Trustworthy Leadership and its Relation to Nurses' Creative Work Performance

Amina A. Mohamed[1,2], Heba K. Obeid[3], Amal H. Abou Ramadan[4], Marwa S. Sorour[5]

[1]Master student of Nursing Administration, Faculty of Nursing, Tanta University.

[2]Nursing supervisor at the Gharbia Health Directorate.

[3,4]Assistant Professor of Nursing Administration, Faculty of Nursing, Tanta University.

[5] lecturer of Nursing Administration, Faculty of Nursing, Tanta University.

Corresponding author: PG-139598@nursing.tanta edu.eg

Abstract

Background: Trustworthy leadership is often viewed as a crucial aspect of management that influences the level of nurses' commitment within healthcare organizations and have the ability to increase organizational effectiveness, satisfaction, and creative performance to achieve the organizational goals. **Aim:** To assess the trustworthy leadership and its relation to nurses' creative work performance. **Research design:** A descriptive correlation design was used. **Setting:** The study was conducted in El-Mahalla General Hospital affiliated to the Ministry of Health and Population. **Subjects**: included all (78) head nurses and all (716) nurses. **Tools**: Two tools were used to collected the data, Trustworthy Leadership Structured Questionnaire, and Creative Work Performance Questionnaire. **Results**: 82.1% of head nurses had a high level of total trustworthy leadership. While 63.1% of nurses had high perception levels regarding total head nurses' trustworthy leadership. 67.6% of nurses had a high level of total creative work performance. **Conclusion:** There was a statistically significant positive correlation between nurses' perception of head nurses' total level of trustworthy leadership and nurses' total creative work performance at El-Mahalla General Hospital. **Recommendations:** Conduct continuous in-service training for head nurses that boost the knowledge and skills of head nurses for trustworthy leadership values and nurses for creative performance. Involve more head nurses in decision-making to improve their perception of leadership qualities.

Keywords: Creative   Work   Performance,   Nurses,   Trustworthy   Leadership.

Introduction

Nurses are the most significant professionals in healthcare organizations. Nurses face several challenges, including a rise in the demand for their services, a decline in autonomy, a lack of peer support, and ineffective leaders **(Algeri et al., 2022)**. Nursing leaders create a work environment where nurses feel willing to share ideas, share feedback, and face errors without fear of consequences **(Lee & Dahinten, 2021)**.

Nursing leaders who can deal with errors and learn from others before creating decisions is known as trustworthy leaders **(Mondini et al., 2020)**. Such a leaders should possess a set of behaviors that promote ethical decision-making and other desirable psychological characteristics including a high level of self-awareness **(Adigüzel & Kuloğlu, 2019).**

Trustworthy leadership is an original style of leadership that encourages transparency in sharing knowledge to make decisions while allowing nurses' views (**Lee et al., 2019**). Trustworthy

leadership is defined as a style of leadership that creates and fosters both positive affective ability and a trusting environment (**Fateh et al., 2020**). Nursing leaders that show more truthful beliefs, ideas, preferences, experiences, and beliefs are seen as being more trustworthy (**Srivastava & Mohaley, 2022**).

Walumbwa et al., (2008) provided four structures for trustworthy leadership including; self-awareness, relational transparency, internalized moral perspective, and trustworthy behavior. Self-awareness refers to the understanding of a nurse leader his or her strengths and weaknesses and how they affect nurses.

Relational transparency refers to the degree to which a nurse leader is geared up to share information with nurses (**Miao et al., 2018**). Internalized moral perspective refers to a self-regulation system generated by internal moral values and principles that they strongly hold dear. Finally, trustworthy behavior; refers to making decisions truthfully after carefully examining pertinent data and information (**Wei et al., 2018**).

The trustworthy nurse leaders are concerned with the well-being of nurses, support justice, and treat nurses fairly based on their performance, as a result, the perception of support within healthcare organization will rise, which can positively affect the nurses' work performance and creativity (**Indrayanti & Ulfia, 2022**).

Creative work performance is described as a set of tasks for the generation, and realization of concepts for new technologies, processes, techniques, or products (**Liu, 2020**).

Creative work performance focuses on two components; idea generation and idea realization. Idea generation is defined as a creative behavior intended to find and provide fresh, unique ways and solutions to issues, including creative solutions to working methods and procedures (**Niazi &Arshad, 2022**).

Idea realization is implementing fresh concepts into novel goods or procedures within healthcare organization (**Battistell et al., 2022**). Idea realization is a social activity depends on the acceptance, involvement, and support of others. Nursing leaders can aid in discovering what works and allows nursing leaders to be open to change by fostering the emergence of new ideas (**Volery & Tarabashkina, 2021**).

Significance of study:

Nurses play an essential role in patient care and frequently face difficult and challenging situations that require them to come up with workable answers. Nurses must perform creatively to overcome these challenges and issues (**Narzary & Palo, 2023**). Trustworthy nursing leaders can help professional nurses to adapt their cognitive viewpoint and psychological capacity to a high level of uncertainty to engage in creative work, which is a difficult habit (**Ghazala & Elshall, 2021**). So, this study

aimed to assess trustworthy leadership and its relation to nurses' creative work performance.

Aim of the study

Assess the trustworthy leadership and its relation to nurses' creative work performance.

Research Questions:

What are the levels of head nurses' trustworthy leadership?

What are the levels of nurses' creative work performances?

What is the relation between head nurses' trustworthy leadership and nurses' creative work performances?

Method

Research design:

A descriptive correlation study design was used.

Setting:

The present study was conducted at El-Mahalla General Hospital affiliated to the Ministry of Health and Population, including intensive care units of general and pediatric, neonatal unit, operation departments, kidney dialysis unit, emergency units and inpatient departments.

Subjects: included two group, the subject included all (78) head nurses and all (716) nurses were working in the above-mentioned setting.

Tools: Two tools were utilized to achieve aim the study: -

Tool I: Trustworthy Leadership Structured Questionnaire:

This tool was developed by the investigator guided by **(Liu et al, 2021; Walumbwa et al, 2008).** It was used to assess head nurses' trustworthy leadership from the head nurses' and nurses' perspectives. It consisted of two parts as follow: **Part 1: Subjects' characteristics data**: It included age, sex, department, level of education, marital status, and years of experience.

Part 2: Head Nurses' Trustworthy Leadership Questionnaire:

It included 31 items divided into four domains includes: self-awareness (11 items), relational transparency (7 items), internal moral perspective (7 items) and trustworthy behavior (6 items).

Scoring system:

The nurses' and head nurses' responses were measured on a three points Likert Scale ranging from (1-3) as disagree =1, little agree = 2, and agree = 3. The total scores were summed up and classified into levels according to cut-off points :

- High trustworthy leadership ≥ 75%. Ranged between 93 - 70 of total score.
- Moderate trustworthy leadership 60 - <75%. Ranged between 70-56 of total score.
- Low trustworthy leadership < 60%. Less than 56 of total score.

Tool II: Creative Work Performance Questionnaire:

This tool was developed by the investigator guided by **(Mubarak & Noor, 2018; Zhou & George, 2001).** It was used to assess nurses' levels of performing creative work. Consisted of 32 items divided into two main domains: **idea generation** (16 items), and **idea realization** includes (16 items).

Scoring system:

The nurses' responses were measured on a three points Likert Scale ranging from (1-3) as disagree =1, little agree = 2, and agree = 3. The total scores were summed up and classified into levels according to cut-off points ⁚

- High creative work performance ≥ 75%. Ranged between 96 -72 of total score.
- Moderate creative work performance 60 - <75%. Ranged between 72 -58of total score.
- Low creative work performance < 60%. Less than 58 of total score.

Methods

Official permission was obtained from the dean of the Faculty of Nursing, Tanta University to responsible authorities in El-Mahalla General Hospital.

Ethical considerations: Approval of the Scientific Research Ethical Committee at the faculty of nursing Tanta University was obtained, code no. (37/3/2022).

- Nurses' and head nurses' consent for participation in the study was obtained after an explanation of the nature and purpose of the study. Participation in the study was voluntary, and subject assured that they had the right to withdraw at any stage and study didn't cause any harm.

Validity of tools:

Tools of data collection were tested by a jury of five experts in the nursing administration specialty to check the content validity of the study.

The expert's responses were reported on a four points Likert scale ranged from 4= strongly relevant to 1= not relevant.

Necessary modifications were done including clarification, omission of certain items adding others, and simplifying work-related words.

Face validity of tool (I) = 98.0%, and tool (II) = 96.0%.

pilot study: A pilot study was conducted on (10%) of the sample (79), they were excluded from the sample to test the tool for their clarity, applicability, feasibility, and necessary modifications were done based on the result.

Cronbach's Alpha test was used to test the reliability of tool (I) was 0.842, and tool (II) was 0.785.

Data collection phase: the data was collected from El-Mahalla General Hospital. The investigator met the head nurses and nurses in small groups during their work shifts in the morning and the afternoon shifts in the waiting area for their department to explain the aim of the study and distribute the questionnaire sheets to them. Head nurses and nurses recorded their responses in the presence of the investigator to ascertain whether their questions were answered.

The data were collected over six months from the first of August 2022 until the end of January 2023.

Results

Table (1): Shows subject' personal characteristics data. More than half (53.2%) of nurses fall in the age group 18- <30 with a mean age of 30.43±6.84. While around two-thirds (65.4%) of head nurses fall in the age group 40- <50 with a mean age of 43.24±5.06.   The majority (91.5%) of

nurses, as well as all (100%) head nurses were female. The highest percentage (24.3% and 25.8%) of nurses and head nurses were working in intensive care units, respectively. Regarding educational level; around half (45.8%) of nurses had Associate Degrees in Nursing and more than two third (69.2%) of head nurses had Bachelor's Degrees in Nursing. The majority (82.4% and 87.2 %) of nurses and head nurses were married, respectively. Nearly more than half (58.1%) of nurses had <10 years of experience with a mean of 8.75±6.89, and half (50 %) of the head nurses had 10- <20 years of experience with a mean (19.67±4.31).

Figure (1): Shows head nurses' and nurses' levels regarding total trustworthy leadership. More than eighty percentage (82.1%) of head nurses had a high level of total trustworthy leadership. While more than sixty percentage (63.1%) of nurses had high perception levels regarding total head nurses' trustworthy leadership, and more than one quarter (26.5%) had a moderate perception level.

Table (2): Shows head nurses' and nurses' levels of perception regarding head nurses' trustworthy leadership domains. There was a statistically significant difference between head nurses' and nurses' levels of perception regarding all head nurses' trustworthy leadership dimensions at p-value (<0.001) except for the relational transparency domain of trustworthy leadership. More than eighty percentage (84.6%, 84.6%, and 80.8%) of head nurses had a high level regarding trustworthy behavior, internalized moral perspective, and self-awareness

domains of trustworthy leadership, respectively.

While more than sixty percentage (64.4%, 64.0%, 63.4%, and 60.9%) of nurses had high perception levels regarding head nurses' relational transparency, internalized moral perspective, self-awareness, and trustworthy behavior domains of trustworthy leadership, respectively.

Figure (2): Nurses' levels of total creative work performance. More than two thirds (67.6%) of nurses had a high level regarding total creative work performance. While more than one quarter (26.5%) had a moderate level. Also, more than two thirds (68.7%, and 66.8%) had high levels regarding idea generation, and idea realization domains of creative work performance, respectively. While more than one quarter (27.5%, and 25.3%) of nurses had moderate levels regarding idea realization and idea generation domains of creative work performance, respectively.

Figure (3): Illustrates the correlation between total head nurses' trustworthy leadership and total nurses' perception of creative work performance. There was a statistically significant positive correlation between total head nurses' trustworthy leadership and total nurses' creative work performance at p-value <0.001*.

Figure (4): Illustrates the correlation between total trustworthy leadership and total creative work performance. There was a statistically significant positive correlation between total nurses' perception of trustworthy leadership and total nurses'

creative work performance at p-value <0.001**

Table (3): Shows a correlation between head nurses' trustworthy leadership and nurses' creative work performance. There was a statistically significant positive correlation between head nurses' trustworthy leadership all dimensions and nurses' creative work performance for all dimensions and in total at p-value <0.001*.

Table (1): subjects' personal characteristics data.

| Items	Nurses (N=716)		Head nurses(N=78)	
	N	%	N	%
Age				
18- <30	381	**53.2**	0	0.0
30- <40	264	36.9	19	24.4
40- <50	59	8.2	51	**65.4**
50 or more	12	1.7	8	10.3
Range Mean ± SD	20-52 30.43±6.84		34-56 43.24±5.06	
Sex				
Male	61	8.5	0	0.0
Female	655	**91.5**	78	**100.0**
Working Department				
General intensive care	174	**24.3**	20	**25.8**
Pediatric intensive care	53	7.4	4	5.1
Neonatal Unit	90	12.6	4	5.1
Operation Departments	110	15.4	15	19.1
Kidney Dialysis Unit	74	10.3	3	3.9
Emergency Units	67	9.4	14	17.9
Inpatient Departments	148	20.6	18	23.1
Level of education				
Secondary Degree in Nursing	83	11.6	0	0.0
Associate Degree in Nursing	328	**45.8**	0	0.0
Bachelor's Degree in Nursing	227	31.7	54	**69.2**
Postgraduate Studies	78	10.9	24	30.8
Marital Status				
Married	590	**82.4**	68	**87.2**
Not married	126	17.6	10	12.8
Year of Experiences				
<10	416	**58.1**	0	0.0
10- <20	235	32.8	39	**50.0**
20- <30	52	7.3	37	47.4
30 or more	13	1.8	2	2.6
Range Mean ± SD	0.33-36 8.75±6.89		10-32 19.67±4.31	
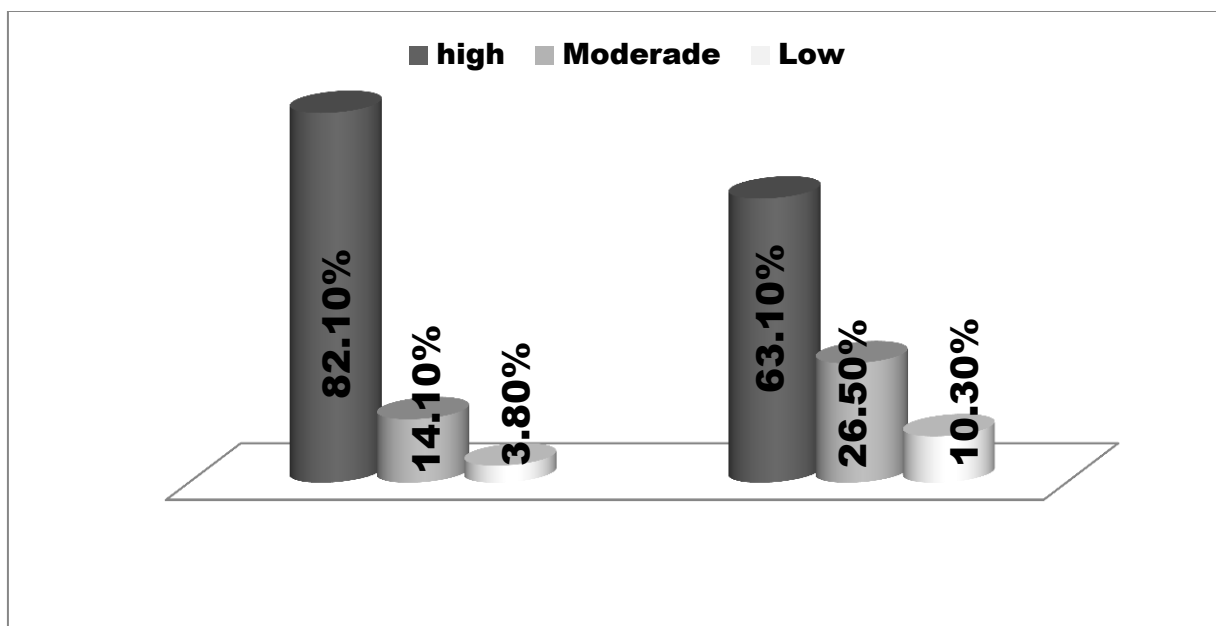
Figure (1): Head nurses' and nurses' levels regarding total trustworthy leadership

Table (2): Head nurses' and nurses' levels of perception regarding head nurses' trustworthy leadership domains.

Items of trustworthy leadership domains	Head Nurses (n= 78).						Nurses (n= 716).						Chi-square	
	High		Moderate		Low		High		Moderate		Low		X^2	P-value
	No	%	No	%	No	%	No	%	No	%	No	%		
Self-awareness	63	80.8	12	15.4	3	3.8	454	63.4	192	26.8	70	9.5	9.524	0.009*
Relational transparency	58	74.4	15	19.2	5	6.4	461	64.4	176	24.6	79	11.0	3.328	**0.189**
Internalized moral perspective	66	84.6	9	11.5	3	3.8	458	64.0	192	26.8	66	9.2	13.365	<0.001*
Trustworthy behavior	66	84.6	10	12.8	2	2.6	436	60.9	202	28.2	78	10.9	17.345	<0.001*

There was highly statistically significant at p-value <0.001, while just statistically significant at p-value <0.05*.
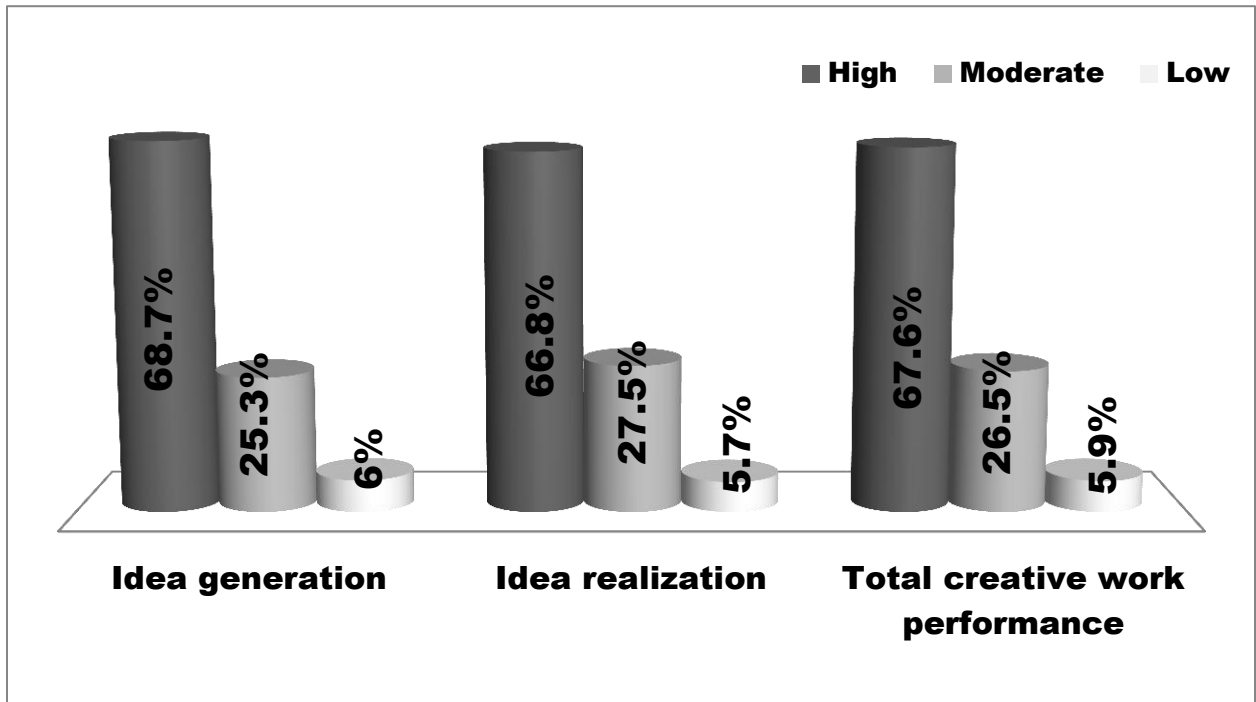
Figure (2): Nurses' levels of total creative work performance.
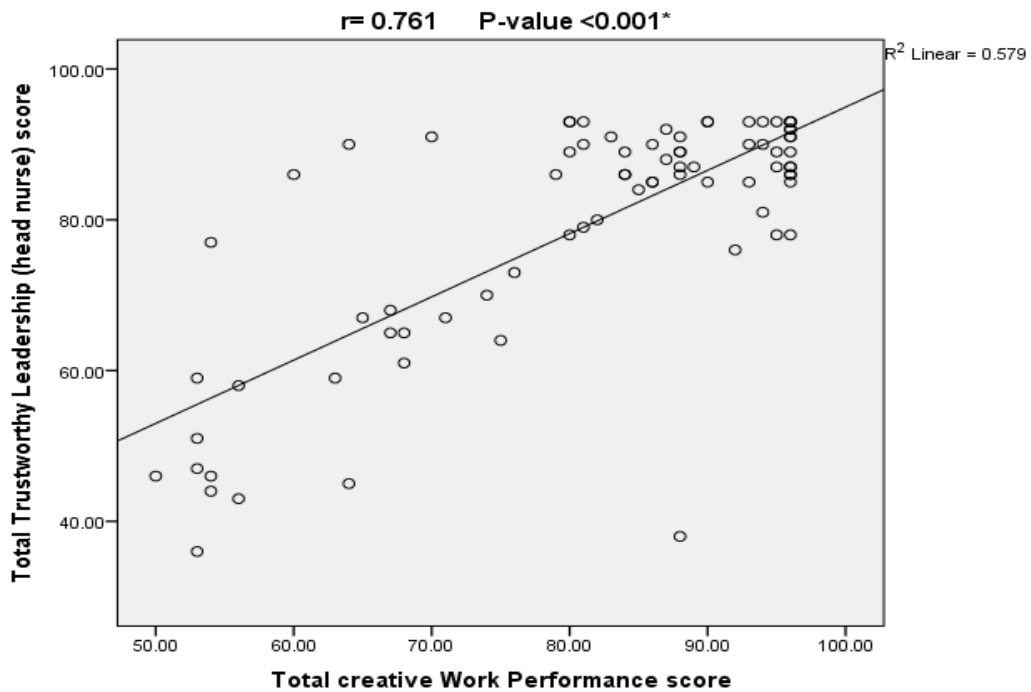

Figure (3): Correlation between total head nurses' trustworthy leadership and total nurses' creative work performance.
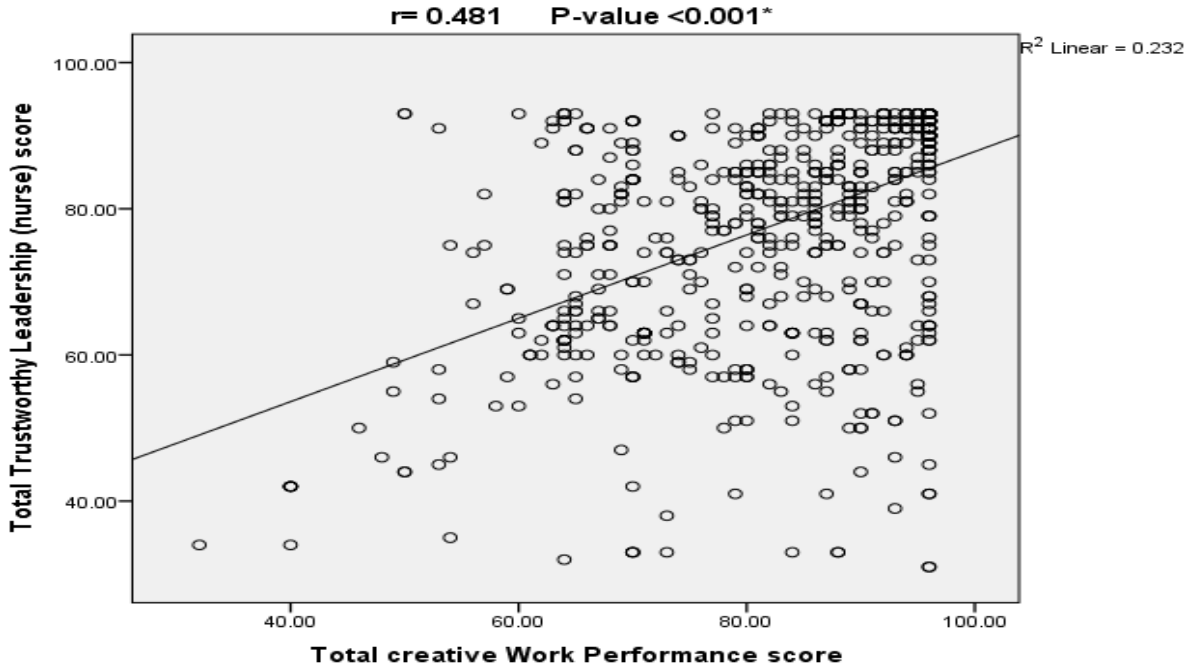
Figure (4) Correlation between total nurses' perception of trustworthy leadership and total nurses' creative work performance.

Table (3): Correlation between head nurses' trustworthy leadership dimensions and nurses' creative work performance dimensions.

Creative work performance domains / Trustworthy leadership domains	Idea generation		Idea realization		Total creative Work Performance	
	r	P-value	r	P-value	r	P-value
Self-awareness	0.378	<0.001*	0.425	<0.001*	0.445	<0.001*
Relational transparency	0.394	<0.001*	0.361	<0.001*	0.436	<0.001*
Internalized Moral perspective	0.388	<0.001*	0.405	<0.001*	0.456	<0.001*
Trustworthy behavior	0.394	<0.001*	0.420	<0.001*	0.441	<0.001*
Total Trustworthy Leadership	0.419	<0.001*	0.438	<0.001*	0.761	<0.001*

There was highly statistically significant at p-value <0.001*

Discussion

Correlation between head nurses' trustworthy leadership and creative work performance of nurses.

The result of the present study indicated that there was a statistically significant positive correlation between total head nurses' and nurses' perception of trustworthy leadership and total nurses' perception of creative work performance at El-Mahalla General Hospital. This is due to head nurses encourage transparency and share information and knowledge with their staff and participant nurses in decisions related to their work issues, which creates effective trusting environment that supporting creative work performance.

This result was supported by **Liu et al., (2023) and Novitasari et al., (2021),** found that perceived leader trust has a positive significant effect on the study subject work performance and innovation. Also, **Lakra & Sharma, (2021)** and **Javed et al., (2018),** found that creative work had positive correlation with trustworthy leader. In contrast. **Ogbeibu et al., (2021),** result founds there was a negative correlation between leader trustworthiness and staff creativity.

Head nurses' and nurses' total levels regarding trustworthy leadership.

In relation to head nurses' and nurses' total levels regarding trustworthy leadership the current study findings showed that more than eighty percentage of head nurses had a high level of total trustworthy leadership. While more than quarter of nurses had moderate perception levels regarding total head nurses' trustworthy leadership. This may

be due to majority of El-Mahalla General Hospital head nurses had high levels of trustworthy behavior, internalized moral perspective, and self-awareness domains of trustworthy leadership. But on the same time around thirty percentage of nurses had moderate levels of perception regarding trustworthy behavior domain of head nurses' trustworthy leadership domains.

This result goes in the same line with **Hadi-Moghaddam et al., (2021)** found that the high percentage of nurses trusted head nurses. While this finding was incongruent with the results of **Afsar & Masood, (2018) and Gholami et al., (2019),** reveled moderate levels of reported trust in managers by nurses.

The result of the current study regarding head nurses' trustworthy leadership domains showed that majority of head nurses had high level regarding trustworthy behavior, internalized moral perspective, and self-awareness domains of trustworthy leadership. While high percentage of nurses had high perception levels regarding head nurses' relational transparency, internalized moral perspective, self-awareness, and trustworthy behavior domains of trustworthy leadership. This may be due to around half of El-Mahalla General Hospital head nurses had between ten to more than twenty years of experience. So, they were more self-aware and more acquainted with the internalized workplace moral perspective.

This result goes in the same line with **Abderhaman et al., (2022)**, and **Alromeedy & Ozbek, (2022)**, found that the study subject had high level in the four dimensions include relational transparency, internalized moral

perspective, trustworthy behavior, and self-awareness of leader among the staff nurses. While this finding was incongruent with **Elsehrawy & Mohamed, (2023),** found that nurses had a moderate perception of four dimensions .

There was a statistically significant difference between head nurses' and nurses' levels of perception regarding all head nurses' trustworthy leadership dimensions except for the relational transparency domain of trustworthy leadership. This finding is consistent with **Wojtas et al., (2019)** who reported that relational transparency is the ability of leaders to communicate with others in transparent manner.

The result of the present study regarding total trustworthy leadership illustrated that around one fifth of head nurses had moderate and low level of total trustworthy leadership. This may be due to more than two third of head nurses only had bachelor's degree and didn't have opportunity to grow and continue their post graduate education. Also, more than one quarter of El-Mahalla General Hospital head nurses had moderate level of trustworthy behavior. This result goes in the same line with **Farghaly et al., (2019),** found more than one quarter of nurses had a moderate perception level regarding trust in the supervisors. While opposite with **Helaly & El Shaer, (2021),** found high percent of them were moderate regarding supervisor trust.

Nurses' levels regarding creative work performance.

Findings of the present study results revealed that more than two thirds of nurses had a high level regarding creative work performance, this may be due to more than half of nurses fall in the age group between eighteen and thirty years, which gives them an opportunity to grow their knowledge, skills, and competence and implement new ideas as sources of power. Also, more than thirty percentage of nurses had the opportunity to receive their university or post graduate education level.

Altaei & Muosa, (2023) and **Op den Kamp et al., (2020),** supported the study finding, and found that majority of participated nurses reported a high level regarding creative performance. **Miao & Cao, (2019),** found high-performance work is positively related to study subject creativity. On the opposite, the result of the current study was contradicted with **Rayan & Abdrabou, (2023)** and **Pont-Niclòs et al., (2022),** founds the majority of respondents had moderate total creativity level. And **Abdelrhaman & Ghoneimy, (2018),** found that the majority of staff nurses had low level of creativity in work .

The result of the current study regarding creative work performance domains revealed that more than two thirds of nurses had high levels regarding idea generation, and idea realization domains of creative work performance. These findings may be due to high percentage of nurses work actively in a group setting with acknowledging take chances, express their opinion, impose new ideas within hospital and able to deal with environmental challenges. **Mohammed & Mostafa, (2023),** supported the study finding, and found that staff nurses' perception had

high levels regarding idea generation, and idea realization domains .

Conclusion

Based on the findings of the present study it was concluded that:

there was a statistically significant positive correlation between nurses' perception of head nurses' total level of trustworthy leadership and nurses' total creative work performance at El-Mahalla General Hospital. Majority of head nurses had a high level of total trustworthy leadership. While more than sixty percentage of nurses had high perception levels regarding total head nurses' trustworthy leadership. More than two thirds of nurses had a high level of total creative work performance.

Recommendations

In the light of the finding obtained from the present study, the following recommendations were suggested:

For hospital administration:

- Conduct continuous in-service training for head nurses that boost the knowledge and skills of head nurses for trustworthy leadership values and nurses for creative performance .

- Involve more head nurses in decision-making to improve their perception of leadership qualities .

- Cultivate an atmosphere of confidence, and a culture of organizational loyalty for encourage nurses to find creative solution to work issue.

For head nurses:

- Provide support to nurses through honest interaction, creative problem-solving, and shared decision-making.

- Provide immediate feedback on the performance of their nurses, hold open discussions about results, utilize it instead of placing blame objectively.

For nurses:

- Attend educational programs about creative work performance.

For further research:

Detect the possible mediating variable as psychological capital or creative self-efficacy that enhance the nurses creative work performance.

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