes the benefits of positive reappraisal strategies in mitigating stress (Carver, 1997; Bacanlı et al., 2013).

Despite these gains in coping, no statistically significant differences were observed in job satisfaction levels before and after the intervention. While the baseline job satisfaction

scores were relatively high, the lack of post-intervention change may be attributed to several factors. First, job satisfaction is influenced by a wide array of external and organizational elements—such as administrative support, workplace culture, interpersonal dynamics, remuneration, and career advancement opportunities—which were not directly addressed by the individual-level intervention employed in this study (Fortney et al., 2013; Yüksel et al., 2016). The participants' reports of dissatisfaction with their working conditions and compensation likely further constrained any measurable improvement.

Moreover, the duration and scope of the training may have been insufficient to produce substantial change in job satisfaction. While coping skills can be taught and refined over short periods, job satisfaction tends to develop over time and often requires systemic changes within the workplace. Similar findings have been reported in previous studies suggesting that stress management interventions, although beneficial for psychological resilience, may not independently impact broader occupational outcomes without organizational-level reforms (Durmuş & Günay, 2007).

It is also worth noting that coping strategies are more proximal outcomes, which can be directly targeted and modified through training, whereas job satisfaction is a distal construct, mediated by more complex and enduring workplace dynamics. Thus, the present findings highlight the necessity of combining individual-level interventions with organizational strategies for a more comprehensive improvement in nurses' occupational well-being.

This study also underscores the importance of integrating stress management and emotional regulation techniques into nursing education curricula. For example, during the COVID-19 pandemic, similar interventions were found to be effective in enhancing psychological resilience among nursing students (Öztürk, 2021). Embedding such training into both undergraduate programs and in-service professional development could serve as a preventive measure against burnout and dissatisfaction.

In summary, while the stress management training program was effective in promoting adaptive coping and reducing reliance on maladaptive strategies, it did not significantly alter job satisfaction levels. These findings suggest that interventions aiming to improve nurses' occupational well-being should address both personal skill development and systemic organizational factors to achieve optimal results.

Limitations

This study has several limitations that should be acknowledged. First, the small sample size (n=23) limits the statistical power and generalizability of the findings. Second, the absence of a control group prevents the attribution of observed changes exclusively to the intervention. Third, the reliance on self-report measures may introduce response biases. Fourth, the short duration of the training may not have been sufficient to affect more complex, long-term outcomes such as job satisfaction. Lastly, the sample was restricted to nurses from two hospitals in a specific region, which may further limit the generalizability of the results. Future research should consider randomized controlled designs, larger samples, and longer follow-up periods to assess sustained effects and broader applicability.

CONCLUSION

This study demonstrated that a structured stress management training program positively influenced nurses' coping strategies by reducing maladaptive behaviors and enhancing adaptive responses such as positive reinterpretation. However, the training did not yield significant changes in job satisfaction. These findings suggest that while individual-level interventions can enhance emotional resilience and coping, improving job satisfaction may require more comprehensive, organizational-level reforms. Integrating stress management skills into routine training and professional development programs may serve as a preventive strategy to mitigate burnout and support nurses' psychological well-being. Future research should explore multi-level interventions that target both personal and systemic factors to improve nurses' overall occupational health.

Relevance to Clinical Practice

Nurses frequently experience high levels of occupational stress that can undermine their coping capacities and job satisfaction. This study highlights the potential of structured stress management training to promote healthier coping strategies among nurses. Although job satisfaction remained unchanged, the findings suggest that combining such interventions with organizational changes may yield more comprehensive improvements in staff well-being and the quality of patient care. Embedding stress management education into nursing curricula and continuing education programs may serve as a sustainable strategy to build psychological resilience and reduce burnout in clinical settings.

ETHICAL DECLARATIONS

Ethics Committee Approval

The study received ethical approval from the Non-interventional Researches Ethics Committee of Van Yüzüncü Yıl University (Date: 10.11.2023, Decision No: 2023/11-23) and institutional permission from Dursun Odabaş Medical Center (Date: 25.12.2023, Decision No: E-54355720-302.14.01-464370).

Informed Consent

Written informed consent was obtained from all individual participants prior to their inclusion in the study. Participants were fully informed about the study's aims, procedures, potential risks and benefits, and their rights—including the right to withdraw at any time without consequence. All participants voluntarily signed a written informed consent form.

Peer Review Process

This manuscript was subject to external peer review.

Conflict of Interest

The authors declare no conflicts of interest related to this study.

Financial Disclosure

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Author Contributions

All authors contributed significantly to the study's conception, design, data acquisition, analysis, and interpretation. All authors reviewed and approved the final version of the manuscript.

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REFERENCES

Bacanlı, H., İlhan, T., & Aslan, S. (2013). Başa Çıkma Stratejileri Ölçeği kısa formunun (COPE) Türkçeye uyarlanması: geçerlik ve güvenirlik çalışması. *Eğitim ve Bilim, 38*(169), 346-357.

Bagheri, T., Fatemi, M. J., Payandan, H., Skandari, A., & Momeni, M. (2019). The effects of stress-coping strategies and group cognitive-behavioral therapy on nurse burnout. *Annals of burns and fire disasters, 32*(3), 184.

Ceravolo, D., & Raines, D. A. (2019). The impact of a mindfulness intervention for nurse managers. *J Holistic Nursing, 37*(1), 47-55. doi:10.1177/0898010118781620

Carver, C. S. (1997). You want to measure coping but your protocol's too long: consider the Brief COPE. *Int J Behavioral Med, 4*(1), 92-100. doi:10.1207/s15327558ijbm0401_6

Çögenli, M. Z., & Erdal, Y. (2018). Hemşirelerde iş stresi ve iş stresinin çalışma performansına etkileri: Sinop Atatürk Devlet Hastanesi örneği. *Business & Management Studies: An Int J, 6*(3), 497-515. doi:10.22139/jobs.741576_

Dos Santos T. M, Kozasa E. H, Carmagnani I. S, Tanaka L. H, Lacerda S. S, Nogueira-Martins L. A (2021). Positive effects of a stress reduction program based on mindfulness meditation in Brazilian nursing professionals: qualitative and quantitative evaluation. Explore. *J Sci Healing, 12*(2); 90-99. doi:10.1016/j.explore.2015.12.005

Durmuş, S., & Günay, O. (2007). Hemşirelerde iş doyumu ve anksiyete düzeyini etkileyen faktörler. *Erciyes Tıp Dergisi, 29*(2), 139-146.

Erdilek Karabay, M. (2015). Sağlık personelinin iş stresi, iş-aile çatışması ve iş-aile-hayat tatminlerine yönelik algılarının işten ayrılma niyeti üzerindeki etkilerinin belirlenmesi üzerine bir araştırma. *Yönetim Bilimleri Dergisi, 13*(26), 113-134.

Ghawadra, S. F., Lim Abdullah, K., Choo, W. Y., Danaee, M., & Phang, C. K. (2020). The effect of mindfulness-based training on stress, anxiety, depression and job satisfaction among ward nurses: a randomized control trial. *J Nurs Manag, 28*(5), 1088-1097. doi:10.1111/jonm.13049

Jachmann, A., Loser, A., Mettler, A., Exadaktylos, A., Müller, M., & Klingberg, K. (2025). Burnout, depression, and stress in emergency department nurses and physicians and the impact on private and work life: a systematic review. *JACEP Open, 6*(2), 100046. doi:10.1016/j.acepjo.2025.100046

Khamisa, N., Peltzer, K., Ilic, D. & Oldenburg, B. (2016). Hemşirelerin iş kaynaklı stresi, tükenmişlik, iş tatmini ve genel sağlıkları: bir takip çalışması. *Uluslararası Hemşirelik Uygulamaları Dergisi, 22*(6), 538-545.

Koç, S., Özkul, A. S., Özdemir Ürkmez, D., Özkul Özel, H., & Çelik Çevik, L. (2017). Bir sağlık kuruluşunda görev yapmakta olan hemşirelerin stres kaynaklarının ve düzeylerinin analizi. *Okmeydanı Tıp Dergisi, 33*(2):68-75. doi:10.5222/otd.2017.1100

Lin, L., He, G., Yan, J., Gu, C., & Xie, J. (2019). The effects of a modified mindfulness-based stress reduction program for nurses: a randomized controlled trial. *Workplace Health Saf, 67*(3), 111-122. doi:10.1177/2165079918801633

Liu, M., Yan, Z., & Wu, C. (2025). Comparative efficacy and acceptability of resilience-focused interventions for nurses: a systematic review and network meta-analysis of randomized controlled trials. *BMC Nursing, 24*(1), 418. doi:10.1186/s12912-025-03090-0

Montanari, K. M., Bowe, C. L., Chesak, S. S., & Cutshall, S. M. (2019). Mindfulness: assessing the feasibility of a pilot intervention to reduce stress and burnout. *J Holist Nurs*, *37*(2), 175-188. doi:10.1177/0898010118793465

Muyo, T., Matsuda, N., & Suzuki, S. (2014). Development of the Nursing Job Satisfaction Scale. *J Nurs Management, 22*(6), 745-755.

Öztürk, F. (2021). COVID-19 pandemi sürecinde verilen stresle baş etme teknikleri dersinin hemşirelik bölümü birinci sınıf öğrencilerinde psikolojik sağlamlık ve öz etkililik-yeterliğe etkisi. *Sted/Sürekli Tıp Eğitimi Dergisi*, *30*(4), 269-277. doi:10.17942/sted.959908

Ramírez-Elvira, S., Romero-Bejar, J. L., Suleiman-Martos, N., Gomez-Urquiza, J. L., Monsalve-Reyes, C., Canadas-De la Fuente, G. A., & Albendin-Garcia, L. (2021). Prevalence, risk factors and burnout levels in intensive care unit nurses: a systematic review and meta-analysis. *Int J Environ Res Public Health*, *18*(21), 11432. doi:10.3390/ijerph182111432

Sacgaca, L., Gonzales, A., Alkubati, S., Alrashidi, N., Alreshidi, M. S., Pasay-An, E., ... & Saguban, R. (2023). The impact of mental well-being, stress, and coping strategies on resilience among staff nurses during COVID-19 in Saudi Arabia: a structural equational model. *Healthcare, 11*(3), 368. doi:10.3390/healthcare11030368

Salehi, M., Ghasemian, A., Najar, A. V., Nazari, H., & Hooshmand, E. (2025). From compassion to burnout: emotional labor in oncology nursing—a qualitative study. *BMC Nursing, 24*(1), 272. doi:10.1186/s12912-025-02928-x

Sulosaari, V., Unal, E., & Cinar, F. I. (2022). The effectiveness of mindfulness-based interventions on the psychological well-being of nurses: a systematic review. *Appl Nurs Res*, *64*, 151565. doi:10.1016/j.apnr.2022.151565

Üstündağ, H., Bostanci, Z., & Aydoğan, B. (2019). Hemşirelik öğrencilerinin stresle başetme düzeyleri ile algıladıkları sosyal destek arasındaki ilişki. *Sağlık Bilimleri Ve Meslekleri Dergisi*, *6*(1), 71-80. doi:10.17681/hsp.466581

Wazqar, D. Y, Kerr, M., Regan, S. ve Orchard, C. (2017). İş stresi ve başa çıkma stratejilerinin hemşirelerin mesleki yaşam kalitesi üzerindeki etkisinin bütünleştirici bir incelemesi. *Hemşirelik Yönetimi Dergisi, 25*(5), 385-396.

Yang, J., Tang, S., Zhou, W. (2018). Effect Of mindfulness-based stress reduction therapy on work stress and mental health of psychiatric nurses. *Psychiatria Danubina, 30*(2), pp 189-196. doi:10.24869/psyd.2018.189

Yıldırım, A., & Yılmaz, F. (2016). Hemşire İş Doyum Ölçeği'nin Türkçe geçerlilik ve güvenilirlik çalışması. *Türkiye Klinikleri Hemşirelik Bilimleri Dergisi, 8*(1), 45-52.

Yüksel-Kaçan, C., Örsal, Ö., & Köşgeroğlu, N. (2016). Hemşirelerde iş doyumu düzeyinin incelenmesi. *Hemşirelikte Araştırma Geliştirme Dergisi*, *18*(2/3), 1-12. doi:10.69487/hemarge.696067

Zengın, M. and TAŞ, R. (2023). Hemşirelik öğrencilerinin algıladıkları sosyal destek düzeyleri ile stres ve stresle baş etme davranışları arasındaki ilişki. *Balıkesir Med J. 7*(1), 15-24. doi:10.33716/bmedj.1239124