

Mediating effect of organizational commitment on nurses' ethical climate and ethical behavior[†]



Original Article

Zahra Marzieh Hassanian^a, Arezoo Shayan^{b,*}, Maryam Seyedtabib^c, Leili Tapak^d, Zahra Karami^e

^aDepartment of Nursing, School of Nursing and Midwifery, Hamadan University of Medical Sciences, Hamedan 6517838736, Iran

^bDepartment of Midwifery, School of Nursing and Midwifery, Hamadan University of Medical Sciences, Hamedan 6517838736, Iran

^cDepartment of Biostatistics and Epidemiology, Ahvaz Jundishapur University of Medical Sciences, Behbahan 6517838736, Iran

^dDepartment of Biostatistics, School of Health, Hamadan University of Medical Sciences, Hamedan 6517838736, Iran

^eSchool of Nursing and Midwifery, Hamadan University of Medical Sciences, Hamedan 6517838736, Iran

Received: 22 August 2024; Accepted: 6 September 2024; Published: 20 December 2025

Abstract: **Objective:** To study the relationship, the mediating effect of organizational commitment on nurses' ethical climate and ethical behavior.

Methods: Structural Equation Modeling (SEM) was employed to perform path analysis in this exploratory study. The participants consisted of 280 Iranian nurses who were studied through proportional random sampling. The research tool was consisted of (1) the Ethical Climate Questionnaire by Cullen and Victor, which examines the ethical standards of selfishness, philanthropy, and ethical principles, as well as the reference sources of ethical arguments, including individual, regional, and global ones; (2) Allen and Mayer's questionnaire, which measures organizational commitment in 3 areas: emotional commitment, continuous commitment, and normative commitment; and (3) Peterson's Ethical Behavior Questionnaire, which combines nine items to form interconnected ethical behaviors and is based on a 5-point Likert scale. The data were analyzed using AMOS and SPSS v.23 software.

Results: The correlation coefficient between the two variables, ethical climate and ethical behavior, showed a significant relationship ($r = 0.10$, $p = 0.085$). The organizational commitment showed a significant relationship between some dimensions and the total ethical climate. The ethical climate affects the organizational commitment (beta = 3.261) and behavior (beta = 0.121). Organizational commitment does not show any significant relationship with ethical behavior. The ethical climate affects the organizational commitment and the ethical behavior.

Conclusions: Nursing managers and nursing staff should consider the ethical climate that affects the organizational commitment and nursing ethical behavior.

Keywords: *ethical behaviors • ethical climate • mediating effect • nurse • organizational commitment*

© Shanxi Medical Periodical Press Co., Ltd.

[†]This project was supported by The Mediating Effect of Organizational Commitment on Nurses' Ethical Climate and Ethical Behavior (No. IR.UMSHA.REC.1396.601).

How to cite this article: Hassanian ZM, Shayan A, Seyedtabib M, Tapak L, Karami Z. Mediating effect of organizational commitment on nurses' ethical climate and ethical behavior. *Front Nurs.* 2025;4:547–554.

*Corresponding author.

E-mail: arezoo.shayan2012@yahoo.com (A. Shayan).

Open Access. © 2025 Hassanian et al., published by Shanxi Medical Periodical Press. This work is licensed under the Creative Commons Attribution 4.0 License.

1. Introduction

The organizational commitment of nursing staff, while restoring, maintaining, and promoting human health, will significantly increase professional commitment and lead to the better achievement of organizational goals.¹ Ethics is a series of acquired traits and qualities that humans accept as ethical principles. In nursing, ethics is the foundation for behavioral standards and provides a framework for nurses' actions.² Increasing workload in nurses leads to more exposure to ethical issues and sometimes disrespect, which can lead to increased dissatisfaction.³ Ethical distress is unavoidable due to the prioritization of budget and work-related issues over patient's safety and care. If personnel, successful managers, and insurance agents themselves behave ethically, the agents will exhibit a high commitment to their company.⁴ Merging ethical values is an important dimension of organizational culture, and the presence of misalignment or ethics gaps affects the quality of care being delivered, the morale, and the behavior of the staff and the organization's image in the community.⁵

Organizational commitment is employee's level of identification and participation with organizational goals and values.⁶ It is the individual's tendency to put enough energy and loyalty in favor of the social system and the willingness to continue paying service in an organization.⁷ Organizational commitment is influenced by personal and structural factors and the employee's previous experience.⁸ A person with high organizational commitment will show great effort and even sacrifice to achieve the goals of the organization.⁹ He/she adopts his/her identity from the organization, participates and engages with it, and enjoys being its member.¹⁰ Increasing the level of job satisfaction, involving personnel in the affairs of the organization, and being accepted by the management are factors affecting organizational commitment.¹¹ Organizational commitment has been assumed as one of the predictors of intention to leave so that nurses who have less commitment and attachment to their workplace are more likely to quit their job, which will seriously disrupt the daily activities of the hospital.^{12,13}

The ethical climate of an organization is measured by the ethical dimensions of an organization.¹⁴ The framework presented by Cullen et al.¹⁵ for measuring employees' perceptions of the ethical climate is a combination of the theoretical structures of cognitive development, the ethical theory of Kohlberg, and the places of analysis. In the self-centered dimension and the place of individual analysis, ethics becomes instrumental. In the humanitarian dimension and the place of individual analysis, ethics becomes of a caring type, and in the basic dimension and place of international analysis, it finds the role of adherence to principles, laws, and codes

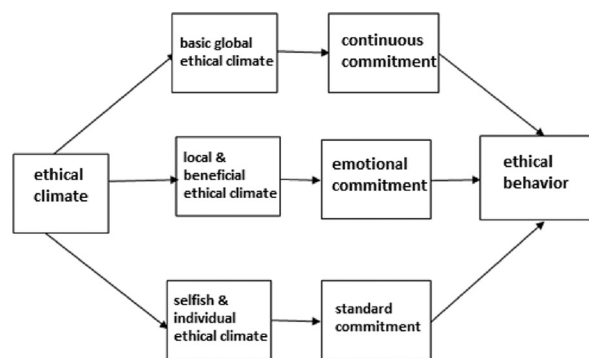


Figure 1. Conceptual model and the study hypotheses.

of ethics. Available evidence shows that organizational ethical climate crucially predicts behaviors.¹⁶ There is a relationship between nurses' perceptions of ethical climate and their individual interests.^{17,18} These ethical principles and values can serve as a source for nurses' decision-making and practice. The current study seeks to examine the relationship between ethical climate, organizational commitment, and ethical behavior of the nurses working at the Hamadan University of Medical Sciences. Figure 1 illustrates the conceptual model and the study hypotheses presented for review, including:

1. There is a relationship between the perception of ethical climate and nurses' organizational commitment.
2. There is a relationship between organizational commitment and nurses' ethical behavior.
3. There is a relationship between perceptions of ethical climate and nurses' ethical behavior.
4. There is a relationship between the perception of ethical climate, organizational commitment, and nurses' ethical behavior.

2. Methods

In the current study, a fundamental method (Structural Equation Modeling) is used to examine the effective variables on ethical behavior, while considering the mediating effect of organizational commitment in the ethical climate of Hamadan University of Medical Sciences.

The research sample consists of the nurses working at the treatment-educational centers of Hamadan University of Medical Sciences who had the criteria for entering the study. Entry criteria included education level of at least a bachelor's degree and work experience of at least one year or more in the inpatient departments. Nurses, who incompletely answered the questionnaire or were employed in departments of the hospital other

than the inpatient department, were excluded from the study.

The samples were selected by proportional, stratified random. The population of the sample, based on the previous samples,¹⁹ with a correlative coefficient of 0.24 between the organizational commitment and ethical climate, the significance level of 5%, and power of 90%, given the following formula and the possibility of a 10% drop in the sample, the extent of the total sample was estimated to be 280 nurses.

$$n = \left[\frac{Z_{\alpha} + Z_{\beta}}{c} \right]^2 + 3$$

$$C = 0/5 \times Ln((1+r)/1-r).$$

The calculation of sample size is given in Eq. (1).

The research tools included the demographic data questionnaire, Allen & Mayer organizational commitment questionnaire, Cullen & Victor ethical climate questionnaire, and Peterson ethical behavior questionnaire.

2.1. Organizational commitment questionnaire

In this study, the Allen and Meyer organizational commitment questionnaire was used. The questionnaire has 3 domains including affective commitment, continuous commitment, and normative commitment, each of which is assessed with 8 questions. The questionnaire has a 5-point Likert scale. In this questionnaire, the expressions 4-5-6-8-9-12-18-19-21-24 were scored in reverse order.

2.2. Ethical climate questionnaire

The Cullen & Victor (1988) ethical climate questionnaire has been designed based on Kohlberg's theory (1981) on three ethical dimensions including egoism (maximizing self-interest), benevolence (maximizing individual interests as much as possible) and principles (adherence to global principles and beliefs in dimensions of theoretical ethical climate) are created which include individual egoism (individual benefit), global egoism (productivity), individualistic principles (personal ethics), regional egoism (organizational benefit), individual benevolence (friendship), regional ethical principles (organizational rules and standards), regional benevolence (group interests), global ethical principles (professional rules and codes) as well as global benevolence (social responsibility and subordinates' interests). The dimensions of the questionnaire were determined through confirmatory factor analysis. The findings showed that the assumption of the nine dimensions created by this model fits the data better than the previously used five-part model.^{14,15}

Each of the nine dimensions was assessed through 4 questions. The questionnaire scale is based on a 5-point Likert scale. The overall score and each dimension of the questionnaire are calculated by summing the scores.

2.3. Ethical behavior questionnaire

The results of the research on the Peterson ethical behavior questionnaire show that most ethical climate dimensions act as a predictive factor for the non-observance of ethical behavior, so the aspects of this questionnaire can greatly predict certain types of immoral behaviors. The questionnaire merges nine items to form interrelated ethical behaviors. It has a 5-point Likert scale and the total score is calculated by summing the scores.

The organizational commitment questionnaire has been used in nursing research, and its validity has been proved. Internal reliability in Nabizadeh Gharghozar et al.²⁰ and Neves et al.²¹ research was 87% and 82%, respectively.

The validity of the ethical climate questionnaire underwent content validity and reliability tests through Cronbach's alpha coefficient (89%) in the study of Heidari et al.,²² Mohammad Najafi's study (1389), and Cronbach's alpha reliability coefficient (76/0).²³

The ethical behavior questionnaire in Peterson's¹⁴ study showed that the reliability is appropriate enough by being 0.82, and in Heidari et al.'s²² research was 89% through Cronbach's alpha coefficient. The validity of the questionnaire was obtained in the form of content validity, and the reliability has been set to 76% in the Najafi study (2010)¹⁶ and 89% in the DeVellis²⁴ study.

The data analysis was performed using AMOS V.23 and SPSS V.23 software. The significance level of the *p* value was assumed to be <0.05. We used model fitness indices to evaluate the suitability of the model. The indices used included χ^2 , χ^2/df , GFI, AGFI, RMSEA, CFI, and NNFI.

2.4. Ethical considerations

The current scheme was approved by the ethical code and the specific ID of IR.UMSHA.REC.1396.601 at the Research Council of Hamadan University of Medical Sciences. Moreover, the confidentiality of the subjects' information, their willing participation in the research by giving written consent, the explanation of the research goals to the subjects, and honesty in collecting and analyzing the data were among the ethical considerations taken into account during the research.

Pearson correlation (<i>r</i>)		Organizational commitment			
		Affective commitment	Continuous commitment	Normative commitment	Total
Ethical climate	Individual egoism	0.307***	0.063	0.230***	0.240***
	Global egoism	-0.029	0.054	-0.173	-0.054
	Individual ethical principles	0.319***	0.073	0.222***	0.247***
	Regional egoism	0.162**	0.052	0.185**	0.164**
	Individual benevolence	0.227***	0.132*	0.130*	0.208***
	Regional ethical principles	0.327***	0.019	0.177**	0.201**
	Regional benevolence	0.187**	0.004	0.143*	0.129*
	Global ethical principles	0.279***	-0.004	0.174**	0.170**
	Global benevolence	0.327***	0.166**	0.177**	0.281***
Total	0.372***	0.098	0.222***	0.279***	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 1. Relationship between ethical climate perception and nurses' organizational commitment.

Pearson correlation (<i>r</i>)		Organizational commitment			
		Affective commitment	Continuous commitment	Normative commitment	Total
Ethical behavior		-0.008	0.065	0.008	0.036

Table 2. Relationship between nurses' organizational commitment and their ethical behaviors.

3. Results

The mean age of the participating nurses was 32.13 and the standard deviation was 6.192. About 98.3% of the nurses were females, among which 86.5% of the nurses were married and the rest were single. The educational level of the nurses (94.3%) was B.S. Most nurses' shifts (61.8%) were rotational and night shifts were in the least frequency (5.4%). About 91.8% of the study units (nurses) did not have any membership in the Ethics Committee.

The highest average of the organizational commitment dimension belonged to a continuous commitment with 25.09 ± 7.16 , and the lowest average was for affective commitment with 15 ± 4.68 . The highest average of the perception of ethical climate was related to regional benevolence with 16.6 ± 3.4 , with the lowest average belonging to global benevolence with the amount of 2 ± 0.061 . Furthermore, the mean and standard deviation of the ethical behavior was 19.89 ± 4.79 . The findings indicate that the highest correlation coefficient belongs to the two variables of total ethical climate and affective commitment ($r = 0.37$, $p < 0.001$).

Organizational commitment had a significant relationship with the dimensions of the ethical climate of global egoism ($r = 0.24$, $p < 0.001$), individual ethical principles ($r = 0.16$, $p = 0.006$), regional egoism ($r = 0.25$, $p < 0.001$), individual benevolence ($r = 0.21$, $p = 0.001$), regional ethical principles ($r = 0.13$, $p = 0.031$), regional benevolence ($r = 0.20$, $p = 0.001$), global ethical

Variables	<i>r</i>
Individual egoism	0.039
Global egoism	-0.038
Individual ethical principles	0.061
Regional egoism	0.079
Individual benevolence	0.227***
Regional ethical principles	0.033
Regional benevolence	0.096
Global ethical principles	0.062
Global benevolence	0.067
Total	0.085

Note: *** $p < 0.001$.

Table 3. Relationship between nurses' ethical climate and behaviors.

principles ($r = 0.17$, $p = 0.004$), global benevolence ($r = 0.28$, $p < 0.001$), and total ethical climate ($r = 0.28$, $p < 0.001$; Table 1).

The findings revealed that, by the Peterson correlation, there is not a significant relationship between organizational commitment and its dimensions with ethical behavior (Table 2).

Moreover, according to the results, the maximum correlation coefficient belongs to two variables of ethical climate perception, i.e., individual benevolence and ethical behavior ($r = 0.23$, $p < 0.001$; Table 3).

The results show that the organizational commitment variable does not play a mediating role in this model

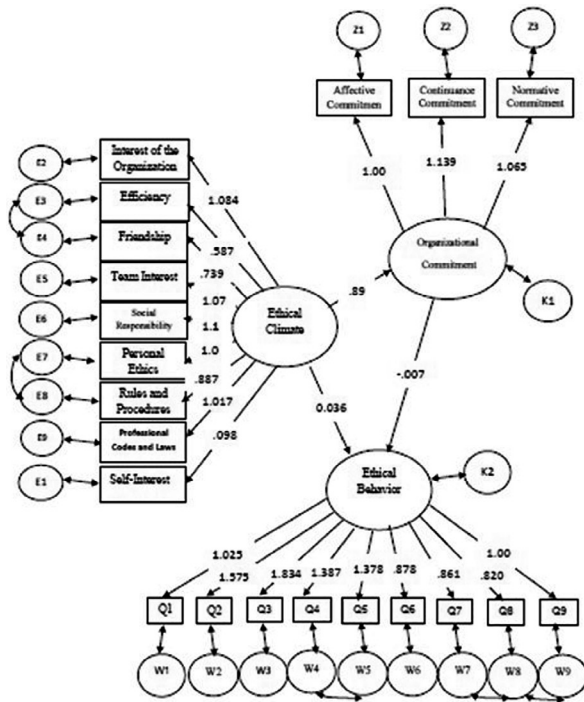


Figure 2. Path diagram that shows the factor loads of the observed variables after modifications in the latent variables (ethical climate, organizational commitment, and ethical behavior).

(Figure 2). The perceptions of ethical climate influence organizational commitment (beta = 3.261). The perception of ethical climate influences ethical behavior (beta = 0.121). Furthermore, organizational commitment does not show a significant effect on behavior (Table 4).

4. Discussion

The nurses' perceptions of the ethical climate of treatment-educational centers were more related to individual egoism (self-interest), productivity, and individual basic ethics (individual behavior), and were less based on global benevolence (social responsibility and subordinate interests), regional benevolence (group interests), regional egoism (organizational profit), and regional ethical principles (organizational rules and standards). In terms of the analysis status, it was more individualistic, regional, and global, suggesting the impact of capitalist system dominance on people's perception of ethical climate and individual benefit, and the avoidance of the ethical climate of global ethics (rules and codes of practice) and global benevolence (social responsibility and the interests of subordinates) in the nursing community, which distances themselves of the purpose of humans' creation and nursing human mission. In the study of Heidari et al.²², the highest perception of ethical climate by nurses was personal ethics and then group interests

Model	beta
Coefficients	
Ethical climate → Organizational commitment	3.261*
Ethical climate → Ethical behavior	0.121**
Indices	
RMSEA	0.052
CFI	0.908
GFI	0.903
AGFI	0.876
NNFI	0.893
Chi-square—X ² (df)	317.811 (181)
X ² /df	1.756

Note: *p < 0.05; **p < 0.01.

Table 4. Model indices after applying modifications.

(regional benevolence) and, in terms of analysis status, was more individualistic than regional and global.

There is a relationship between the two variables of total ethical climate and affective commitment and total ethical climate and normative commitment. Organizational commitment has a relationship with the ethical climates of global egoism, individual ethical principles, regional egoism, individual benevolence, regional ethical principles, regional benevolence, global ethics, global benevolence, and total ethical climate.

Teresi et al.²³ showed that there is a significant relationship between ethical climate and affective commitment. Teymoori et al.²⁵ report a direct and significant relationship between the ethical climate and organizational commitment. The results of Cullen et al.¹⁵ and Jalali et al.'s²⁶ research, revealed that ethical climate and organizational commitment are directly and strongly correlated. Hassanian and Shayan²⁷ found that there was a significant and negative relationship between the nurses' ethical behavior and perceptions of some ethical climate. In another research, it was concluded that there is a correlation between nurses' perceptions of hospital ethical climate and behavior.¹⁸

Responsible nursing activities also require reflective and critical thinking, complex problem-solving ability, ethical decision-making, and better application of laws.²⁸ The ethical principles are related to benevolence, prestige, respect, independence, social justice, and vocational performance.²⁹ Ethical principles determine nurses' clinical decision-making processes, the management of practical activities, professional interactions, and research.²⁸ Nurses with higher affective and normative commitment have greater skills in handling conflicts with their supervisors, subordinates, or colleagues.⁹

Total, normative, affective, and continuous organizational commitment was not related to ethical behavior.

While the results of Grego-Planer's³⁰ research confirmed that there was a positive relationship between the organizational commitment and the behaviors of employees. Sumardjo and Supriadi's³¹ research confirms that result. Evidence from Pagliaro et al.'s³² study showed the effects of ethical climate(s) on employees' behavior. Ethics influences organizational outcomes, and these effects are largely mediated through the mechanisms of ethics modification and organizational continuity.

On the relationship between perceptions of ethical climate, organizational commitment, and nurses' ethical behaviors, since the ethical climate is predictive of ethical behavior, organizations' managers should prepare the grounds for the development of ethical behaviors. In other words, they should provide an ethical climate at the workplace based on the observance of global basic ethics (vocational laws and codes) and refrain from an egoist ethical climate, which is based on individual and group interests, to decrease unethical behaviors at the workplace. There is a stronger relationship between ethical climate dimensions and its total score.¹⁴ In this regard, ethical climate dimensions specifically predict ethical behavior. Abou Hashish³³ found out that there was a relationship between nurses' perceptions of overall ethics, organizational commitment, and job satisfaction. Ashfaq et al.'s³⁴ research showed that organizational commitment mediated the relationship between ethical climate and ethical behavior. Another study showed that the effect of ethical climate on the ethical behavior of employees is driven by organizational commitment.³²

Dinc and Huric³⁵ showed that medical centers can influence job satisfaction and organizational commitment through the development of a caring and legal ethics climate.

Other researchers have also shown that the benevolent, legal, basic, and independent climate has a positive relationship with commitment and the instrumental climate has a negative relationship with commitment.^{36,37} Managers should strive to enhance the levels of both affective and normative commitment in their organizations and the ethical leadership of managers plays a significant role in developing employees and ethical organizational cultures.³⁸

In this study, in order to evaluate the suitability of the model, model fitness indices were used. The maximum likelihood method has been used for estimations. Here, factor load values >0.4 imply the acceptability of the conceptual model. In general, the model fitness results were obtained as follows:

$$X^2 = 317.811; \chi^2/df = 1.756, p < 0.001$$

(GFI = 0.903; AGFI = 0.876; RMSEA = 0.052; CFI = 0.908; and NNFI = 0.893).

Based on the results, the conceptual model is validated on the basis of X^2/df , GFI, AGFI, RMSEA, and CFI indices. The NNFI index is also close to the reference value of 0.90, confirming the conceptual model.

The organizational commitment variable does not play a mediating role in the model. In other words, increasing the score of ethical climate perception increases the score of organizational commitment, but this does not significantly affect ethical behavior. Although ethical climate influences organizational commitment (beta = 3.261) and ethical climate affects behavior (beta = 0.121), organizational commitment does not significantly affect behavior.

One of the innovations in this article was to investigate and analyze the effect of organizational commitment on the ethical climate and moral behavior of nurses. This topic is new and innovative because it directly addresses the psychological and organizational complexities that affect nurses' ethical behavior. Innovation in this article can be seen in several ways: (a) Examining the effect of organizational commitment: This article examines the effect of organizational commitment on the moral behavior of nurses, which is an innovative topic that has not been studied so far. (b) A word to better understand the relationship between ethical climate, organizational commitment, and ethical behavior of nurses is an innovative approach in ethical and organizational research. (c) Providing practical recommendations: This article not only deals with theoretical analysis, but also practical recommendations to improve ethical climate and ethical behavior. It presents in health organizations that can help progress and innovation in this field. Therefore, innovation in this article is not only observed at the level of the topic and research approach, but also at the level of providing practical recommendations and using advanced data analysis techniques. These innovations can help improve the quality of medical and health care and increase patient satisfaction. It is suggested that other variables affecting the ethical behavior and organizational commitment of the treatment staff should be conducted with a larger sample size in future studies.

5. Conclusions

There was a significant relationship between ethical climate and nurses' ethical behaviors in the individual benevolent dimension. The finding declared that the organizational commitment does not play a mediating role in this model. Ethical climate influences organizational commitment and ethical behavior, but organizational commitment does not affect behavior. It appears that the presence of an ethical climate promotes organizational commitment in nursing departments. Nursing

managers could offer ground for improving nurses' ethical behavior. It is recommended that managers and nursing planners, in order to improve the ethical behavior and organizational commitment of nurses through their policy-making, adjust the ethical climate toward the global basic ethics and benevolent ethics and incorporate the organizational commitment of value constructs into organizational concepts.

Acknowledgments

This paper is the result of an approved research at Hamadan University of Medical Sciences by the ethical code and the specific ID of IR.UMSHA.REC.1396.601, code 9609215912, and funded by the Vice-Chancellor

for Research. The authors wish to thank the Vice-Chancellor for Research of Hamadan University of Medical Sciences who supported this study and all participants and managers for their great help in conducting this research.

Ethical approval

This study was approved by the ethical code and the specific ID of IR.UMSHA.REC.1396.601 at the Research Council of Hamadan University of Medical Sciences.

Conflicts of interest

All contributing authors declare no conflicts of interest.

References

- Gassas R, Salem O. Nurses' professional values and organizational commitment. *J Taibah Univ Med Sci.* 2022;18:19–25.
- Preshaw DH, Brazil K, McLaughlin D, Frolic A. Ethical issues experienced by healthcare workers in nursing homes: literature review. *Nurs Ethics.* 2016;23:490–506.
- Duarte SDCM, Stipp MAC, Cardoso MMVN, Büscher A. Patient safety: understanding human error in intensive nursing care. *Rev Esc Enferm USP.* 2018;52:e03406.
- Fu W, He F, Zhang N. Antecedents of organizational commitment of insurance agents: job satisfaction, ethical behavior, and ethical climate. *J Glob Bus Insights.* 2020;5:134–149.
- Nelson WA, Taylor E, Walsh T. Building an ethical organizational culture. *Health Care Manag (Frederick).* 2020;39:168–174.
- Borges R, Bernardi M, Petrin R. Cross-country findings on tacit knowledge sharing: evidence from the Brazilian and Indonesian IT workers. *J Knowl Manag.* 2019;23:742–762.
- Meyer JP, Allen NJ, Smith CA. Commitment to organizations and occupations: extension and test of a three-component conceptualization. *J Appl Psychol.* 1993;78:538–551.
- Rodríguez-Fernández M, Herrera J, de Las Heras-Rosas C. Model of organizational commitment applied to health management systems. *Int J Environ Res Public Health.* 2021;18:4496.
- Galletta M, Portoghese I, Melis P, et al. The role of collective affective commitment in the relationship between work-family conflict and emotional exhaustion among nurses: a multilevel modeling approach. *BMC Nurs.* 2019;18:5.
- Bratt MM, Felzer HM. Predictors of new graduate nurses' organizational commitment during a nurse residency program. *J Nurses Staff Dev.* 2012;28:108–119.
- Rahwana KA, Yuniar ES. Job Satisfaction as a driver of organizational commitment. *JAME.* 2023;25:8–12.
- Arslan Yürümezoğlu H, Kocaman G, Mert Haydarlı S. Predicting nurses' organizational and professional turnover intentions. *Jpn J Nurs Sci.* 2019;16:274–285.
- Miedaner F, Kuntz L, Enke C, Roth B, Nitzsche A. Exploring the differential impact of individual and organizational factors on organizational commitment of physicians and nurses. *BMC Health Serv Res.* 2018;18:180.
- Peterson DK. The relationship between unethical behavior and the dimensions of the ethical climate questionnaire. *J Bus Ethics.* 2002;41:313–326.
- Cullen JB, Victor B, Bronson JW. The ethical climate questionnaire: an assessment of its development and validity. *Psychol Rep.* 1993;73:667–674.
- Barattucci M, Teresi M, Pietroni D, Iacobucci S, Lo Presti A, Pagliaro S. Ethical climate(s), distributed leadership, and work outcomes: the mediating role of organizational identification. *Front Psychol.* 2021;11:564112.
- Abadiga M, Nemera G, Hailu E, Mosisa G. Relationship between nurses' perception of ethical climates and job satisfaction in Jimma University Specialized Hospital, Oromia region, south west Ethiopia. *BMC Nurs.* 2019;18:39.
- Wang L, Li D, Wei W, Zhang T, Tang W, Lu Q. The impact of clinical nurses' perception of hospital ethical climates on their organizational citizenship

- behavior: a cross-sectional questionnaire survey. *Medicine (Baltimore)*. 2022;101:e28684.
19. Ali NM, Fatemeh H. Structural equation modeling of the relationship between the intention to quit and ethical climate, job satisfaction, and organizational commitment among the staff of Shiraz private hospitals. *Health Inf Manage*. 2011;8:698–708.
 20. Gharghozar ZN, –Shoorideh FA, Khazaei N, Alavi-Majd H. Assessing organizational commitment in clinical nurses. *Quart J Nurs Manage*. 2013;2:41–48.
 21. Neves T, Graveto J, Rodrigues V, Marôco J, Parreira P. Organizational commitment, psychometric qualities and invariance of the Meyer and Allen Questionnaire for Portuguese Nurses1. *Rev Lat Am Enfermagem*. 2018;26:e3021 (in English, Portuguese, Spanish).
 22. Heidari A, Hassanian ZM, Mazloum H. Study of Relationship Between Nurses' Perceptions of Ethical Climate and the Ethical Behavior of Nurses in Hospitals of Mashhad University of Medical Sciences. Research projects. Iran, Mashhad: Mashhad Nursing and Midwifery Faculty; 2013.
 23. Teresi M, Pietroni DD, Barattucci M, Giannella VA, Pagliaro S. Ethical climate(s), organizational identification, and employees' behavior. *Front Psychol*. 2019;10:1356.
 24. DeVellis RF. *Scale Development: Theory and Applications*. Los Angeles: SAGE Publications; 1991.
 25. Teymoori E, Rahmani V, Fereidouni A, Khachian A, Hannani S. Ethical climate of the operating room from the perspective of the surgical team and its relationship with organizational culture and organizational commitment. *Perioper Care Oper Room Manag*. 2022;26:100238.
 26. Jalali T, Borhani F, Esmailpur H, Aliesmaeli M, Aminizade M. Relationship between ethical climate and organizational commitment of medical emergency technicians in Kerman University of Medical Sciences. *Iranian J Med Ethics Hist Med*. 2017;10:91–102.
 27. Hassanian ZM, Shayan A. The mediating effect of ethical climate on religious orientation and ethical behavior. *Nurs Ethics*. 2019;26:1114–1127.
 28. Moran KJ, Burson R, Conrad D. *The Doctor of Nursing Practice Project: A Framework for Success*. Burlington, MA: Jones & Bartlett Learning; 2023.
 29. McDermott-Levy R, Leffers J, Mayaka J. Ethical principles and guidelines of global health nursing practice. *Nurs Outlook*. 2018;66:473–481.
 30. Grego-Planer D. The relationship between organizational commitment and organizational citizenship behaviors in the public and private sectors. *Sustainability*. 2019;11:6395.
 31. Sumardjo M, Supriadi YN. Perceived organizational commitment mediates the effect of perceived organizational support and organizational culture on organizational citizenship behavior. *Qual Access Success*. 2023;24:376–384.
 32. Pagliaro S, Lo Presti A, Barattucci M, Giannella VA, Barreto M. On the effects of ethical climate(s) on employees' behavior: a social identity approach. *Front Psychol*. 2018;9:960.
 33. Abou Hashish EA. Relationship between ethical work climate and nurses' perception of organizational support, commitment, job satisfaction and turnover intent. *Nurs Ethics*. 2017;24:151–166.
 34. Ashfaq F, Abid G, Ilyas S. Impact of ethical leadership on employee engagement: role of self-efficacy and organizational commitment. *Eur J Investig Health Psychol Educ*. 2021;11:962–974.
 35. Dinc MS, Huric A. The impact of ethical climate types on nurses' behaviors in Bosnia and Herzegovina. *Nurs Ethics*. 2017;24:922–935.
 36. Kaur J. Exploring relationships among ethical climate types and organizational commitment: a case of Indian banking sector. *J Indian Bus Res*. 2017;9:20–40.
 37. Martin KD, Cullen JB. Continuities and extensions of ethical climate theory: a meta-analytic review. *J Bus Ethics*. 2006;69:175–194.
 38. Abuzaid AN. The relationship between ethical leadership and organizational commitment in banking sector of Jordan. *J Econ Adm Sci*. 2018;34:187–203.