



The Relationship between Green Intellectual Capital and Organizational Environmental Performance

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Abstract

Background: Green intellectual capital offers the opportunity to embrace environmentalism in the whole organizational management to achieve a competitive edge. Organizational environmental performance reflects the effects that organizational activities generate on the natural environment and demonstrates the degree to which organizations are committed to eco-friendly actions to protect the natural environment. **Aim:** To investigate the relationship between green intellectual capital and organizational environmental performance. **Design:** A descriptive correlational research design was used in the study. **Setting:** This study was conducted at Fayoum Health Insurance Hospital, Fayoum Governorate, Egypt. **Subjects:** All nursing personnel (N=195) at Fayoum Health Insurance Hospital. **Tools:** Two tools were used for data collection, Tool 1: Green Intellectual Capital Questionnaire, Tool 2: Organization Environmental Performance Questionnaire. **Results:** Three fifths of studied nurse managers, and more than half of studied staff nurses had a positive perception about green intellectual capital. Furthermore, half of studied nurse managers and less than half of staff nurses had a high level of organizational environmental performance. **Conclusion:** There was a highly significant positive correlation between perception of nursing personnel about green intellectual capital and organizational environmental performance with p-value= 0.00. **Recommendation:** Design a clear environmental strategy in strategic planning to guide hospitals' environmental performance. Design green rewards and compensation strategy based on organizational environmental performance. In addition, conduct a training program for nursing personnel about developing their green competencies in healthcare.

Keywords: *Green Intellectual Capital, Challenges, Organizational Environmental Performance.*

I. Introduction

Recently, the world is characterized by environmental degradation and the accelerating pace of climate change, within this context, healthcare organizations are marked as one of the most important sectors that must go green. Consequently, Healthcare organizations and other sectors are encouraged by several initiatives in the light of Egypt's vision 2030 to employ novel strategies toward boosting their green productivity and implementing eco-management principles (Kurniawan *et al.*, 2023; Shabana *et al.*, 2023; Wei *et al.*, 2023; Astuti & Ahmar, 2025).

Green intellectual capital (GIC) refers to the skills, knowledge, and capabilities of environmental greening, thus allowing the transformation of environmental goals into pro-environmental actions. GIC includes three main dimensions: first: green human capital (GHC) is the knowledge, skills and abilities of employees that support environmental sustainability. Second: Green structural capital (GSC) described as an



organization's institutionalized knowledge, eco-friendly management systems, databases and knowledge-sharing frameworks that disseminate environmental best practices across the organization. Finally, Green relational capital (GRC) is the network of connections that an organization maintains with its stakeholders, including customers, suppliers, retailers, and government entities (*Alnaim & Metwally, 2024; Gulakdeniz & Karadas, 2024; Shahbaz & Malik, 2025*).

Environmental issues have become a major concern of discussion among governments, investors, and consumers. In response, Egypt has implemented strategic measures to promote environmental sustainability and providing innovative financing mechanisms for green projects including green bonds and adopting many ambitious goals in this field such as green hydrogen production, solar and wind energy development, and low-carbon and electric transportation systems (*Shabana et al., 2023; Saputra & Subarjo, 2025*).

Organizational environmental performance (OEP) is the process of carrying out activities in a way that affects the environment in a positive manner. Furthermore, OEP reflects the effects that organizational activities generate on the natural environment and demonstrates the degree to which organizations are committed to eco-friendly activities to protect the natural environment (*Ameer & Khan, 2023; Hsu & Chen, 2023*).

Today, with increasing environmental challenges in the world, the organizational environmental efforts begin with implementing a strong green recruitment and selection strategy. Green hiring includes developing an environmentally conscious employer brand and carefully selecting candidates based on their knowledge and awareness of environmental conservation. Employees with a green culture have intrinsic environmental values and green consciousness toward environmental issues, also, they can utilize their green knowledge to improve OEP and contribute to a positive green image of the organization's environmental reputation (*ul Mateen et al., 2023*).

II. Significance of Study

In the light of the growing environmentalism, and the global trend towards green transformation of organizations, healthcare organizations have been urged to play their role toward environmental protection. accordingly, Egypt's vision 2030 was developed in the alignment with the United Nations' initiatives to protect the natural environment, their 17 sustainable development goals. In this context, Egypt's role as the host of parties COP-27 underscores its commitment to cope with climate changes through implementing eco-management principles across various sectors to enhance waste management and responsible disposal practices, including the Global Waste Initiative 50 by 2050 to treat and recycle a minimum of 50% of the solid waste produced in Africa by 2050 (*Omran et al., 2022; Kurniawan et al., 2023; Khan et al., 2023; Mohammed & Badawy, 2023; Shabana, 2023*).

The growing awareness of environmental issues has emphasized the significance of going green. Egypt faces significant challenges related to pollution and environmental damage. The relevance of green initiatives in the work environment is increasingly recognized. In this regard, organizations are prioritizing environmentalism and investing in green intellectual capital. This focus aims to minimize environmental impact and climate change and ultimately achieve a sustainable competitive edge through cost reduction. So, it was important to investigate the relationship between green intellectual capital and organizational environmental performance (*Bhatti et al., 2023; Wei et al., 2023*).

III. Aim of the study

The aim of this study was to investigate the relationship between green intellectual capital and organizational environmental performance through the following objectives:

1. Assess green intellectual capital as perceived by nursing personnel.
2. Identify organizational environmental performance level.
3. Find out the relationship between green intellectual capital and organizational environmental performance.



IV. Research questions

1. What is the nursing personnel perception about green intellectual capital?
2. What is the level of organizational environmental performance?
3. What is the relationship between green intellectual capital and organizational environmental performance?

V. Subject and Methods

Research design:

A descriptive correlational research design was used in the study.

Setting:

This study was conducted at Fayoum Health Insurance Hospital which located in Fayoum Governorate, Egypt.

Subjects:

The present study included all nursing personnel (N=195) who were working at Fayoum Health Insurance Hospital. Furthermore, the current study subjects consisted of two groups, the first group included all levels of nurse managers (N= 20). The second group included all staff nurses (N= 175).

Tools of data collection

The data for this study was collected by using two tools as the following:

Tool I: Green Intellectual Capital Questionnaire:

This tool consisted of two parts as follows

Part one: Personal data for nursing personnel:

This part included: gender, age, level of education in nursing, current job department, years of experience in the current job, and attending previous training about green management and green intellectual capital.

Part two: Nursing personnel's perception about green intellectual capital questionnaire:

A questionnaire was adapted from (Bombiak, 2021& Zaki et al, 2023) and was modified by the researchers based on review of relevant literature (Bhatti et al, 2023; Wei et al., 2023) to assess green intellectual capital as perceived by nursing personnel. It consisted of 30 items grouped under three dimensions as follows: green human capital (12items), green structural capital (10 items) and green relational capital (8 items).

Scoring system:

Responses of nursing personnel were scored on 5-points Likert Scale, where "1" indicates strongly disagree and "5" indicates strongly agree then the total score was calculated and converted to a percentage score, where total score equals 150 points, and the cutoff point was made at 70% equals 105 points based on 5-point Likert Scale. Then the percentage scores were classified as the following:

- **Positive perception:** if the percentage was $\geq 70\%$ equals ≥ 105 points.
- **Negative perception:** if the percentage was less than 70% equals < 105 points.

Tool II: Organization Environmental Performance Questionnaire:

This tool was designed by the researchers based on review of relevant literature (*Daily et al., 2007, Paillé et al., 2014, Abou-AL-Ross & Abu Mahadi., 2021*) and this tool was used to identify organizational environmental performance level. It consisted of (25) items.

Scoring system:

Responses of both nurse managers and staff nurses were scored on 5-point Likert Scale, where "1" indicates strongly disagree and "5" indicates strongly agree then the total score was calculated and converted

to a percentage score, and then the percentage scores were classified as the following: where total score equals 125 points.

- **Low level:** if the percentage was less than 60% equals < 75 points on 5-point Likert scale.
- **Moderate level:** if the percentage was 60% and less than 75% equals from 75-93 points on 5- point Likert scale.
- **High level:** if the percentage was $\geq 75\%$ equals > 93 points on 5-point Likert scale.

Validity of the tools:

Two tools of data collection were translated into Arabic by the researcher using back translation, formulated and submitted to experts in nursing administration from two universities: two professors from Menoufia University, and one assistant professor from Beni Suef University, to assess the face and content validity. Accordingly minor necessary modifications were made based on the jury's recommendations. The responses of jury members were reported as (agree, disagree, and comment).

Reliability of the study tools

Cornbrash's Alpha was used to determine the internal reliability of the tool.

Table (1): Descriptive statistics and results of reliability analysis (Cornbrash's Alpha) of the study tools.

Items	Cornbrash's Alpha	Internal consistency
- Green Intellectual Capital Questionnaire.	0.82	Excellent
- Organization Environmental Performance Questionnaire.	0.95	Excellent

Ethical Considerations

Prior to conducting the study an official permission was obtained from the Scientific Research Ethics Committee at Faculty of Nursing - Helwan University. In addition to the approval of the President of the General Authority for Health Insurance was obtained before conducting the study at the Health Insurance Hospital in Fayoum. Participation of nursing personnel in the study was voluntary, and nursing personnel were given full information about the study and their role before signing the informed consent. The ethical considerations included explaining the purpose and nature of the study, stating the possibility to withdraw at any time, confidentiality of the information where it will not be accessed by any other party without the permission of the participants. Ethics, values, culture and beliefs were respected.

Pilot study

The pilot study was conducted on 10% of the total sample size (5) nurse managers and (15) of staff nurses who were randomly selected from the beginning of June 2024 until the middle of the same month of the year. The pilot study was made to examine the clarity of questions and time required to complete the questionnaires sheets used in data collection. The time needed by each subject to complete the 1st tool ranged from 10-15 minutes, and the 2nd tool ranged from 5-10 minutes. Based on pilot study, no modifications were required, and final versions of both tools were papered. Therefore, both nurse managers and staff nurses were included in the entire study sample.

Field work:

The actual fieldwork started at the beginning of June 2024, and it was completed by the end of July 2024, within four days a week morning and afternoon shifts. The purpose of the study was simply explained to the nursing personnel who agreed to participate in the study prior to any data collection. The researcher

assured that the study subjects could choose to participate or not in the conducted study, and their responses were confidential. The researcher was always present in the hospital during data collection to answer any question.

Statistical Item

Upon completion of data collection, data was computed and analyzed using Statistical Package for the Social Science (SPSS), version 24 for analysis. The P value will be set at 0.05. Independent samples T test was used to compare the means of the two study groups. Pearson correlation coefficient was used to study correlation between variables. Data were presented using descriptive statistics tests such as numbers, percentage, mean \pm standard deviation (\pm SD), will be used to describe the results.

VI. Results

Part I: Personal Data of Studied Nursing Personnel

Table (2): Personal data of studied nurse managers (N=20).

Personal data	No.	%
Age		
• 20-29	0	0.0
• 30-39	6	30
• 40-49	14	70
Gender		
• Male	3	15
• Female	17	85
Years of experience in current job		
• 1-10	7	35.0
• 11-20	1	5.0
• ≥ 21	12	60.0
Mean \pm SD (12.42\pm8.8)		
Educational level in nursing		
1. Nursing technical diploma	5	25.0
2. Technical nursing institute	0	0.0
3. Bachelor's degree	13	65.0
4. Master's degree	2	10.0
Work department		
1. In-patient	8	40.0
2. Out-patient	0	0.0
3. Emergency Room	0	0.0
4. Intensive care units	5	25.0
5. Nursing office	3	15.0
6. Cath-Lab	2	10.0
7. OR	0	0.0
8. Dialysis	2	10.0
Job title		
1. Charge nurse	8	40.0
2. Head nurse	7	35.0
3. Supervisor	4	20.0
4. Director	1	5.0

Table (2) describes personal data of studied nurse managers. It was indicated that, less than three quarters (70%) of studied nurse managers aged more than 40 years old, and less than one third (30%) of them aged between 30-39years, the majority (85%) of them were females. Three fifths (60%) of studied nurse managers were experienced 21years or more in the current job, with the total mean \pm SD (12.42 \pm 8.8). In relation to their educational level in nursing, slightly less than two thirds (65%) of them were bachelor's degree graduates, while only (10%) of them master's degree in nursing. Two fifths (40%) of studied nurse managers working at in-patient departments, and more than one third (35%) of them were head nurses.

Table (3): Personal data of studied staff nurses (N=175).

Personal data	No.	%
Age		
• 20-29	87	49.7
• 30-39	65	37.1
• ≥ 40	23	13.2
Genger		
• Male	8	4.6
• Female	167	95.4
Years of experience in current job		
• 1-10	118	67.4
• 11-20	29	16.6
• ≥ 21	28	16.0
Mean \pm SD (11.13\pm7.5)		
Education		
• Nursing technical diploma	52	29.7
• Technical nursing institute	81	46.3
• Bachelor's degree	39	22.3
• Master's degree	3	1.7
Department		
1. In-patient	68	38.9
2. Out-patient	0	0.0
3. Emergency room	20	11.4
4. Intensive care units	53	30.3
5. Nursing office	0	0.0
6. Cath-Lab	5	2.8
7. OR	19	10.9
8. Dialysis	10	5.7

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Table (3) describes personal data of studied staff nurses. Near to half (49.7%) of studied staff nurses aged between 20-29 years old, and more than one third (37.1%) aged between 30-39years, while less than one fifth (13.2%) were aged 40years or more. The majority (95.4%) of studied staff nurses were females, while only (4.6%) of them were males. More than two thirds (67.4%) of them were experienced between 1-10 years in the current job with the total mean \pm SD (11.13 \pm 7.5). In relation to their educational level in nursing, slightly less than half (46.3%) were technical nursing institute graduates, while only (1.7%) of them were master's degree. As regarding to their working department, more than one third (38.9%) of them working at in-patient department.

Part II: Green Intellectual Capital Dimensions.

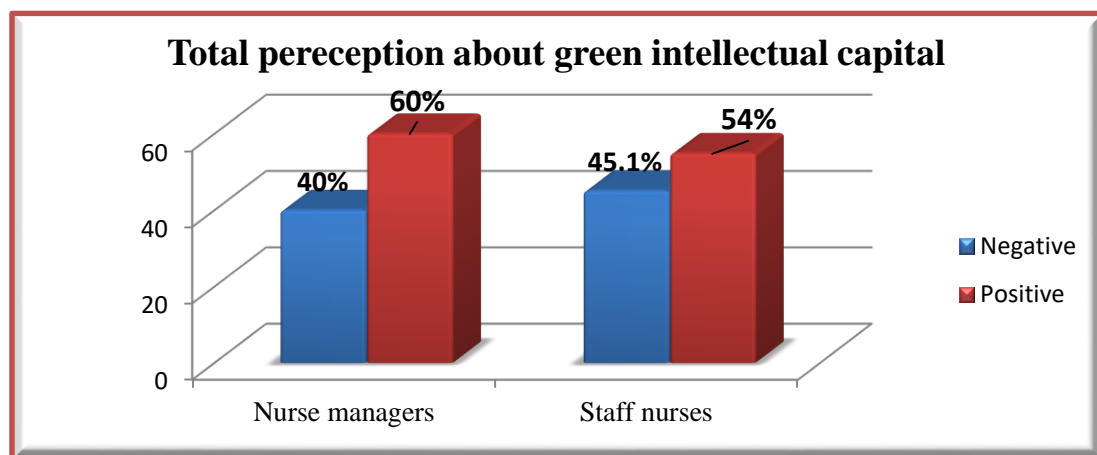


Figure (1): Total percentage distribution of studied nursing personnel's perception about green intellectual capital (N=195).

Fig (1) clarifies that three fifth (60%) of studied nurse managers and also more than half (54.9%) of studied staff nurses had a positive perception about green intellectual capital. While two fifth (40%) of studied nurse managers as well as less than half (45.1%) of staff nurses had a negative perception.

Part III: Organizational Environmental Performance.

Table (4): Level of organizational environmental performance perceived by studied nursing personnel (N=195).

Organizational Environmental Performance	Nurse managers(n=20)		Staff nurses(n=175)	
	No.	%	No.	%
- Low < 60%	2	10.0	34	19.4
- Moderate 60% - < 75%	8	40.0	61	34.9
- High \geq 75%	10	50.0	80	45.7

Table (4) describes that half (50%) of studied nurse managers and also less than half (45.7%) of staff nurses had a high level of organizational environmental performance. While only (10%) of studied nurse managers and less than one fifth (19.4%) of studied staff nurses had a low level of organizational environmental performance.

Part IV: Correlations between Different Study Variables.

Table (5): Correlation between green intellectual capital dimensions and personal data of studied nursing personnel (N=195).

Variables	Green Human Capital		Green Structural Capital		Green Relational Capital	
	r	p	r	p	r	P
- Age	0.2	0.005*	0.21	0.004*	0.14	0.03*
- Educational level	0.1	0.15	0.13	0.06	0.03	0.58
- Years of experience	0.21	0.003*	0.21	0.003*	0.18	0.01*
	F	p	F	p	F	P
- Gender	15.5	0.00*	11.6	0.00*	6.9	0.00*
- Work department	3.2	0.00*	4.1	0.00*	2.7	0.00*
- Job title	1.5	0.16	0.71	0.66	0.81	0.57

*Significant at p-value<0.05

Table (5) indicates that there was a highly significant correlation between all green intellectual capital dimensions and perception of the studied subjects' age, gender, work department, and experience at current jobs with P-value <0.05. While there was non- statistically significant correlation with their job title in nursing with P-value > 0.05.

Table (6): Correlation between perception of nursing personnel about green intellectual capital and organizational environmental performance (N=195).

Scores	Organizational Environmental Performance	
	R	P
Perception about Green Intellectual Capital	0.54	0.00*

*Significant at p-value<0.05

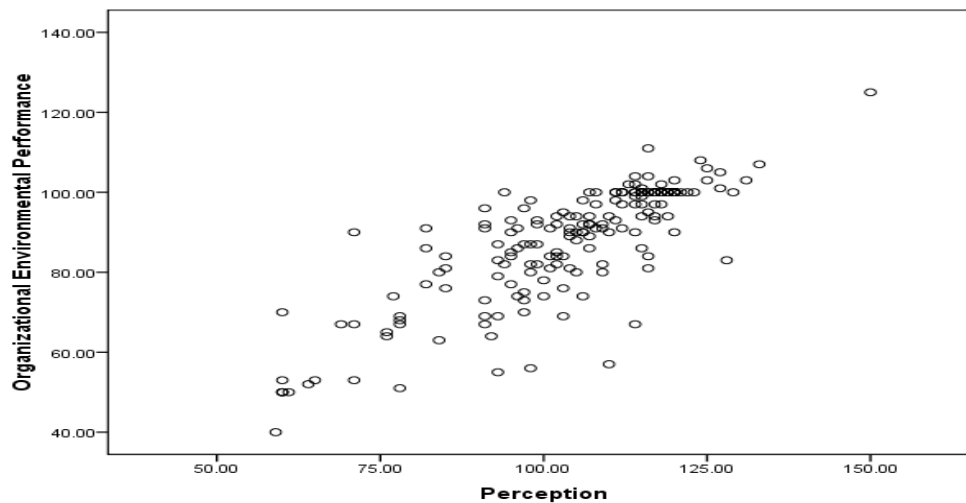


Figure (2): Correlation between perception of nursing personnel about green intellectual capital and organizational environmental performance.

It was indicated from **Table (6)** and **Figure (2)** that there was a highly significant positive correlation between perception of nursing personnel about green intellectual capital and organizational environmental performance among studied nursing personnel ($P = 0.00$), ($r = 0.54$).

VII. Discussion

Green intellectual capital has become more important to the healthcare organizations than ever before, due to the issue of employee turnover owing to layoffs, resignations, and retirement. Therefore, organizations should show respect to their employees greatly if they want to maintain their loyalty through the current economic downturn (*Atalla et al., 2024*).

Regarding the total perception of studied nursing personnel about green intellectual capital. The current study findings were clarified that three fifths of studied nurse managers had a positive perception about green intellectual capital with total score mean \pm SD 106.03 ± 16.96 regarding all dimensions of green intellectual capital. While two fifths of them had a negative perception. Furthermore, it was indicated that more than half of studied staff nurses had a positive perception about green intellectual capital with total score mean \pm SD 106.00 ± 31.08 regarding all dimensions of GIC, on the other hand, less than half of staff nurses had a negative perception.

The current study results were in harmony with the study by *Zaki et al., (2023)* who mentioned that the majority of studied head nurses had a high perception about green intellectual capital with total mean score 65.08 ± 6.78 for all dimensions of GIC, while the minority of them had a low perception. In addition, the present study results were on the same context as the study by *Al Issa et al., (2023)* who conducted the study in Iraq about "Green intellectual capital for sustainable healthcare: evidence from Iraq", who recorded that the total means of green intellectual capital measurements are available at a moderate level for all dimensions of green intellectual capital.



However, these results of the present study were in contrast with the studies by *Yusliza et al., (2020)* who conducted the study in Malaysia about "A Structural Model of the Impact of Green Intellectual Capital on Sustainable Performance". Who mentioned that the studied subjects had a limited knowledge and low perception level regarding green intellectual capital. From the researcher's point of view, these results might be due to the commitment of the hospital to develop their green image for their stakeholders by including the responsibilities related to environmental protection in job descriptions. Also, the environmental knowledge and skills of the nursing personnel are verified by the hospital management as reported by studied subjects.

Recently, organizations of different sectors are increasingly paying attention to minimizing the harmful environmental impacts of their activities, products and services. High organizational environmental performance requires organizational commitment to provide continuous improvement of environmental activates and implementing an environmental management system for balancing and combining economic, social and environmental interests (*Awatara et al., 2025*).

Regarding organizational environmental performance, the present study outcomes clarified that half of studied nurse managers had a high level of organizational environmental performance with a total score mean \pm SD 90.16 ± 14.20 . While the minority of them had a low level of OEP. Also, the current study outcomes revealed that less than half of staff nurses had a high level of organizational environmental performance total score mean \pm SD 87.39 ± 14.93 . While less than one fifth of them had a low level of OEP.

The current study results were supported by the study of *Yadav & Mathew., (2023)* who conducted the study in India about "Improving organizational sustainable performance of organizations through green training" who recorded high organizational environmental performance (OEP) with total score means \pm SD 3.84 ± 0.504 for studied subjects. In addition, the present study results were in the line with the study by *Wang et al., (2023)* who conducted the study in China, about "Exploring the multidimensional perspective of retail investors' attention: the mediating influence of corporate governance and information disclosure on corporate environmental performance in China", who demonstrated that, corporate environmental measures achieve about half of the desired environmental characteristics, with total score of means \pm SD (0.410 ± 0.219) .

Meanwhile, the results of the current study were in opposite of the study by *Abou-AL-Ross & Abu Mahadi, (2021)*, who illustrated a weak OEP perceived by studied subjects with total score of means \pm SD 4.34 ± 2.25 . From the researcher's point of view these results could be due to the presence of formal environmental strategies to assess the environmental performance of the hospital. Also, this could occur due to the management concerned with directing and instructing nursing personnel on how to improve their green performance to protect the environment and reduce pollution hazards. As well as the hospital management evaluates green performance levels perceived by the nursing personnel in order to meet the organizational environmental objectives.

Regarding the correlations between the personal data of studied subjects and different study variables, the current study findings demonstrated that there was a highly significant correlation between the perception of studied subjects about all green intellectual capital dimensions, organizational environmental performance and the studied subjects' age, gender, work department, and experience at current jobs with significant P-value.



These results of the present study were in harmony with the study by *Zaki et. al., (2023)* who revealed that a statistically significant relations were found between head nurses' age and years of experience with their perception of green intellectual capital. From the researcher's point of view, these results could be related to accumulated knowledge, skills, and deeper understanding of nursing personnel about the hospital processes by their experience. Also, this positive correlation revealed that the power of shared values and departmental culture regarding environmental protection can improve both green intellectual capital and organizational environmental performance.

On the other hand, the current study findings reported that there was a non-statistically significant correlation between the perception of studied subjects about all green intellectual capital dimensions and the studied subjects' neither job title in nursing nor level of education in nursing. These results of the present study were in harmony with the study by *Zaki et. al., (2023)* who found that no statistically significant relations were found between head nurses' educational levels with green intellectual capital. From the researcher's point of view, these results could be due to nursing personnel in the hospital receiving training programs to enhance their social responsibility and environmental performance regardless of their job titles or individual qualifications. However, from the researcher's point of view, nursing personnel with higher levels of education and superior job titles may have more authority to be a change agent and have more direct accesses to organizational resources that can increase their environmental performance.

Regarding the correlation between the perception of studied subjects about green intellectual capital and their organizational environmental performance level, the current study findings revealed that there was a highly significant positive correlation between perception of nursing personnel about GIC and OEP among studied nursing personnel. The present study findings agreed with the study by *Fatima et.al., (2023)* who revealed a positive correlation between green intellectual capital and environmental performance. On the same context, the results of the current study were supported by the study of *Al Issa et. al., (2023)* whose findings showed that only green human and relational capital boosting green environmental performance.

Therefore, the present study findings were on the same line with the study by *Wei et al., (2023)* that was conducted in Pakistan in the title "Role of green intellectual capital and top management commitment in organizational environmental performance and reputation: Moderating role of pro-environmental behavior", who reported a significant link between firm environmental performance and green intellectual capital with a highly significant t-value and p-values.

Moreover, the current study outcomes were aligned to the study by *Khan et. al., (2023)* who reported that GIC significantly mediates the association between GIC and EP. Also, in this sense, the present study findings were supported by the study of *Syahidun, (2023)* that was conducted in Indonesia, about "Strengthening Green Intellectual Capital for Corporate Sustainable Performance through Green Innovation", who showed a significantly positive effect of GIC on sustainable business, which could increase the competitive edge for organizations.

In the same context, the present study findings were agreed with the study of *Alnaim & Metwally., (2024)*, who conducted the study in Egypt, entitled in "Green Intellectual Capital and Corporate Environmental



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Performance: Does Environmental Management Accounting Matter?", who found that there is a positive and significant impact of all GIC components on Corporate Environmental Performance. Concurrently, the current study findings agreed with the study by *Haddawee, (2024)* which was conducted in Iraq in the title "Motion leadership strategies and their interactive impact on the relationship between green intellectual capital and sustainable organizational performance" who showed the existence of a significant and positive correlation between GIC and sustainable organizational performance.

Additionally, the outcomes of the present study were in harmony with the study by *Sarwar & Mustafa (2024)* that conducted in Pakistan and entitled in "Analyzing the impact of green intellectual capital on environmental performance: the mediating role of green training and development", who reported that GHC, GSC, represented positive P-values and positively linked with environmental performance. On the other hand, the present study findings were in opposite of the study by *Ullah et al. (2022)* who conducted the study in Pakistan to examine the association between "Green Intellectual Capital and Green Human Resource Management on Environmental performance where green innovation acted as the mediator in Pakistan manufacturing industries" and concluded that green intellectual capital does not have direct association with environmental performance.

In addition, the current study findings disagreed with the study by *Asiaei et. al., (2023)* which conducted in Iran, about "Green intellectual capital and ambidextrous green innovation: The impact on environmental performance", as its results demonstrated that green intellectual capital dimensions are not directly associated with environmental performance. From the researcher's point of view, it is indicated that nursing personnel with a positive perception regarding green intellectual capital more tend to demonstrate higher levels of organizational environmental performance in order to fulfill the organizational environmental goals as well as achieving competitive edge in the labor market.

In the light of limited research and studies specifically addressing the relationship between green intellectual capital and organizational environmental performance in nursing and healthcare, and the corresponding limited relevant literature, the researcher used findings from other fields to discuss the findings of the current study. This is necessary since it is a new area of research in healthcare. Finally, the researcher discussed the results that achieve the objectives of the present study through the assessment of green intellectual capital as perceived by nursing personnel, identified the organizational environmental performance level of studied nursing personnel, and found out the relationship between green intellectual capital and organizational environmental performance.

VIII. Conclusion

Based on the study findings of the current study, it was concluded that: three fifths of the studied nurse managers and more than half of staff nurses had a positive perception about green intellectual capital. Also, half of the studied nurse managers and less than half of the studied staff nurses had a high level of organizational environmental performance. Meanwhile, there was a highly significant positive correlation between perception of nursing personnel about green intellectual capital and organizational environmental performance with p-value= 0.00.



IX. Recommendations

Based on the current study the following recommendations are suggested:

- Design a clear environmental strategy in strategic planning to guide hospitals' environmental performance.
- Conduct a training program for nursing personnel about developing their green competencies in healthcare.
- Conduct more studies related to green intellectual capital and organizational environmental performance, to develop investment of these assets in a way that contributes to maximizing performance and achieving a competitive privilege of healthcare organizations.

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