

## Green Management and Its Effect on Organizational Citizenship Behavior among Staff Nurses

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### Abstract

**Background:** Green management practices and green behavior are important components of organizational sustainability, particularly in the healthcare. The adoption of organizational citizenship behavior helps organizations improve their green management. **Aim:** The study's aim was to assess the effect of green management on organizational citizenship behavior among staff nurses. **Research design:** This study's methodology was a descriptive correlational approach. **Setting:** This study was carried out in Al-Ahrar Teaching Hospital. **Subjects:** The study subjects included 85 staff nurses out of 110 who are working in the designated setting. **Tools of data collection:** Employee green behaviors scale and organizational citizenship behavior scale were used to gather data. **Result:** (5.9%) of the staff nurses reported high degree of total employee green behavior level. While, minority (7.1%) of them had high level of total organizational citizenship behavior, and (57.6%) of studied staff nurses exhibited low level of total organizational citizenship behavior. **Conclusion:** Green management and organizational citizenship behavior among staff nurses were statistically significantly correlated. **Recommendations:** Developing staff nurses' green management practices and knowledge. Providing workshops on organizational sustainability and nurses' green behavior guidelines. Establishing an ongoing training for enhancing staff nurses' organizational citizenship behavior.

**Keywords:** Green management, Staff nurses, Organizational citizenship behavior.

### INTRODUCTION:

A green workplace is environmentally sensitive, resource-efficient, and socially responsible. Organizations need to understand the benefits and opportunities of going green and act as agents of change to practice environmental sustainability (Chen et al., 2024). The green concept aims to address climate change and the sustainable use of natural resources. Various sectors are paying more attention to environmental-based management to mitigate the negative effects of operations on the environment (Solomon et al., 2024).

Green healthcare focuses on eco-friendliness, providing environmentally friendly care services that enhance individual health and benefit the community. It can also bring economic value by reducing waste, operating expenses, and raising awareness of sustainability (Dion & Evans, 2024). The concept of green management is relatively new and signifies organizations efforts to reduce

environmentally harmful processes. It aligns with the vision of a modern green economy, which emphasizes the shift towards renewable energy sources (Aristei & Gallo, 2024).

Employee green behaviors involve actions aimed at reducing environmental harm or enhancing ecological benefits, influenced by personal psychological factors as well as external conditions. To effectively encourage these behaviors, it's crucial to understand these psychological influences. For instance, educating employees about their environmental impact and ways to prevent disasters can significantly motivate them to adopt green practices (Zacher et al., 2023).

Employee green behavior (EGB) includes actions performed by employees that either support or hinder environmental sustainability goals. EGB is categorized into obligatory behaviors required as part of job duties, such as recycling and energy conservation, and voluntary behaviors that demonstrate personal commitment to the

environment, like waste reduction and conservation efforts. Encouraging employees to embrace green practices can be facilitated through education on the environmental impacts of their actions and the promotion of conservation techniques (Tahir et al., 2024; Hussain, 2023).

An employee's knowledge of sustainability and eco-friendly practices is essential to fostering green behavior. When employees understand the importance of environmental conservation and are educated on how to implement sustainable practices, they are better equipped to apply these principles in their work. Greater environmental knowledge not only strengthens employees' commitment to sustainability but also enhances their overall well-being, as they feel more engaged and purpose-driven in their roles (Zeng et al., 2023).

A strong green organizational culture, built around shared values and practices that emphasize environmental responsibility, has a positive impact on employee behavior. Organizations that foster such a culture are better able to align employees' personal values with the company's sustainability goals (Wadood et al., 2024). This alignment not only helps achieve long-term environmental objectives but also provides a competitive edge in the market by embedding sustainability across all organizational operations. A strong green culture encourages employees to contribute actively to the company's environmental goals, making sustainability a core part of the organizational identity (Arise & Muzuva, 2024).

A need exists to induce environmentally friendly behavior by creating awareness, training, opportunities, and motivation to intervene and encourage more thoughtful behavior. Employee perceptions of organizational support for towards the environment serve vital roles in motivating EGB. This support could be in terms of environmentally friendly policies, environmental performance-based appraisals, a green team, encouraging employee involvement, etc. The adoption of organizational citizenship behavior helps

organizations improve their green management (Das & Dash, 2023).

Organizational citizenship behavior includes actions that, while not formally requested or directly rewarded, significantly contribute to the functioning and success of the organization. Research indicates that these behaviors can positively influence organizational outcomes by improving productivity, optimizing resource utilization, facilitating coordination among team members, stabilizing performance, and enhancing employee recruitment, selection, retention, and adaptability to environmental changes (Liu & Fan, 2023 ).By fostering a collaborative and supportive work environment, OCB helps organizations navigate challenges and seize opportunities more effectively(Soomro & Soomro, 2024).

Organizational citizenship behavior helps the employees to feel more in control over their jobs and activities and feel noble about helping others (Rabbani & Yuliani, 2024). It can be assessed by evaluating how often employees show discretionary and extra-role behaviors. According to Zhao et al. (2023), the adoption of organizational citizenship behavior helps an organization in improving its green management.

Organizational citizenship behavior involves discretionary behaviors performed by employees that fall outside their official job descriptions. These behaviors are not directly recognized by the formal reward system but collectively contribute to the organization's effectiveness and harmony. They include actions that employees choose to engage in voluntarily, which, although not mandatory, play a crucial role in supporting organizational goals and fostering a positive work environment (Luthfiyana et al., 2024).

Organizational citizenship behavior is characterized by their voluntary nature and lack of formal acknowledgment within organizational agreements or job descriptions. Employees exhibit these positive social behaviors based on personal motivation rather than external pressures or rewards. This voluntary engagement in OCBs underscores their role in enhancing organizational efficiency

and effectiveness without any formal stipulation or expectation of compensation (Agarwal et al., 2024).

Employee green behavior (EGB) and organizational citizenship behavior (OCB) had integral relation to advancing both organizational performance and environmental sustainability. Encouraging EGB within the workplace involves promoting environmentally responsible practices through various initiatives, such as awareness programs and managerial incentives (Xiao et al., 2024). When employees engage in green behaviors, they often display a form of OCB specifically aimed at environmental protection, such as reducing waste, recycling, or conserving resources. These actions reflect a commitment to sustainability that goes beyond the basic job requirements and supports the organization's environmental goals (Amrutha & Geetha, 2024).

### Significance of the study

Green management involves the policies and practices that motivate employees to participate in activities that promote socially responsible green behavior to create an environmentally conscious and resource-efficient organization (Ahmed et al., 2024). Studies showed that well-trained, motivated, and involved employees are likely to engage in behavior that supports environmental sustainability in an organization (Faezah et al., 2024).

The researcher works in Al- Ahrar hospital and observes that staff nurses have insufficient information about green management and considers the importance of understanding green management and green behavior among them. As staff nurses are considered the most important members of the hospital, their awareness regarding green management may reflect their organizational citizenship behavior. Also reflect in the organization by achieving organization's objectives and facilitating change and development. So, the present study aims to assess effect of green management and its influence on organizational citizenship behavior among staff nurses in order to maintain effective & safe and healthy working

environment for patients and staff and promote optimal level of patient care.

### AIM OF THE STUDY

It aimed to assess the effect of green management on organizational citizenship behavior among staff nurses.

#### Research question:

Is there a relation between green management and organizational citizenship behavior among staff nurses?

### SUBJECTS AND METHODS

#### Research design

A descriptive correlational research design was utilized to conduct this study.

#### Research setting:

The study conducted in Al-Ahrar Teaching Hospital which is located in Zagazig City in the Al-Sharqia Governorate. This hospital is affiliated with the general organization for teaching hospitals and institutes. Its total capacity is 420 beds. It consists of departments for Orthopedic, Thoracic, Neurology, Oncology, ENT, Cardiology, Radiology, Emergency, Urology, internal-medical department.

#### Subjects

The study subjects consisted of 85 staff nurses out of 110 staff nurses working in different departments at the aforementioned study setting at the time of study.

#### Data collection tools

Data of this study have been collected through two tools namely: Employee green behaviors scale and organizational citizenship behavior scale.

#### First tool: Employee Green Behaviors Scale:

It aims to assess staff nurses' green behaviors. It was developed by Jayakumar & Kadhiravan, (2019) and modified by researcher.

It consists of two parts: -

**Part 1: staff nurses' personal and job characteristics.** It pertains to collecting data such as age, sex, marital status, qualifications, years of experience, and position..... etc.

**Part 2: Employee Green Behaviors Scale:**

This tool has been adapted from **Jayakumar & Kadiravan, (2019)** and altered by the researcher. It aimed to evaluate staff nurses' green behaviors. It comprised of twenty-four items grouped under six categories, with 4 items for each dimension as follows: Environmental Awareness (4 items), Taking Initiative (4 items), Working Sustainably (4 items), Influencing Others (4 items), Avoiding Harm (4 items), and Conserving (4 items).

#### **Scoring system**

Responses were measured on a five points Likert scale and ranging from (Always (5), Often (4), Sometimes (3), Rarely (2) and Never (1)). These scores were converted into a percent score. In addition, the calculation of the mean and standard deviation was done. Total scores categorized on high level if score more than 70% and moderate if total score ranged between from (50 - 70%) and low if score was less than 50% (**Jayakumar & Kadiravan, 2019**)

**Second tool: Organizational-citizenship behavior scale:**

It aimed to assess organizational citizenship behavior between staff nurses. This scale was adopted from Mohamed (2018) based on Organ (1990). It consisted of twenty items separated into five dimensions, as follows: Altruism deviant (5 items), Civility deviant (4 items), Sportsmanship deviant (3 items), Civic virtue deviant (5 items), and Conscientiousness deviant (4 items).

#### **Scoring system:**

Responses were measured on a 5-point Likert scale ranging from "1= strongly disagree, 2= Disagree, 3= uncertain, 4= Agree, and 5= Strongly agree". These scores were converted into a percent score. In addition, the calculation

of the mean and standard deviation was done. Organizational citizenship behavior was considered high if the total percent score was more than 70% and moderate if total score ranged between from (50 - 70%) and low if the score was less than 50% (**Mohamed, 2018**).

#### **Validity:**

The validity of the tool was judged by the jury group consisting of five experts (two professors and three assistant professors) in Nursing Administration Department and Psychiatric Nursing Department from Faculty of Nursing, Aim-Shams University for face and content validation. They assessed the tool for relevance, comprehensiveness, and applicability. According on the jury's verdicts, the researcher made changes such rephrasing, adding, or omitting information. They were asked to express their opinions regarding the proposed tool.

#### **Reliability:**

The reliability of the data collection tools was assessed its internal consistency by using Cronbach's Alpha Coefficient test. Employee Green Behaviors Scale was 0.910 and Organizational citizenship behavior Scale was 0.907.

#### **Pilot study:**

A pilot study was done on 10% (8 staff nurses) of the expected sample size staff nurses to test the feasibility of the study, application of tools, content validity and estimate the time required for filling the tool and no modifications were done. So, the staff nurses who included in the pilot study were included in the study sample.

#### **Field work:**

The field work of the study took two months started in the beginning of September 2023 and completed at the end of October 2023. The researcher met the head nurse of each unit for determining the suitable time to collect the data from the staff in each unit. The researcher introduced herself to staff nurses in the workplace, explains the aim and component of the questionnaires and distributed the sheets to staff nurses in their work settings at different

times and attended during the filling of the questionnaires to clarify any ambiguity and answer any questions. Data was collected two days per week on Sunday and Tuesday at the morning and afternoon shifts. The questionnaire took (25-30) minutes. Each completed questionnaire form was double-checked by the researcher to confirm its accuracy.

### **Ethical considerations:**

Ethical approval was obtained from a Scientific Research Ethical Committee of the Faculty of Nursing, Ain Shams University with (code number: NUR 24.01.208). Official letters from Faculty of Nursing to the selected hospital to obtain an approval for data collection was submitted. Informed written consents were secured from every participant (staff nurses) after explanation of the study aim and procedures. All participants were assured about their right to refuse or to withdraw from the study at any time. Full anonymity and confidentiality of any obtained information was guaranteed. No actual or potential harm was expected from the study maneuvers.

### **Administrative Design:**

To get approval to carry out the research and choose an appropriate time to meet with the staff nurses, a letter for the data collecting process was sent to the head nurse of each department. To get their approval to carry out the research and choose an appropriate time to meet with the staff nurses, The researcher explained the importance of the study and the implication of expected results for the study subjects.

### **Statistical analysis:**

Data entry and statistical analysis were done using (SPSS) statistical software package. Quality control was at the stage of coding and data entry. Data were presented using descriptive statistics in the form of frequencies and percentage for qualitative variables; mean and standard deviation for quantitative variable. Qualitative categorical variables were compared Chi-square test; Pearson correlation co-efficient (r) was used for assessment of the inter-relationship among quantitative variables.

Statistical significance was considered at (P-value <0.05).

## **RESULTS:**

**Table (1):** illustrates that the majority of staff nurses (49.4%) were aged between 30 and 40 years, with an average age of 35.7 years with a mean (4.9). Most of them were married (74.1%), and a significant portion holds qualifications from a Nursing Technical Institute (71.8%). Regarding experience, half of staff nurses, 50.6% had 10-15 years of nursing experience with an average of 12.9 years with a mean (2.6), while 36.5% had less than 3 years of experience in their current department with a mean ( $3.98 \pm 1.13$ ). Only 14.1% had attended training courses on green management.

**Table (2):** demonstrates that, the majority (71.8%) of the staff nurses had low level total green behavior dimensions; while (5.9%) of staff nurses had high level total green behavior dimensions. Furthermore, there were highly statistically significant differences between total green behavior dimensions ( $p < 0.001$ ).

**Table (3):** reveals that the more than half (57.6%) of the staff nurses had low level total organizational citizenship behavior dimensions; while (7.1%) of staff nurses had high level total organizational citizenship behavior dimensions. Furthermore, there were highly statistically significant differences between total organizational citizenship behavior dimensions throughout program phases ( $p < 0.001$ ).

**Table (4):** shows that there was a high significant relation between age, attending training courses, and green behavior level ( $p < 0.001$ ). Also, there was a significant relation between qualification and green behavior level ( $p < 0.05$ ). While there was no relation with marital status, experience in nursing, or experience in the department with a green behavior level ( $p > 0.05$ ).

**Table (5):** reveals that there was a statistically significant relationship between staff nurses' organizational citizenship behavior, marital status, and qualification

( $p < 0.05$ ). Also, there was a high significant relation between attending training courses and organizational citizenship behavior ( $p < 0.001$ ). However, there is no significant relation found with experience in nursing or experience in the department with organizational citizenship behavior ( $p > 0.05$ ).

**Table (6):** shows that there was a positive, highly statistically significant correlation between total green behavior level and total organizational citizenship behavior level.

**Table (1):** Distribution of the studied staff nurses' personal and job characteristics (N=85).

Items	N	%
<b>Age:</b>		
< 30 years	20	23.5
30-40 years	42	49.4
> 40 years	23	27.1
<b>Mean (SD) 35.7 (4.9)</b>		
<b>Marital Status:</b>		
Married	63	74.1
Unmarried	22	25.9
<b>Qualification:</b>		
Diploma in Nursing	13	15.3
Nursing Technical Institute	61	71.8
Bachelor of Nursing	11	12.9
<b>Number of years of experience in nursing:</b>		
< 10 years	22	25.9
10-15 years	43	50.6
> 15 years	20	23.5
<b>Mean (SD) 12.9 (2.6)</b>		
<b>Number of years of experience in the department:</b>		
< 3 years	31	36.5
3-5 years	24	28.2
> 5 years	30	35.3
<b>Mean (SD) 3.98 (1.13)</b>		
<b>Attended training courses on green management:</b>		
Yes	12	14.1
No	73	85.9

**Table (2)** Total staff nurses' green behavior levels (n=85).

Total staff nurses' green behavior	Green behavior levels	
	N	%
<b>Influencing Others</b>		
High	4	4.7
Moderate	16	18.8
Low	65	76.5
<b>Mean (SD)</b>	7.1 (2.2)	
<b>Conserving</b>		
High	5	5.9
Moderate	18	21.2
Low	62	72.9
<b>Mean (SD)</b>	6.9 (2.1)	
<b>Avoiding Harm</b>		
High	6	7.1
Moderate	22	25.9
Low	57	67.1
<b>Mean (SD)</b>	6.3 (0.98)	
<b>Environmental Awareness</b>		
High	5	5.9
Moderate	25	29.4
Low	55	64.7
<b>Mean (SD)</b>	6.37 (1.9)	
<b>Taking Initiative</b>		
High	4	4.7
Moderate	21	24.7
Low	60	70.6
<b>Mean (SD)</b>	6.4 (2.1)	
<b>Working Sustainably</b>		
High	3	3.5
Moderate	32	37.7
Low	50	58.8
<b>Mean (SD)</b>	5.48 (1.3)	
<b>Total</b>		
High	5	5.9
Moderate	19	22.3
Low	61	71.8
<b>Mean (SD)</b>	38.81(9.7)	

Table (3) Total staff nurses' organizational citizenship behavior levels (n=85).

Total staff nurses' organizational citizenship behavior	Organizational citizenship behavior levels	
	N	%
<b>Altruism (Selflessness) 5</b>		
High	6	7.1
Moderate	24	28.2
Low	55	64.7
<b>Mean (SD)</b>	5.65 (0.99)	
<b>Civility (courtesy) 4</b>		
High	5	5.9
Moderate	26	30.6
Low	54	63.5
<b>Mean (SD)</b>	7.42 (1.6)	
<b>Sportsmanship 3</b>		
High	4	4.7
Moderate	30	35.3
Low	51	60
<b>Mean (SD)</b>	5.65 (1.8)	
<b>Civic virtue (civilized behavior) 5</b>		
High	7	8.2
Moderate	25	29.4
Low	53	62.4
<b>Mean (SD)</b>	8.69 (2.7)	
<b>Conscientiousness (Awareness of conscience) 3</b>		
High		
Moderate	5	5.9
Low	20	23.5
<b>Mean (SD)</b>	60	70.6
	5.09 (1.8)	
<b>Total Organizational citizenship behavior</b>		
High	6	7.1
Moderate	30	35.3
Low	49	57.6
<b>Mean (SD)</b>	32.5 (4.6)	



Table (4) Relation between personal and job characteristics of studied staff nurses and their green behavior (n=85).

Personal and job characteristics	N	Total green behavior Mean (SD)	Test	P. value
<b>Age:</b>			Anova	
< 30 years	20	45.7 (7.8)		
30-40 years	42	40.2 (9.4)	13.409	0.000**
> 40 years	23	37.6 (8.6)		
<b>Marital Status:</b>			T test	
Married	63	37.5 (10.4)	0.861	1.029
Unmarried	22	38.2 (9.7)		
<b>Qualification:</b>			Anova	
Diploma in Nursing				
Nursing Technical Institute	13	37.4 (8.6)	5.693	0.012*
	61	39.8 (10.7)		
Bachelor of Nursing	11	42.50 (11.2)		
<b>Experience in nursing:</b>			Anova	
< 10 years	22	38.67 (10.3)	1.203	0.089
10-15 years	43	39.13 (8.6)		
> 15 years	20	38.70 (12.0)		
<b>Experience in the department:</b>			Anova	
< 3 years	31	38.70 (8.4)	1.109	0.085
3-5 years	24	39.1 (10.3)		
> 5 years	30	38.5 (8.5)		
<b>Attended training courses:</b>			T test	
Yes	12	43.8 (10.1)	8.912	0.002**
No	73	36.1 (6.5)		

\*significant &lt;0.05, \*\* high significant &lt;0.01

**Table (5) Relation between personal and job characteristics of studied staff nurses and organizational citizenship behavior (n=85)**

Personal and job characteristics	N	Total organizational citizenship behavior Mean (SD)	Test	P. value
<b>Age:</b>			Anova	
< 30 years	20	32.9 (5.7)	1.009	0.872
30-40 years	42	33.4 (4.9)		
> 40 years	23	31.9 (6.1)		
<b>Marital Status:</b>			T test	
Married	63	34.6 (5.6)	4.998	0.034*
Unmarried	22	30.9 (6.7)		
<b>Qualification:</b>			Anova	
Diploma in Nursing				
Nursing Technical	13	30.3 (5.9)	5.120	0.021*
Institute	61	33.6 (6.8)		
Bachelor of Nursing	11	37.8 (7.4)		
<b>Experience in nursing:</b>			Anova	
< 10 years	22	33.6 (6.2)	0.919	0.945
10-15 years	43	35.1 (6.9)		
> 15 years	20	34.7 (5.7)		
<b>Experience in the department:</b>			Anova	
< 3 years	31	35.0 (5.9)	0.768	1.029
3-5 years	24	36.7 (7.2)		
> 5 years	30	34.2 (6.5)		
<b>Attended training courses:</b>			T test	
Yes	12	37.6 (5.7)		
No	73	30.9 (7.3)	7.823	0.008**

\*significant <0.05, \*\* high significant <0.01

**Table (6) Correlation between staff nurses' green behavior level and their organizational citizenship behavior level.**

Variable	Total organizational citizenship behavior level	
	r	P value
Total employee green behavior level	0.562	0.001**

\*significant <0.05, \*\* high significant <0.01

## DISCUSSION:

Green management practices are becoming essential to align environmental responsibility with healthcare goals. This practice involves collaboration between healthcare professionals, administrators, and environmental experts to

develop and apply strategies that foster sustainability. (Kissi et al., 2024). Effective management practices within healthcare organizations play a crucial role in promoting both environmental responsibility and enhancing staff behaviors that contribute to organizational success (Sepetis et al., 2024).

Organizational Citizenship Behavior (OCB) encompasses voluntary actions by employees that extend beyond their formal duties, fostering a positive work environment and advancing organizational effectiveness (Yusuf et al., 2024). Given the pivotal role that nurses play, improving their awareness and practices related to green management can significantly influence organizational efficiency and environmental sustainability (Lewaherilla et al., 2024). Consequently, the aim of the current study was to assess the effect of a green management on staff nurses' organizational citizenship behavior.

**Concerning personal and job characteristics**, the majority of staff nurses aged between 30 to 40 years, with an average of 35.7 years. Most of them were married, and a significant portion holds qualifications from a nursing technical institute. More than half of staff nurses had 10-15 years of nursing experience with an average of 12.9 years, while more than one third had less than 3 years of experience in their current department. The results of this study were in line with those of Elksas et al. (2024), who examined "Effectiveness of Implementing Green Management Program on Nursing Staff Knowledge, Attitudes, and Green Management Practices towards Occupational Safety" and only slightly more than ten percent of nursing staff attended training courses on green management.

**According to the total staff nurses' green behavior level**, the current study result showed that the majority of staff nurses had inadequate total green behavior levels. This might be due to lack of knowledge related to green behavior and sustainable practices for nurses and high workload and stress. This study congruent with research conducted by Mustapha et al. (2017), who examined "Sustainable Green Management System (SGMS) – An integrated approach towards organizational sustainability" and clarified that, organizations settled by small enterprises, managers with good intentions frequently incur barriers to superior environmental performance.

In the same line, Ibrahim et al. (2023) and Tarkar (2022), studies entitled "Educational Program for Nursing Management Staff about Green Management and its Effect on Patient

Safety" and "Role of green hospitals in sustainable construction: Benefits, rating systems and constraints" who found that, studied nurses have inadequate knowledge regarding green practice and there was highly statistically significant difference improvement of nursing management staff knowledge level regarding it after program. Also, in the same line, Mohammed et al. (2023), study stated that all of studied nurses had lack of knowledge and practice regarding green practice so human resources came at the first as a barrier followed by infrastructure, so the study recommended the importance of implementation educational program for nurses regarding green practice in hospital unit.

The result was incongruent with Benzidia et al. (2021), Who conducted a study about "The impact of big data analytics and artificial intelligence on green supply chain process integration and hospital environmental performance" and noted that the majority of participants have incompetent total green practice.

**Regarding the staff nurses' total organizational citizenship behavior**, this study demonstrated that more than half of studied staff nurses had inadequate total organizational citizenship behavior levels. This result might be attributed to lack of activities promoting organizational citizenship behaviors, job dissatisfaction, and low financially rewarding. Also, staff nurses feeling less embedded within their organizations by negatively affecting their commitment as well as lack of nurses' involvement in decisions of concern to organization, not strengthening their positive attitudes towards the organization, not giving an opportunity for them to express their opinions leads to dissatisfaction with their jobs, increased work pressure and lack of organizational citizenship.

This finding supported by Jafarpanah & Rezaei (2020), who conducted a study about "Association between organizational citizenship behavior and patient safety culture from nurses' perspectives: A descriptive correlational study" and found that there were low scores in sportsmanship, civic virtue, and courtesy. Also, the result was congruent with Abdallah & Mostafa (2021), who conducted a study entitled

“Effects of Toxic Leadership on Intensive Care Units Staff Nurses’ Emotional Intelligence and Their Organizational Citizenship Behaviors” and found that the majority of staff nurses perceived low level of organizational citizenship behavior at El-Menshawey General Hospital.

This result is in disagreement with **Mabrouk & El-Shrief (2018)** and **Alim & ElSayed (2017)**, who conducted studies entitled “Nurses’ job involvement and its relation to their organizational citizenship behavior” and “Organizational attributes and its relation to organizational citizenship behavior among academic nursing staff” and revealed that nurses demonstrated high level of organizational citizenship behavior. Also, the result is in disagreement with **Mohamed & Saber (2023)**, entitled “The Mediating Effect of Transformational Leadership between Organizational Commitment and Organizational Citizenship Behavior among Nursing Staff”, and found that there is a highly levels of organizational citizenship behavior among nursing staff.

**Regarding to the relation between staff nurses’ total green behavior and their personal and job characteristics**, the present study demonstrated that there is a highly significant relation between age, qualification, attending training courses, and green behavior level. This result is in agreement with a study by **Saad et al. (2024)**, who conducted a study about “Effect of Educational Program on Nurses’ Perception Regarding Green Hospital and Attitude towards Patient Safety Guidelines” and revealed a significant relationship between green behavior and qualifications of the studied nurses.

This result is corroborated by a study by **Abd-Elhamid, & Gaber (2023)**, who did a study regarding “Effect of Green Management Educational Program on Nurses’ Sustainability Management Knowledge in A Selected Hospital, Nurses’ Demographics Correlate”, and showed that there was a significant relation between age, attending training, qualification, and green behavior level.

**Regarding to the relation between staff nurses’ total organizational citizenship**

**behavior levels and their personal and job characteristics**, the current study result illustrated that there is a significant relation between qualification, marital status, attending training courses and organizational citizenship behavior level. This finding is consistent with **Lim et al. (2018)**, who conducted a study entitled “Effects of Nurses’ Emotional Intelligence on Their Organizational Citizenship Behavior, with Mediating Effects of Leader Trust and Value Congruence”, and showed that nurses who are single and who hold a master's degree had organizational citizenship behavior levels higher than those who were married and had a bachelor’s degree.

In contrast, the result of the present study was inconsistent with a study conducted by **Alabbas& Mahran (2023)**, entitled “Nurse’s Perspective of Organizational Citizenship Behavior during the COVID-19 Pandemic in Saudi Arabia”, and revealed that the organizational citizenship behavior level did not statistically relate to nurses’ marital status and educational level.

**Regarding to the relations between study variables**, the current study findings revealed statistically highly significant relations between staff nurses’ total green behavior and total staff nurses’ organizational citizenship behavior. The results were in the same line with **Aboramadan (2022)**, who conducted a study about “The Effect of Green HRM on Employee Green Behaviors in Higher Education: The Mediating Mechanism of Green Work Engagement”, and showed significant correlation between employee green behavior and organizational citizenship behavior.

The results were in the same line with **Galván-Mendoza et al. (2022)**, who conducted a study about “Environmental knowledge, perceived behavioral control, and employee green behavior in female employees of small and medium enterprises in Ensenada, Baja California”, and showed that environmental knowledge has a positive and statistically significant effect on perceived behavioral control and employee green behavior. Also, it was found that the perceived behavioral control variable had a positive and statistically significant effect on the employee green behavior of female employees.

Also, the present study finding is congruent with **Fawehinmi et al. (2020)**, who did a study about “Assessing the green behavior of academics: The role of green human resource management and environmental knowledge” and showed that green human resources management has a positive impact on employee green behavior, nurse empowerment, and green job creation, as well as organizational environmental citizenship. This finding gives a theoretical implication in terms of ability, motivation, and opportunity theory

### CONCLUSION:

There were highly statistically significant correlations between the variables evaluated and personal and job characteristics staff nurses, such as age, qualification, attending training courses. There was a very strong positive association between staff nurses’ organizational citizenship behavior and their green management. These results corroborate the study hypothesis, which claimed that green management had an influence on staff nurses’ organizational citizenship behavior.

### RECOMMENDATION:

The following suggestions are put forward considering the study's results:

- Developing staff nurses’ green management practices and knowledge.
- Providing workshops on organizational sustainability and nurses' green behavior guidelines.
- Establishing an ongoing training for enhancing staff nurses’ organizational citizenship behavior.
- Designing best practices that foster environmentally responsible organizational citizenship behavior.
- Empowering an organization’s work culture that promote sustainability and encourage citizenship behavior among staff nurses.

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