
Effect of Ethical Work Climate Training Program on Nurse's Perception of Green Behavior and Organizational Identification

Eman Mohamed Ahamed Elshazly¹, Om Hashem Gomaa Ragab² & Nadia Mohamed Ali Saleh³

¹. Assistant Professor of Nursing Administration, Faculty of Nursing, South Valley University, Qena, Egypt.

². Assistant Professor of Nursing Administration, Faculty of Nursing, Sohag University, Egypt.

³. Assistant Professor of Nursing Administration, Faculty of Nursing, Sohag University, Egypt.

Abstract:

Background: Organizational life is an essential aspect of the ethical climate that directly affects individual and organizational identification results and green behaviors. An ethical climate is the factor which modifying intra-organizational relationships and affecting employees' attitudes, consequently it has a great impact on organizational outcomes. **Aim:** This study aims to assess the effect of ethical work climate training program on nurse's perception of green behaviour and organizational identification. **Subjects and methods:** The study followed a quasi-experimental research design. It included all available nurses' working at medical and surgical departments. Three tools were used to collect the data. The 1st tool is hospital ethical climate scale; the 2nd is employee green behavior scale; and the 3rd is organizational identification scale. **Results:** There is marked increases in the means of ethical work climate, green behavior, and organizational identification from average too high for pre, post and follow up results respectively. **Conclusion:** There is high statistically significant positive coefficient relationship of ethical work climate in relation to green behavior and organizational identification weighed by pre, post and follow up results. There is no significance between ethical work climate and background characteristics. **Recommendations** It is recommended that, health care organizations to develop ethical principles for nursing department, providing it in training program and conducting periodic assessment of knowledge and practices of ethical work climate, green behavior, and organizational identification.

Keywords: *Ethical Work Climate, Green Behavior, Organizational Identification, Training Program & Nurses*

Introduction

Nurses provide holistic care to people in all age groups and ethnic backgrounds, attending to their physical, emotional, psychological, intellectual, social, and spiritual needs (Mohamed et al., 2022). Nurses who are the leading force in operating health care services are directly affected by the ethical climate patterns adopted by hospitals. Ethical climate involves the characteristics that immensely influence decisions and experienced in organizations and this climate requires generating a common approach that seeks answers to the questions which arise when dealing with ethical problems and to accurate approaches that need to be used in terms of ethics. Ethical climate is a concept related to the degree of implementing ethical norms. Building an ethical work climate will result in a high nurse's moral and improve health care (Cerit & Özveren, 2019; Khanam et al., 2023).

The ethical climate provides guidance that helps employees understand acceptable and unacceptable behaviors (Nassani et al., 2023). The ethical climate of an organization can influence nursing practices and patient outcomes in addition to serving as a guide for personnel to solve ethical dilemmas (Pauly et al., 2019, Saygili et al., 2020). Nurses who

believe in the ethical climate display ethical behaviors when providing patient care. General behaviors, values, beliefs, relationships, criteria, and behaviors within the organization derive from its ethical climate. Employees generally believe that the ethical climate of the organization matches the ideal moral values and behaviors (Borhani et al., 2021). If the ethical climate is high, the employee empowerment will be high that improves organizational performance, leads to employees' green behavior (Danish et al., 2021). Managers should motivate employee green behavior through the selection and allocation of human resources (Mi et al., 2020).

Nurses green behavior refers to "a series of behaviors implemented by employees that aim to reduce the negative effect on the environment and contribute to environmental sustainability (Unsworth et al., 2021)." Scalable actions and behaviors that nurses engage in that are linked with and contribute to or detract from environmental sustainability" is what is meant to be understood about nurses green behavior. It could be categorized as unproductive work behavior, task performance, or organizational citizenship conduct. Green behavior among nurses can take several forms, such as water conservation, waste avoidance, recycling, and energy conservation.

One of the most important contextual elements influencing workers' attitudes and behaviors is the culture of the organization. Employee behaviors such as job satisfaction, job performance, organizational citizenship behavior, affective commitment, effort, satisfaction with the supervisor, and team identification are all positively impacted by an ethical work environment (Saleem et al., 2020).

Nurses green behavior has two types: voluntary green behavior and task green behavior. Voluntary nurse green behavior involves personal initiative and exceeds organizational expectations. Task green behavior is a part of job description. Organizational identification is a form of social identification where an individual develops an emotional bond or feeling of belongingness to an organization (Chaudhary, 2020). Nurse empowerment may result in a more ethical climate culture, which encourages more nurses' green behavior. Green behavior by nurses is an ethical reflection of their feeling of duty (Li et al., 2020; 2021).

Organizations cannot achieve environmental sustainability goals without the presence of nurses at different hierarchical levels who implement employee's green behavior, which is the essence of the sustainability of the organizational environment. Organizations are responsible to corporate social responsibility for their employees and customers such as well-being and safety in addition to economic activities. Managers who want to go green for ethical practices should comply with governmental regulations. Lack of supervisory support and role models is as key barriers to employee green behavior. Organizational identification is a mediating factor to employees' perceptions of their organization's corporate social responsibility and employee green behavior (Zacher et al., 2023).

Nurse attitudes and behavioral patterns in ethical climate are motivated by a sense of belonging to the organization. Employees' positive and negative behavioral responses are influenced by their amount of organizational identification, which is correlated with ethical climates. Nurse perceptions of the regulations, policies, and processes that an organization upholds, encourages, and rewards in terms of ethics are collectively referred to as the ethical work climate. In order to create an ethical work climate, nurses' job attitudes have a significant impact on organizational identity and behavior, which in turn determines the level of competitive advantage (Acar et al., 2018; Pagliaro et al., 2018; Barattucci et al., 2021).

Organizational identification is a psychological association with an organization that results in positive behavior directed toward its nurses who belong to social groupings that influence their self-

perception. These processes can also encourage group behaviors (Park & Back, 2020). The relationship between an employee and the organization can be explained and predicted in large part by organizational identification. In order to foster organizational identity, managers should establish objectives and develop plans of action that adhere to efficiency, friendship, team spirit, social responsibility, company policies and procedures, legal requirements, and professional codes (Acar et al., 2018). Ethical climate provide a collective and interdependent way to act within the organization that enhances organizational identification for nurses (Teresi et al., 2019).

Aim of the study

This study aims to assess the effect of ethical work climate training program on nurse's perception of green behaviour and organizational identification.

Significance of the study

The organizational ethical climate is an important organizational climate dimension, which refers to the internal members of the organization for what are ethical behaviour, common experience and understanding of how to resolve ethical dilemmas or problems (Teresi et al., 2019). Providing training and promotion to improve nurse managers' ethical leadership in the form of workshops and periodic counseling is effective. This should also be considered in the nursing education program (Aloustani et al., 2020). Ethical climate defines what correct behavior is and how ethical issues should be handled within organizations. For this reason which encourages the researchers to implement the program to increase participants' knowledge about ethical work climate which in turn influences nurses green behavioural and organizational identification.

Research hypotheses

- H1:** Ethical work climate training program positively affects nurses' green behavior.
- H2:** Ethical work climate training program positively affects nurses' organizational identification.
- H3:** There is a positive relation between ethical work climate, nurses' green behavior and organizational identification.

Subjects and Methods

Research design

A quasi-experimental research design was utilized to meet the aim of this study.

Setting:

The study conducted at South Valley University Hospital in all medical surgical departments.

Sample:

Convenient sample composed of all available nurses working in previously mentioned sites and were

willing to participate in the study total number 49 (29 working in medical and 20 working in surgical department).

Tools of data collection:

Three tools were used for data collection:

First tool: Hospital Ethical Climate Scale, consists of two parts:

Part (I): Personal characteristics of nurses namely: gender, age, educational level, years of experience, marital status, and received an ethical work climate training in the past.

Part (II): Hospital Ethical Climate Scale HECS adopted from **Borhani, (2021)** that was developed by **Olson, (1995)** based on the **Victor and Cullen, (1987 & 1988)** scale was used to measure nurses' perceptions of ethical climate in their hospital settings. The scale includes 26 items in 5 effective dimensions in creating the atmosphere of the hospital. Its dimensions are: patients' dimension (4 items) colleagues' dimension (4 items), nursing managers' dimension (6 items) Physician (6 items) and dimension of organization/hospital (6 items). Questions scored on a Likert scale (1 = almost never and 5 = almost always).

Second tool: This tool is an Employee Green Behavior Scale adopted from **Zhang et al., (2021)** the scale is from 1 (strongly disagree) to 5 (strongly agree). The scale contains four sub-dimensions Green learning (three items), Individual practice (four items), Influencing others (three items), Organizational voices (three items).

Third tool: Organizational identification Scale adopted from **Mael and Ashforth, (1992)** it is a six-item scale, the scale is from 1 (strongly disagree) to 5 (strongly agree).

• Scoring system for the three tools

1. Low = > 60%
2. Average = 60% ≤ 80%
3. High = < 80%

Method:

This study was carried out in the following phases:

Assessment and planning phase: This phase, which began in May 2022, involved reviewing the literature that was available and other studies that were relevant to the research challenge, as well as theoretical understanding of the study's multiple aspects.

Ethical considerations: Informed consent was obtained from nurses who are willing to participate in the study after explanation of the nature and purpose of the study. They informed that they can withdraw from the study at any time without any restrictions. Confidentiality and anonymity of the study population was assured. Approval has been obtained from Scientific Research Ethics Committee, Faculty of Nursing, and South Valley University on 6th May

2023 acceptance number (SVU-NUR-MED SUR-6-5-6-2023).

Implementation phase: This phase started at July 2023 throughout four months. The process of data collection of the implementation phase was achieved through:

- **Validity** in this study face validity was tested on July 2023 through jury of 3 experts (assistant professors) in the field of nursing administration two from Faculty of Nursing, South Valley University and one from Faculty of Nursing, Sohag University.
- **Reliability** of proposed tools was done using Cronbach's alpha test. A pilot study was carried out on (20% of study sample) 10 nurses. The pilot study was done to ensure clarity, applicability, feasibility of conduction of the study tools, and time needed for each tool to be filled in (five minutes for each tool). According to the findings of the pilot study there were no modifications so the pilot study sample was included in the total study sample results. Cronbach's alpha result was 0.825 for hospital ethical climate scale; 0.724 for employee green behavior scale; and 0.888 for organizational identification scale.
- **Training program implementation:** Started on August 2023 for small groups of nurses 8 groups of the total sample number 49 nurses (each group 5-7 nurses at time), three sessions provided for each group. Each group meet once per week. Total number of hours for the training program for each group of nurses was (15 hours).
- The training program done in Hall "A" in Clinics building at University hospitals, south Valley University, Kilometre 6, Qena. The session's classification was as following:
 - **First session:** This session started by identification of nurses with the researchers and names, affiliations of the research team, clarifying the aim of the study, assuring the anonymity of collected data, and data will be used only for research purposes. The schedule of the upcoming sessions to be done including. The material sent to them through WhatsApp. To facilitate continuity throughout the face to face sessions. Pre-test was done to assess ethical work climate, nurses' green behavior and organizational identification.
 - **Second session:** this session concerned with clarifying the content of the training program materials included: the concept of nursing ethics; the importance of work ethics; the development of the morals of the individual; establishing work ethics in the organization; means of consolidating professional ethics; and social responsibility.
 - **Third session:** this session continue to clarify the content of the training program materials by

clarifying: how does the organization shape ethical behavior; levels of work ethics; causes of moral breakdowns of institutions; ethics and quality; properties of ethical standards; ethical climate of nursing; and summary of the previously taught content. Closing and inform participants with the schedule of post and follow up tests for evaluation that will be done.

Evaluation phase:

Pre-test done on August 2023, as the this study intended to measure the attitude of nurses in response to the training program that difficult to be measure immediately post, so post-test was done after one month of the program. Follow up-test was done after three months of pre-test using the study tools to fulfil the study aim.

Administrative design:

Official permissions were issued from the designated authorities namely: Dean of Faculty of Nursing, South Valley University, Manager of South Valley University Hospital, and Nursing Administration Department Council, Faculty of Nursing, Sohag University.

Statistical analysis

The collected data entry had done using Statistical Package for Social Sciences SPSS version 26.0 from International Business Machines Corporation IBM for windows. Data was verified for any errors. Data was statistically analysed using: Frequencies, percentages, means and standard deviation (Mean \pm St. D.), One-Way ANOVA, and coefficients regression analyses. P-values were considered statistically not significant at > 0.05 , significant at < 0.05 , and highly significant at < 0.01 .

Results

Table (1): Distribution of nurses according to their personal characteristics (n=49)

| Personal characteristics | No. | % |
|--|-------------------|-------------|
| Gender(Sex) | | |
| Male | 27 | 55.1 |
| Female | 22 | 44.9 |
| Age | | |
| Less than \leq | 35 | 71.4 |
| $25 \geq$ | 14 | 28.6 |
| Mean \pm St. D. | 24.06 \pm 1.587 | |
| Educational level | | |
| Technical Institute of Nursing | 10 | 20.4 |
| Bachelor degree in Nursing Science | 33 | 67.3 |
| Post graduate studies | 6 | 12.2 |
| Years of Experience | | |
| Less than 5 | 42 | 85.7 |
| 5 - > 10 | 7 | 14.3 |
| Marital status | | |
| Single | 39 | 79.6 |
| Married | 9 | 18.4 |
| Widow | 1 | 2.0 |
| Received an ethical work climate training in the past | | |
| No | 38 | 77.6 |
| Yes | 11 | 22.4 |

Table (2): Mean and standard deviation in pre, post& follow up study for ethical work climate, green behavior and organizational identification (n=49)

| Dimensions | No. of Items | Pre | Post | Follow up | F test | P-value |
|--------------------------------------|--------------|--------------------|--------------------|---------------------|--------|---------|
| | | Mean ± Std. D. | Mean ± Std. D. | Mean ± Std. D. | | |
| Patient | 4 | 15.14±1.848 | 15.08±2.149 | 16.8±1.581 | 13.199 | 0.000** |
| Colleagues | 4 | 15.33±1.505 | 15.53±1.709 | 17.06±1.533 | 17.532 | 0.000** |
| Nursing managers | 6 | 18.82±5.065 | 20.84±3.918 | 24.65±3.011 | 25.796 | 0.000** |
| Physicians | 6 | 19.57±3.536 | 21.02±2.947 | 24.16±3.016 | 26.747 | 0.000** |
| Hospital | 6 | 19.29±2.923 | 20.73±2.849 | 24.80±2.692 | 50.171 | 0.000** |
| Total ethical work climate | 26 | 88.14±9.796 | 93.20±9.738 | 107.47±9.851 | 51.294 | 0.000** |
| Green Learning | 3 | 10.29±1.696 | 10.27±1.483 | 12.16±1.264 | 26.175 | 0.000** |
| Individual Practice | 4 | 14.18±2.870 | 14.71±2.466 | 16.29±1.814 | 9.974 | 0.000** |
| Influencing others | 3 | 12.49±1.980 | 11.90±1.735 | 13.04±1.428 | 5.352 | 0.006** |
| Organizational Voices | 3 | 10.33±2.145 | 10.39±1.902 | 12.45±1.608 | 19.861 | 0.000** |
| Total green behavior | 13 | 47.29±5.827 | 47.27±4.966 | 53.94±4.571 | 27.363 | 0.000** |
| Organizational identification | 6 | 22.59±4.276 | 24.31±3.324 | 26.41±2.457 | 15.182 | 0.000** |

**P < 0.01 highly significant

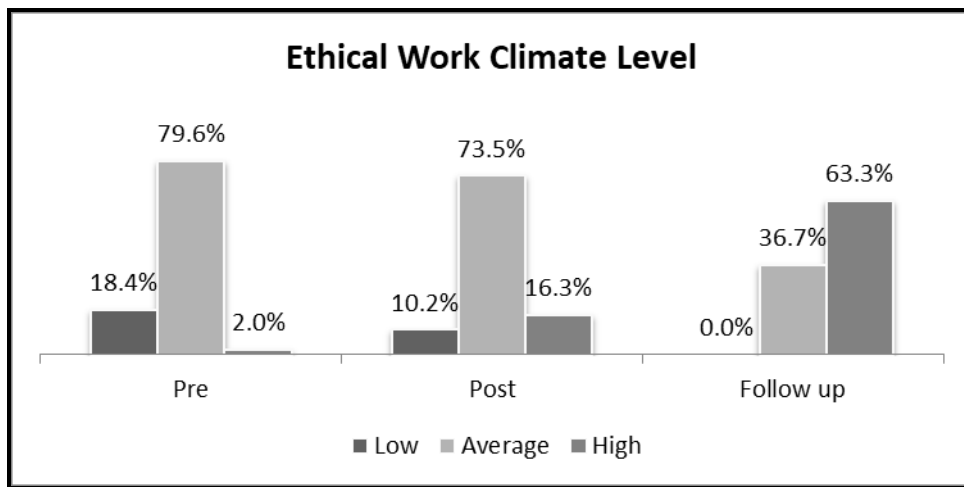


Figure (1): Distribution of nurses' ethical work climate levels at pre, post and follow up (n=49)

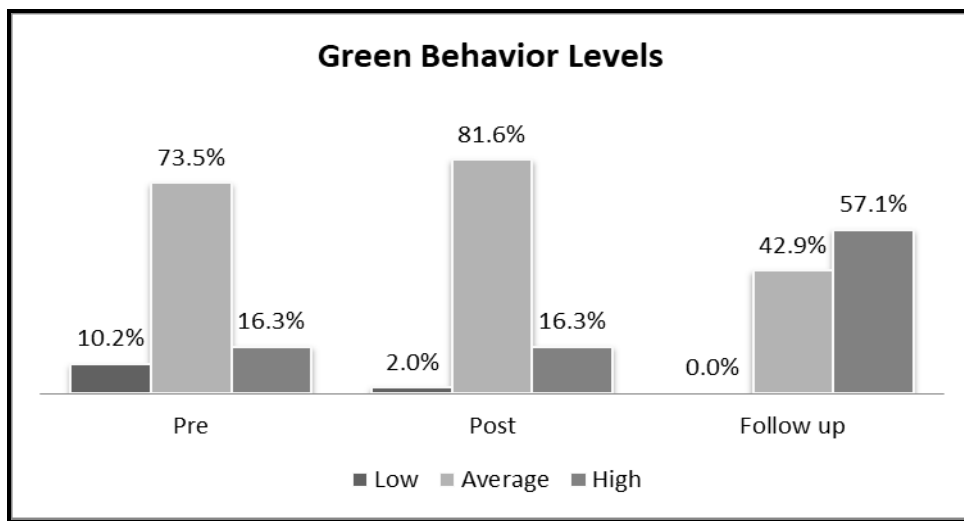


Figure (2): Distribution of nurses' related to green behavior levels at pre, post and follow up test results (n=49)

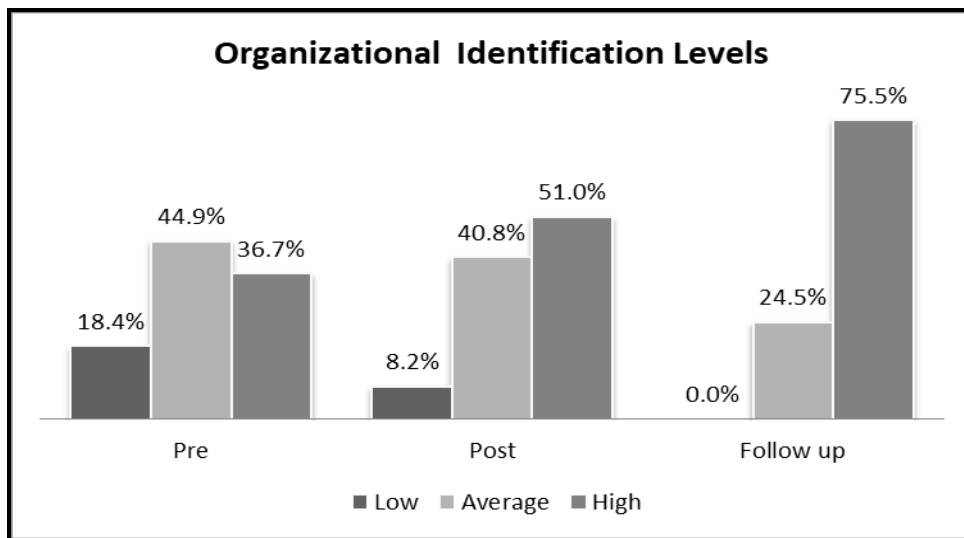


Figure (3): Distribution of nurses’ organizational identification levels at pre, post and follows up (n=49)

Table (3): Best fitting multiple linear regression models for ethical work climate to personal characteristics of nurses, green behavior, and organizational identification weighed by pre, post and follow up results.

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|-----------------------------|--------------|---------------------------|--------------|----------------|
| | B | Std. Error | Beta | | |
| (Constant) | -7.936 | 23.457 | | -0.338 | 0.736 |
| (Gender) Sex | -2.414 | 1.878 | -0.095 | -1.286 | 0.201 |
| Age | 1.039 | 0.893 | 0.129 | 1.164 | 0.246 |
| Education | 3.249 | 1.755 | 0.145 | 1.851 | 0.066 |
| Experience | -2.506 | 3.236 | -0.069 | -0.774 | 0.440 |
| Social status | 1.158 | 2.459 | 0.042 | 0.471 | 0.638 |
| Received an ethical work climate training in the past | -0.970 | 2.151 | -0.032 | -0.451 | 0.653 |
| Green behavior | 1.077 | 0.176 | 0.502 | 6.113 | 0.000** |
| Organizational identification | 0.959 | 0.302 | 0.258 | 3.177 | 0.002** |

*P < 0.05 significant, **P < 0.01 highly significant

Table (1): Shows that for personal characteristics the highest percentage of study sample are males 55.1%, have less than 25 years old 71.4% and the mean ± St. D. = 24.06 ± 1.587, single 79.6%, have bachelor degree in nursing science 67.3%, less than 5 years of Experience 85.7% and not received an ethical work climate training in the past 77.6%.

Table (2): Declares that the highest means pre study is 19.57±3.536 and 19.29±2.923 for physicians and hospital of work climate dimensions and 14.18±2.870 and 12.49±1.980 for individual practice and influencing others of green behavior dimensions respectively. The highest means post study is 20.84±3.918 and 21.02±2.947 for nursing managers and physicians of work climate dimensions and 14.71±2.466 and 11.90±1.735 for individual practice

and influencing others of green behavior dimensions respectively. The highest means in follow up study is 24.65±3.011 and 24.80±2.692 for nursing managers and hospital of work climate dimensions and 16.29±1.814 and 13.04±1.428 for individual practice and influencing others of green behavior dimensions respectively.

The means and standard deviations of total ethical work climate were 88.14 ± 9.796; 93.20 ± 9.738; and 107.47 ± 9.851, total green behavior were 47.29 ± 5.827; 47.27 ± 4.966; and 53.94 ± 4.571, and organizational identification were 22.59 ± 4.276; 24.31 ± 3.324; and 26.41 ± 2.457 for pre, post, and follow up test results respectively. There are highly statistical significant difference between pre, post and follow up study results P < 0.01.

Figure (1): Illustrates that, the highest percentages of ethical work climate level was average at pretest and posttest 79.6% and 73.5% respectively, and 63.3% was high at follow up test.

Figure (2): Illustrates that, the highest percentages of green behavior levels were average at pretest and posttest 73.5%, and 81.6% respectively and 57.1% was high at follow up test.

Figure (3): Illustrates that, the highest percentages of organizational identification levels were average at pretest 44.9% and high at posttest and at follow up test 51.0%, and 75.5% respectively.

Table (3): Shows that best fitting multiple regression analysis for ethical work climate in relation to green behavior and organizational identification in pre, post and follow up tests results there is highly significant $P < 0.01$. While there is no significant difference between ethical work climate and personal characteristics of nurses for pre, post and follow up results $P > 0.05$.

Discussion

The ethical climate is dynamic, many factors affect it. Factors affect ethical work climate include: higher level of management leadership styles and behaviors; organization values and other elements as its history, mission, and vision. Manager should create standards of conduct for an ethical climate in nursing practice (Ozdoba et al., 2022). It is required of nurses to be professionally competent in delivering high-quality care in an ethical manner; this represents the longevity and success of an organization that strives for excellence and survival (Klieb et al., 2023). Ethics affects people's behaviors. It directs the human and organizations life. The ethical climate formed by ethical principles contributes to structuring both the relationships between workers and between organizations departments (Altuntaş et al., 2021). The ethical climate of the hospital may have an impact on nurses' ethical behavior. Promoting ethical behavior requires the efforts of all those who have a say in the hospital's ethical climate, such as managers, policymakers, physicians, nurses, and other staff members (Borhani et al., 2021).

Managers' behavior influence organizational safety and environmental performance. The general ethical level of the organization is shaped by the moral behavior of managers and their ethical standards, which has an impact on the sustainability of organizational development. Green conduct among nurses is encouraged by ethical managers' active green advocacy (Li et al., 2021). An employee's likelihood of firmly supporting the organization and acting in ways that are advantageous and profitable for it increases with their level of organizational identification. Employees who firmly and favorably

identify with their organization are more driven in their line of work. Enhanced green behaviors and increased green innovation performance were the outcomes of a green organizational identity. The development of a green culture is aided by green identification within the organization (Chaudhary, 2020). So this study was conducted to assess the effect of ethical work climate training program on nurse's perception of green behavior and organizational identification.

Regarding the personal characteristics the current study showed that, the highest percentage of study sample was male, about two-thirds of them age less than 25 years old, single, and they have bachelor degree, in addition the majority of them less than 5 years of experience and had not received an ethical work climate training in the past. This result may be due to increase the number of males students' at the faculties of nursing, and there is an increase of baccalaureate degree nurses were employed in governmental hospitals. These current results is with Mohamed et al., (2022) showed that the majority of nurses were males, about two-thirds of them age ranged between 20 and 30 years old, more than half of them had 0 and 5 years of experience.

While the current study contradicts to some extent in personal characteristics with Cerit & Özveren, (2019) study found that the participating nurses were (78.8%) females, (48.5 %) between 27-35 years old, and (40.4%) had a bachelor's degree in nursing had 6-10 years of nursing experience, and 44 (44.4%) had 1-5 years of experience in their current wards. In addition Atia & Abdelwahid, (2023) presents that, less than half of nurses' age were between 30 to < 40 years (69.6%), the majority of them were (77.4%) female, (53.5 %) married, (66%) had less than 10 years of experience, and (54.8%) had bachelor of nursing. Moreover Aloustani et al., (2020) demonstrated that the mean age of the study participants was 32.26 ± 7.1 years with a work experience of 7.7 ± 6.9 years. In addition, 82.2% of the participants were female. Finally Nassani et al., (2023) Male (82.1%), Age 30-39 (47.1%), Experience from 5 -9 (25.2%).

The current study detected that, the highest means of work climate dimensions pre study is for physicians and hospital. While highest means post study is for nursing managers and physicians. The highest means in follow up is for nursing managers and hospital. The means and standard deviations of total ethical work climate were (88.14 ± 9.796 ; 93.20 ± 9.738 ; and 107.47 ± 9.851), for pre, post, and follow up test results respectively. This finding agreed with Atia & Abdelwahid, (2023) demonstrates study variables' mean scores; the highest mean scores of ethical work climate were for (17.39 ± 4.69) relationship with

hospitals and (17.23±5.16) physicians. The total mean score (77.33±22.19) of ethical work climate. In addition to **Aloustani et al., (2020)** demonstrated that the total mean score of ethical climate was 76.97 ±19.27.

Current results contradicts with **Cerit & Özveren, (2019)** found that the highest point in peers (15.46 ± 3.69) and patients (15.38 ± 3.70) and the lowest points in hospitals (15.78 ± 4.93). While agrees with the total ethical climate mean score was found to be 84.02 ± 19.80. Moreover it contradicts with **Wang et al., (2022)** states that the doctor dimension was the lowest (3.98±0.57), while relationship with the manager was the highest (4.53±0.46), with a total score (4.30±0.44).

The highest percentages of ethical work climate level were average at pretest and posttest, and it was high at follow up. These results are in agreement with a previous study conducted by **Atia & Abdelwahid, (2023)** demonstrates that 89.1% of nurses reported a positive perception of ethical work climate. Additionally it in the same line with **Borhani et al., (2021)** showed that nurses' perceptions of the ethical climate of hospitals were positive. While it contradicts with **Klieb et al., (2023)** found (68.4%) of nurses perceived negative ethical work climate, while (31.6%) of participants perceived a positive ethical work climate.

Finally, there was highly statistical significant difference between pre, post and follow up tests results for ethical work climate, green behavior and organizational identification. Furthermore there was highly positive significant correlation of ethical work climate in relation to green behavior and organizational identification as weighed by pre, post and follow up study results. This indicates the effectiveness of the training program of ethical work climate, on green behavior and organizational identification. So this supports the all proposed study hypothesis. These results are in agreement with a study conducted by **Baig et al., (2022)** findings show that organizational climate has a significant impact on employees' green behavior. Moreover **Teresi et al., (2019)** shows that an ethical climate of friendship predicted better employees' attitudes and behavioral intentions, and these were mediated by identification with, and commitment to, the organization.

In the same view of **Chen & Wu, (2022)** shown that green practices have the potential to improve employees' green mindfulness and, as a result, encourage their green behaviors. In addition to **Hasebrook et al., (2022)**, this study demonstrates how employees' green behavior is influenced by their relationships with leaders in the firm, coworkers, and influencers. Additionally, **Katz et al., (2022)** research demonstrated that employee green behavior was

positively influenced by pro-environmental attitudes, norms, perceived behavioral control, and intents. Continuously **Mi et al., (2020)** finds that values fit as an ethical principal of personnel to the organization has the greatest incentive effect on employee green behavior. In addition **Norton et al., (2017)** green behavioral intentions were positively related to environmental attitude and green psychological climate including ethics.

In the same context **Pinar et al., (2018)** revealed that ethical work climate dimensions have a positive impact on organizational identification. Furthermore according to **Pagliari et al. (2018)**, employees' perceptions of an ethical and friendly work environment were positively correlated with their sense of belonging to the organization, which in turn enhanced positive organizational outcomes and diminished negative ones. In addition **Chih-Ching, (2019)** showed that there was direct effect of ethical work climate on organizational identification.

On the same direction **Borhani et al., (2021)** The majority of the demographic characteristics had little bearing on the relationship between the ethical atmosphere views of nurses and the actual workplace ethical behavior score ($r = 0.188, P = 0.002$). In order to encourage nurses to behave professionally and to uphold professional ethics, it might be quite helpful to hold nursing ethics training sessions. Finally **Sapada et al., (2017)** suggest that management should also run training programs to improve staff members' comprehension of how to apply green behavior.

Conclusion

- The highest percentages of ethical work climate level was average at pretest and posttest, and it was high at follow up
- The highest percentages of green behavior level was average at pretest and posttest, and it was high at follow up
- The highest percentages of organizational identification levels were average at pretest and it was high at posttest and at follow up.
- There was highly statistical significant difference between pre and posttest and follow up for ethical work climate, green behavior and organizational identification.
- There was high significant and positive correlation between green behavior and organizational identification pretest, posttest and follow up.

Recommendations

1. Develop ethical principles that are appropriate for nursing department goals by nurses' managers.

2. Develop ethical work climate programs for nursing managers and for nurses to sustain the positive impact on their practices and knowledge.
3. Conduct periodic assessment of knowledge and practices of nursing personnel at all levels of ethical work climate, green behavior, and organizational identification to monitor their progress and to identify areas that need improvement.
4. Collaborate with academic institutions and researchers to develop and implement evidence-based interventions and best practices to promote ethical work climate, green behavior, and organizational identification in healthcare facilities.

References

- **Acar, P., Yener, M., & Tayan, A. (2018):** The Effect of an Ethical Work Climate on Organizational Identification an Example of a Logistics Company, *Research Journal of Business and Management (RJBM)*, V.5(1), p.13-21 <http://doi.org/10.17261/Pressacademia.2018.81>
- **Aloustani, S., Atashzadeh-Shoorideh, F., Zagheri-Tafreshi, M. Nasiri, M., Barkhordari-Sharifabad, M. & Skerrett, V. (2020):** Association between ethical leadership, ethical climate and organizational citizenship behavior from nurses' perspective: a descriptive correlational study. *BMC Nursing*, 19, 15 Pp. 2-8. <https://doi.org/10.1186/s12912-020-0408-1>
- **Altuntaş, S., Seren İntepeler, S., Sökmen, S., Kantek, F. Öztürk, H. & Baykal, Ü. (2021):** The effect of ethical work climate on the organizational citizenship behavior of academic nurses. *International Nursing Review*; Volume68, Issue1 Pages 15-23. <https://doi.org/10.1111/inr.12622>
- **Atia, M. & Abdelwahid, E. (2023):** Ethical Work Climate, Moral Distress and Organizational Citizenship Behavior of Nurses: The Mediating Effect of Moral Courage. *Egyptian Journal of Nursing & Health Sciences*, Vol.4, No. 2, 40-57. <https://doi.org/10.21608/EJNHS.2023.319000>
- **Baig, W., Ahmed, I., & Danish, Q. (2022):** Effect of Ethical Climate on Employee Green Behavior: Through Moderated Mediation Mechanism. *Journal of Public Value and Administrative Insight*, Vol. 5 No. 1 P.p. 47-61. <https://doi.org/10.31580/jpvai.v5i1.2466>
- **Barattucci, M., Teresi, M., Pietroni, D., Iacobucci, S., Lo Presti, A., & Pagliaro, S. (2021):** Ethical Climate(s), Distributed Leadership, and Work Outcomes: The Mediating Role of Organizational Identification. *Frontiers in Psychology*, 11:564112. doi: 10.3389/fpsyg.2020.564112
- **Borhani, F., Abbaszadeh, A., Bahrampour A., Ameri, F., & Aryaeenezhad, A. (2021):** Investigating the relationship between the ethical atmosphere of the hospital and the ethical behavior of Iranian nurses. *Journal of Education and Health Promotion*, 31; 10(1):193. https://doi.org/10.4103/jehp.jehp_891_20
- **Cerit, B., & Özveren, H. (2019):** Effect of hospital ethical climate on the nurses' moral sensitivity. *The European Research Journal*; 5(2): 282-290. <https://doi.org/10.18621/eurj.423324>
- **Chaudhary, R. (2020):** Green Human Resource Management and Employee Green Behavior: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management*; 27:630–641. DOI: 10.1002/csr.1827
- **Chen, T., & Wu, Z. (2022):** How to facilitate employees' green behavior? The joint role of green human resource management practice and green transformational leadership. *Frontiers in Psychology*, 13:906869. doi: 10.3389/fpsyg.2022.906869
- **Chih-Ching, T., Allan, Ch., Zhi-Yang, H., & Chien-Hua, F. (2019):** Ethical work climate, organizational identification, leader-member-exchange (LMX) and organizational citizenship behavior (OCB): A study of three star hotels in Taiwan. *International Journal of Contemporary Hospitality Management*
- **Danish, Q., Ahmed, A., Farooq, S., Baig, W., & Ullah, A. (2021):** Ethics and politics: what determines ethical leadership under political mentoring? *Academic Journal of Social Sciences (AJSS)*, 5(1), 1-14. <https://doi.org/10.54692/ajss.2021.05011032>
- **Hasebrook, P., Michalak, L., Wessels, A., Koenig, S., Spierling, S., & Kirmsse, S. (2022).** Green Behavior: Factors Influencing Behavioral Intention and Actual Environmental Behavior of Employees in the Financial Service Sector. *Sustainability*, 14, 10814. <https://doi.org/10.3390/su141710814>
- **Katz, M., Rauvola, S., Rudolph, W., & Zacher, H. (2022):** Employee green behavior: A meta-analysis. *Corporate Social Responsibility and Environmental Management*, 29(5), 1146–1157. <https://doi.org/10.1002/csr.2260>
- **Khanam, Z., Tarab, S., & Khan, Z. (2023):** Examining the link between responsible leadership and employee sustainable performance: the mediating role of ethical climate. *Journal of Economic and Administrative Sciences*. <https://doi.org/10.1108/JEAS-05-2023-0139>
- **Klieb, S., Elghabbour, G., Hassane, S. & El-Said, H. (2023).** Influence of Perceived Ethical Work Climate on Workplace Alienation among Nursing

- Staff at Minia University Hospital. International Egyptian Journal of Nursing Sciences and Research (IEJNSR), Vol. 3 (2), P. 726- 741. <https://doi.org/10.21608/ejnsr.2023.278225>
- **Li, Y., Huang, S., & Song, L. (2020):** Opportunity and necessity entrepreneurship in the hospitality sector: Examining the institutional environment influences. *Tourism Management Perspectives*, 34, 100665. <https://doi.org/10.1016/j.tmp.2020.100665>
 - **Li, M., Gong, Z., Gilal, F., Swol, L., Xu, J., & Li, F. (2021):** The Moderating Role of Ethical Leadership on Nurses' Green Behavior Intentions and Real Green Behavior. *BioMed Research International*, Volume 2021, Article ID 6628016, 7 pages <https://doi.org/10.1155/2021/6628016>
 - **Mael, F., & Ashforth, B. (1992):** Alumni and their alma mater: A partial test of the reformulated model of organizational identification, *Journal of Organizational Behavior*, VOL. 13, 103-123. https://doi.org/10.1002/job.40301_30202
 - **Mi, L., Sun, Y., Gan, X., Yang, H., Lv, T., Shang, K., Qiao, Y., & Jiang, Z. (2020):** Promoting Employee Green Behavior Through the Person-Organization Fit: The Moderating Effect of Psychological Distance. *Frontiers in Psychology* 11:568385. doi: 10.3389/fpsyg.2020.568385
 - **Mohamed, E., Abed, F., & Hassan, S. (2022):** The relationship between ethical work climate and organizational commitment among staff nurses: a comparative study *Egyptian Nursing Journal*, Vol. 17 No. 2, May-August 2020:96–106. *Egyptian Nursing Journal* | Published by Wolters Kluwer – Medknow. https://doi.org/10.4103/ENJ.ENJ_29_20
 - **Nassani, A., Suwaidan, M., Aljarallah, & K., Alsubaie S. (2023):** The impact of organizational support and ethical climate on turnover intention: job satisfaction as a mediator. *Arab Journal of Administration*, Vol. 43, No. 3, pp. 227-238. <https://doi.org/10.21608/AJA.2022.140340.1252>
 - **Norton, A., Zacher, H., Parker, L., & Ashkanasy, M. (2017):** Bridging the gap between green behavioral intentions and employee green behavior: The role of green psychological climate. *Journal of Organizational Behavior*, 38, 996–1015. DOI: 10.1002/job.2178
 - **Olson, L. (1995):** Hospital nurses' perceptions of the ethical climate of their work setting. *Image J Nurs Sch*. 1998; 30: 345–349.
 - **Ozdoba, P., Dziurka, M., Pilewska-Kozak, A., & Dobrowolska, B. (2022):** Hospital Ethical Climate and Job Satisfaction among Nurses: A Scoping Review. *International Journal of Environmental Research and Public Health*; 19(8):4554. <https://doi.org/10.3390/ijerph19084554>
 - **Pagliari, S., Lo Presti, A., Barattucci, M., Giannella, A., & Barreto, M. (2018):** On the effects of ethical climate(s) on employees' behaviour: a social identity approach. *Front. Psychol.* 9:960. <https://doi.org/10.3389/fpsyg.2018.00960>
 - **Park, S. & Back, K. (2020):** Modified scales for organizational identification and organizational disidentification for the foodservice industry. *International Journal of Hospitality Management journal homepage: www.elsevier.com/locate/ijh*. Available online 6 October 2020 0278-4319/© 2020 Elsevier Ltd. All rights reserved.
 - **Pauly, B., Varcoe, C., Storch, J. & Newton, L. (2019):** (Registered nurses' perceptions of moral distress and ethical climate. *Nurs Ethics* 2019; 16:561-73.
 - **Pinar, A., Mujdelen, Y., & Asli, T. (2018):** The Effect of an Ethical Work Climate on Organizational Identification an Example of a Logistics Company. *Research Journal of Business and Management – (RJBM)* ISSN: 2148-6689,RJBM- V.5.ISS.1-2018(2)-p.13-21
 - **Saleem, M., Qadeer, F., Mahmood, F., Ariza-Montes, A., & Han, H. (2020):** Ethical Leadership and Employee Green Behavior: A Multilevel Moderated Mediation Analysis. *Sustainability*. 12(8):3314. <https://doi.org/10.3390/su12083314>
 - **Sapada, A., Modding, B., Gani, A., & Nujum, S. (2017):** The effect of organizational culture and work ethics on job satisfaction and employees performance. *The International Journal of Engineering and Science (IJES)*, vol. 6, no. 12, 2017, pp. 28-36. DOI: 10.9790/1813-0612042836
 - **Saygili, M., Özer, Ö. & Karakaya, P. (2020):** Paternalistic Leadership, Ethical Climate and Performance in Health Staff. *Hospital Topics*, 98:1, 26-35, <https://doi.org/10.1080/00185868.2020.1726848>
 - **Teresi, M., Pietroni, D., Barattucci, M., Giannella V., & Pagliari, S. (2019):** Ethical Climate(s), Organizational Identification, and Employees' Behavior. *Frontiers in Psychology*, Volume 10:1356. <https://doi.org/10.3389/fpsyg.2019.01356>
 - **Unsworth, L., Davis, C., Russell, V., and Bretter, C. (2021):** Employee green behaviour: How organizations can help the environment. *Current Opinion in Psychology*, 42, 1-6. <https://doi.org/10.1016/j.copsyc.2020.12.006>
 - **Victor, B., & Cullen, J. (1988):** The organizational bases of ethical work climates. *Administrative Science Quarterly*, 33, 101 - 125. <https://doi.org/10.2307/2392857>
 - **Victor, B., & Cullen, J.B. (1987):** A theory and measure of ethical climate in organizations.

Research in Corporate Social Performance and Policy, 9, 51-71.

- **Wang, D., Wei, W., Zhang, T., Tang, W., & Lu, Q. (2022):** The impact of clinical nurses' perception of hospital ethical climates on their organizational citizenship behavior: a cross-sectional questionnaire survey. *Medicine*; 101:4(e28684). <http://dx.doi.org/10.1097/MD.00000000000028684>
- **Zacher, H., Rudolph, W., & Katz, M. (2023):** Employee green behavior as the core of environmentally sustainable organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 10, 465-494. <https://doi.org/10.1146/annurev-orgpsych-120920-050421>
- **Zhang, B., Yang, L., Cheng, X., & Chen, F. (2021):** How Does Employee Green Behavior Impact Employee Well-Being? An Empirical Analysis. *Int. J. Environ. Res. Public Health*, 18, 1669. <https://doi.org/10.3390/ijerph18041669>

This is an open access article under
[Creative Commons by Attribution Non-Commercial \(CC BY-NC 3.0\)](https://creativecommons.org/licenses/by-nc/3.0/)
(<https://creativecommons.org/licenses/by-nc/3.0/>)