

# Relationship between Nurses' Emotional Intelligence and Their Organizational Citizenship Behaviors

Nahed Samir kozmel<sup>1</sup>, Reem Mabrouk Abd El Rahman<sup>2</sup>, Wafaa Hassan Mostafa<sup>3</sup>

<sup>1</sup>Nurse Specialist, Directorate of Health Affairs, El-Beheira, Egypt

<sup>2</sup>Professor of Nursing Administration, Faculty of Nursing, Damanhour University, El-Beheira, Egypt.

<sup>3</sup>Assistant professor of Nursing Administration, Faculty of Nursing, Damanhour University, El-Beheira, Egypt.

DOI: <https://doi.org/10.5281/zenodo.8321297>

Published Date: 06-September-2023

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**Abstract:** Emotional Intelligence (EI) has been related to a number of positive work outcomes including organizational citizenship behaviors (OCBs). It seems that organizational behavior of each nurse is strongly influenced by EI. **Aim:** To determine the relationship between nurses' EI and their organizational citizenship behaviors. **Methods:** A descriptive, correlational research design was utilized in all inpatient medical, surgical and critical care units at Kafr El-Dawar General hospital, El-Beheira, Egypt, for all staff nurses who will be available at the time of data collection. **Tools:** two tools were used: Tool I: Wong and Law EI Scale (WLEIS) and a demographic characteristics data sheet; Tool II: Organizational Citizenship Behavior (OCB) Scale. **Results:** Staff nurses have moderate mean percent score of total EI and have high mean percent score of total OCB. Also, there are positive highly significant relationships between total EI and its dimensions and total OCB and its dimensions. **Conclusion:** there was highly statistically positive relationship between total EI of the nurses and their organizational citizenship behaviors at Kafr El-Dawar General hospital. **Recommendations:** Study the impact of managers' leadership style on nursing staff perception of OCB.

**Keywords:** Emotional Intelligence, Organizational Citizenship Behavior, WLEIS.

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## 1. INTRODUCTION

Nurses often deal with their own personal emotions; as well as the patient's emotions that demand a large amount of EI to effectively communicate and provide care. <sup>(1)</sup> EI is defined, by Wong and law, (2002) <sup>(2)</sup> as: "a set of abilities that a person uses to understand, regulate, and make use of his or her own emotion." According to Hein,(2007) <sup>(3)</sup> EI is: "the innate potential to feel, use, communicate, recognize, remember, describe, identify, learn from, manage, understand and explain emotions". Singh,(2015) <sup>(4)</sup> also stated that, EI is: "the ability to identify, understand and manage emotion in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges and defuse conflict".

According to Wong, Law and Wong, (2004) <sup>(5)</sup> EI is classified into four main dimensions: Self-Emotions Appraisal (SEA), Others-Emotions Appraisal (OEA), Use Of Emotion (UOE) and Regulation Of Emotion (ROE). First, SEA relates to the individual's ability to understand deep emotions and express these emotions to others. Second, OEA refers to the ability to perceive and understand the emotions of those surrounding them. Third, UOE is the ability of a person to make use of one's emotions by using the emotions towards constructive activities and personal performance. Lastly, ROE is the ability to regulate one's emotions.

Bar-on (2010) <sup>(6)</sup> clarified that EI helps nurses to manage and understand their own emotions and other members' emotions, communicate effectively, enhance sound decision making, be sufficiently optimistic, positive and self-motivated. Consequently, EI improve their job satisfaction and impacts positively on their performance. <sup>(7)</sup> Organizational Citizenship Behaviors (OCB) is a broad term that refers to distinct behaviors that promote good organizational or business health despite not being explicitly included in job description. <sup>(8)</sup> It is defined as: "behaviors that exceed their contractual obligations and extend beyond the call of duty". <sup>(9)</sup> It also allows for the organization to operate smoothly and efficiently because the nurses are willing to do tasks that need to be done, thus allowing supervisors to allocate resources to other places in need. <sup>(10)</sup> It is important, especially in nursing profession, as it serve as an effective mean of coordinating activities between team members, increase group cohesiveness that makes the more experienced nurses help the less experienced ones to solve work related problems. <sup>(11)</sup> When this behavior continues, it enhances the hospital's ability to attract and retain nurses, and decrease turnover. <sup>(12)</sup> Moreover, OCB increase nurses loyalty, commitment and satisfaction which improve nurse's ability to adapt with hospital rules, regulation and policy. <sup>(13)</sup>

**Aim of the study:** Determine the relationship between nurses' EI and their organizational citizenship behaviors at Kafr El-Dawar General hospital.

**Research question:** What is the relationship between nurses' EI and their organizational citizenship behaviors at Kafr El-Dawar General hospital?

## 2. MATERIALS AND METHODS

**Research design:** A descriptive, correlational research design was used to conduct this study.

**Setting:** This study was conducted in all inpatient medical and surgical units and Intensive Care Units (ICU) at Kafr El-Dawar General Hospital (N=22). The hospital is considered the second largest hospital at El-Beheira Governorate affiliated to the Ministry of Health and Population (MOHP), with bed capacity (278). It is classified as: (1) *Medical units* (N=7), namely: medical, coronary, pediatrics, hematemesis, obstetrics and gynecology, burn and urology units; (2) *Surgical units* (N=6), namely: general surgery (A and B), orthopedics, ear, nose and throat, neuro-surgery, and vascular; (3) *Intensive care units* (N=9), namely: general ICU, pediatric, neonatal, neuro-surgery, coronary care unit, kidney dialysis, toxicology, eclampsia and burn.

**Subjects:** All staff nurses, who were available at the time of data collection at the previously mentioned settings and with at least one year of experience, were included in the study. (N=270).

**Tools:** Two tools were used to conduct this study:

### **Tool I: Wong and Law EI Scale (WLEIS)**

It was developed by Wong and Law <sup>(5)</sup> to measure nurses' EI. It includes 16 items grouped into four main dimensions, namely: self-emotion appraisal (4-item); others' emotion appraisal (4-item); use of emotion (4-item); and regulation of emotion (4-item). Responses were measured on a 5-point Likert scale ranged from (1) strongly disagree to (5) strongly agree. The overall score ranged from (16-80). Scores were low (16-< 32); moderate (32- < 48); and high (48-80).

### **Tool II: Organizational Citizenship Behaviors (OCB) Scale:**

It was developed by Smith et al. <sup>(14)</sup> and modified by LePine et al. <sup>(15)</sup> to measure nurses' organizational citizenship behaviors. It consists of 24 items covering the five dimensions of OCB, namely: altruism (5-item); conscientiousness (5-item); courtesy (5-item); sportsmanship (5-item); and civic virtue (4-item). Responses were measured on a 5-point Likert scale ranging from (1) never to (5) almost always. The overall score ranged from (24-120). Scores were low (24-< 48); moderate (48- < 72); and high (72-120).

In addition, demographic data sheet was developed by the researcher, to elicit demographic data related to: working unit, age, gender, educational qualification, years of nursing and unit experiences and marital status.

## **II- Methods**

1. An official permission was obtained from the Dean of Faculty of Nursing, Damanhour University and the responsible authorities of the study settings after explanation of the purpose of the study.

2. The two tools were translated into Arabic language and were tested for its content validity and translation by five experts from the field of the study. Accordingly, the necessary modifications were done.
3. The two tools were tested for its reliability. The reliability of the two tools was tested statistically using Cronbach’s Alpha Coefficient test, where Wong and law EI Scale ( $\alpha=0.819$ ) and Organizational Citizenship Behaviors Scale ( $\alpha=0.887$ ); which indicating very good reliability.
4. A pilot study was carried out on (10%) of total sample size (n=27), that was not included in the study sample; in order to test the wording of the questions, the clarity and feasibility of the tools; to estimate the average time needed to collect the necessary data and identify obstacles and problems that may be encountered during data collection. Based on the findings of the pilot study, no modifications were done.
5. Data collection was conducted from staff nurses, by the researcher through hand-delivered questionnaires after individualized interview with each one for about (5) minutes to explain the aim of the study and the needed instructions were given before the distribution of the questionnaire in their settings. Every subject took from 15 to 20 minutes to fill out the two tools. Data collection took a period of three months starting from the beginning of December 2019 to the end of February 2020.

**Ethical Considerations:**

- The research approval was obtained from the ethical committee at the Faculty of Nursing-Damanhour University, prior to the start of the study.
- An informed written consent was obtained from the study subjects after explanation of the aim of the study.
- Privacy, anonymity and right to refuse to participate or withdraw from the study were assured during the study.
- Confidentiality and anonymity regarding data collected was maintained.

**3. RESULTS**

**Demographic characteristics of staff nurses, working at Kafr El-Dawar General Hospital.**

Table (1) shows that, the mean  $\pm$ SD of staff nurses’ age was (31.04 $\pm$ 7.57) years. Above half of staff nurses (50.4%) had 20 to less than 30 years old. Concerning working units, less than half of staff nurses (46.3%) are working in intensive care units. Regarding gender, the majority of staff nurses (90.0%) were female. In relation to educational qualification 41.4% of them had Bachelor of Nursing Sciences. Pertaining to years of nursing experience, more than half of staff nurses (56.3%) had less than 10 years of the same experience, with mean  $\pm$ SD (9.82 $\pm$ 7.30). According to years of unit experience, more than half (50.7%) of staff nurses had less than 5 years, with mean  $\pm$ SD (6.56 $\pm$ 6.51).

**Table (1): Demographic characteristics of staff nurses, working at Kafr El-Dawar General Hospital (N=270).**

Demographic characteristics	Staff nurses (No.=270)	
	No.	%
<b>Age (years)</b>		
20-	136	50.4
30-	98	36.3
$\geq 40$	36	13.3
<b>Mean <math>\pm</math>SD</b>	<b>31.04<math>\pm</math>7.57</b>	
<b>Working unit</b>		
Medical	98	36.3
Surgical	47	17.4
Intensive and Critical care	125	46.3
<b>Gender</b>		
Male	27	10.0
Female	243	90.0

Educational qualification		
Bachelor of Nursing Sciences	111	41.1
Diploma of Technical Institute of Nursing	107	39.6
Diploma of Secondary Nursing School	52	19.3
Years of Nursing experience		
<10	152	56.3
10-	88	32.6
≥ 20	30	11.1
<b>Mean± SD</b>	<b>9.82±7.30</b>	
Years of unit experience		
<5	137	50.7
5-	69	25.6
≥ 10	64	23.7
<b>Mean± SD</b>	<b>6.56±6.51</b>	

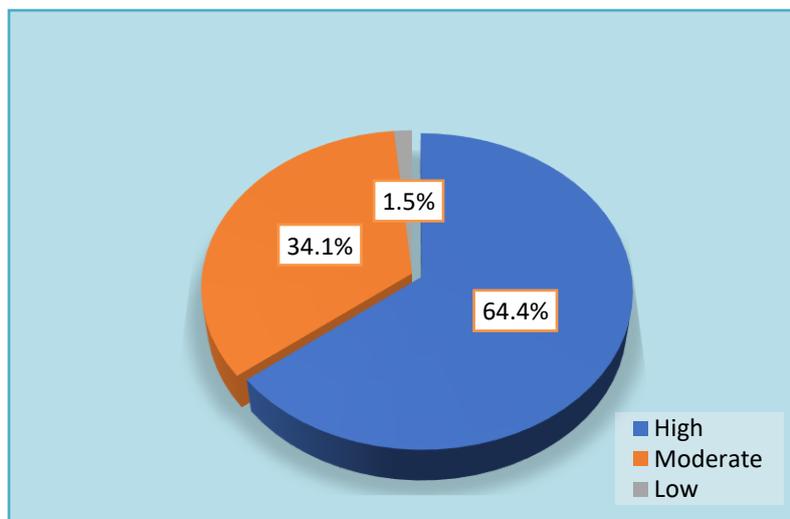
**Mean scores of EI, among staff nurses, working at Kafr El-Dawar General Hospital.**

Table (2) indicates that the Mean ±SD of staff nurses regarding to total EI was (59.43±9.21). The first dimension was use of emotion with Mean ±SD (15.41±2.73); whereas the last dimension was regulation of emotion with Mean ±SD (13.76±3.18).

**Table (2): Mean scores of EI, among staff nurses working at Kafr El-Dawar General Hospital. (N = 270).**

EI dimensions	Min	Max	Mean ±SD
self-emotion appraisal	7	20	15.18 ±2.65
Others' emotion appraisal	6	20	15.06 ±2.74
Use of emotion	8	20	15.41 ±2.73
Regulation of emotion	5	20	13.76 ±3.18
<b>Total EI</b>	<b>26</b>	<b>80</b>	<b>59.43 ±9.21</b>

Figure (1) illustrates that about two thirds (64.4%) of staff nurses got high level of total EI; compared to above one third of them (34.1%), who got moderate score.



**High ≥75%      Moderate 50-< 75%      Low <50%**

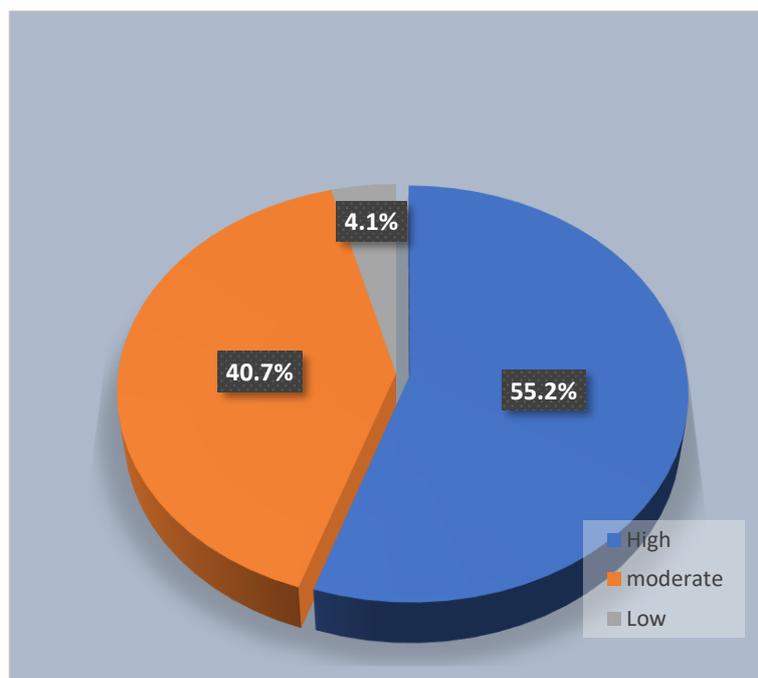
**Figure (1): Distribution of total EI, among staff nurses working at Kafr El- Dawar General Hospital (N = 270).**

Mean scores of organizational citizenship behaviors, among staff nurses working at Kafr El-Dawar General Hospital according to their. Table (3) states that the Mean  $\pm$ SD score of staff nurses regarding to total organizational citizenship behaviors was  $85.8 \pm 13.79$ . The first dimension was courtesy with Mean  $\pm$ SD  $20.33 \pm 4.64$ ; whereas last dimension was Civic virtue with Mean  $\pm$ SD  $12.66 \pm 4.23$ .

**Table (3) Mean scores of organizational citizenship behaviors, among staff nurses working at Kafr El-Dawar General Hospital. (N =270).**

Organizational Citizenship Behaviors (OCB) dimensions	Min	Max	Mean $\pm$ SD
Altruism	5	25	19.94 $\pm$ 4.26
Conscientiousness	7	25	18.77 $\pm$ 3.77
Civic virtue	4	20	12.66 $\pm$ 4.23
Courtesy	8	25	20.33 $\pm$ 4.64
Sportsmanship	5	25	14.29 $\pm$ 4.94
<b>Total OCB</b>	<b>29</b>	<b>120</b>	<b>85.8 <math>\pm</math>13.79</b>

Figure (2) shows that above half of staff nurses (55.2%) got high level of total organizational citizenship behaviors; compared to 40.7% of them got moderate level. Where, 4.1% of them got low level.



**High  $\geq 75\%$       Moderate 50- <75%      Low <50%**

**Figure (2): Distribution of total organizational citizenship behaviors, among staff nurses working at Kafr El-Dawar General Hospital (N=270).**

**Relationship between staff nurses’ demographic characteristics and their EI, working at Kafr El- Dawar General Hospital.**

Table (4) illustrates that there are high statistical significant relationships between both years of nursing and unit experience and total EI where (P=0.004, 0.002), respectively. Moreover, there are statistical significant relationships between age, working unit, gender, educational qualification and total EI, where (P=0.021, 0.021, 0.014, 0.04), consecutively. On the other hand, there is no statistical significant relationship between marital status and total EI.

**Table (4) Relationship between staff nurses’ demographic characteristics, working at Kafr El-Dawar General Hospital and their EI (N =270).**

Staff nurses’ Demographic characteristics		EI						Total (N=270)		X <sup>2</sup>	P-Value
		High (N=174)		Moderate (N=92)		Low (N=4)					
		No.	%	No.	%	No.	%	No.	%		
Age (year)	20-30	106	60.9	30	32.6	0	0.0	136	50.4	12.65	.021*
	30-40	68	39.1	30	32.6	0	0.0	98	36.3		
	≥ 40	0	0.0	32	34.8	4	100	36	13.3		
Working unit	Medical	59	33.9	37	40.2	0	0.0	98	36.3	11.91	.021*
	Surgical	25	14.4	20	21.7	0	0.0	47	17.4		
	intensive care	90	51.7	35	38.1	4	100	125	46.3		
Gender	Male	7	4.1	17	18.4	0	0.0	27	10.0	8.42	.014*
	Female	167	95.9	75	81.6	4	100	243	90.0		
Educational qualification	Bachelor of Nursing Sciences	65	37.3	46	50	0	0.0	111	41.1	10.98	0.04*
	Diploma of Technical Institute of Nursing	73	42	33	35.9	1	25	107	39.6		
	Diploma of Secondary Nursing School	36	20.7	13	14.1	3	75	52	19.3		
Years of nursing experience	<10	92	52.9	60	65.2	0	0.0	152	56.3	16.98	.004**
	10-20	68	39.1	20	21.7	0	0.0	88	32.6		
	≥ 20	14	8	12	13.1	4	100	30	11.1		
Years of experience in the unit	<10	87	50	50	54.3	0	0.0	137	50.7	17.25	.002**
	10-20	50	28.7	19	20.7	0	0.0	69	25.6		
	≥ 20	37	21.3	23	25	4	100	64	23.7		
Marital status	Single	27	15.5	27	29.3	0	0.0	54	20.0	9.317	.157
	Married	137	78.7	60	65.2	4	100	201	74.4		
	Divorced	8	4.6	3	3.3	0	0.0	11	4.1		
	Widow	2	1.2	2	2.2	0	0.0	4	1.5		

\* Significant at P ≤ 0.05. \*\* Highly significant at P ≤ 0.01. High ≥75% Moderate 50-< 75% Low <50%

**Relationship between staff nurses’ demographic characteristics and their organizational citizenship behaviors, working at Kafr El-Dawar General Hospital.**

Table (5) shows that there are high statistical significant relationships between both years of nursing and unit experience and total OCB where (P=0.004, 0.002), respectively. Moreover, there are statistical significant relationships between age, working unit, educational qualification and total OCB, where (P=0.021, 0.021, 0.04), respectively.

**Table (5): Relationship between staff nurses’ demographic characteristics working at Kafr El-Dawar General Hospital and their Organizational Citizenship Behaviors (N=270).**

Staff nurses Demographic characteristics		Organizational Citizenship Behaviors						Total (No.=270)		X <sup>2</sup>	P-Value
		High (No.=149)		Moderate (No.=110)		Low (No.=11)					
		No.	%	No.	%	No.	%	No.	%		
Age (year)	20-<30	86	57.7	48	43.6	2	18.2	136	50.4	12.65	.021*
	30-<40	60	40.3	33	30	5	45.4	98	36.3		
	≥ 40	3	2	29	26.4	4	36.4	36	13.3		
Working unit	Medical	53	35.6	45	40.9	0	0.0	98	36.3	11.91	.021*
	Surgical	19	12.7	28	25.5	0	0.0	47	17.4		
	intensive care	77	51.7	37	33.6	11	100	125	46.3		

Gender	Male	15	10.1	7	6.4	5	45.5	27	10.0	5.87	.053
	Female	134	89.9	103	93.6	6	54.5	243	90.0		
Educational qualification	Bachelor of Nursing Sciences	63	42.3	48	43.6	0	0.0	111	41.1	10.98	.040*
	Diploma of Technical Institute of Nursing	60	40.3	45	40.9	2	18.2	107	39.6		
	Diploma of Secondary Nursing School	26	17.4	17	15.5	9	81.8	52	19.3		
Years of Nursing experience	<10	80	53.7	72	65.4	0	0.0	152	56.3	16.98	.004**
	10-<20	55	36.9	31	28.2	2	18.2	88	32.6		
	≥ 20	14	9.4	7	6.4	9	81.8	30	11.1		
Years of unit experience	<5	77	51.7	60	54.5	0	0.0	137	50.7	17.25	.002**
	5-<10	40	26.8	28	25.5	1	9.1	69	25.6		
	≥ 10	32	21.5	22	20	10	90.9	64	23.7		

\* Significant at P ≤ 0.05. \*\* Highly significant at P ≤ 0.01. High ≥75% Moderate 50- >75% Low <50%

**Correlation Matrix between EI and organizational citizenship behaviors among staff nurses, working at Kafr El-Dawar General Hospital.**

Table 6 states that there are positive highly statistical significant correlation between total EI and all its dimensions and between total organizational citizenship behaviors and all its dimensions, where (P=0.000). Moreover there are positive highly statistical significant correlations between all EI dimensions and majority of OCB dimensions, where (P=0.000).

Additionally, there are positive statistical significant correlations between self-emotion appraisal and altruism, and between total EI and sportsmanship, where (P=0.010, 0.022), respectively. On the other hand, there were no statistical significant correlations between civic virtue dimension and all the EI and OCB dimensions; as well as, between sportsmanship and self-emotion appraisal, others emotion appraisal and civic virtue, where (P>0.05).

**Table (6): Correlation Matrix between EI (EI) and Organizational Citizenship Behaviors (OCB), among staff nurses working at Kafr El-Dawar General Hospital (N=270).**

EI dimensions		OCB dimensions										
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Self-emotion appraisal (1)	R	1	.730	.465	.554	.836	.156	.249	.045	.207	.020	.167
	P		.000**	.000**	.000**	.000**	.010*	.000**	.457	.001**	.748	.006**
Others' emotion appraisal (2)	R		1	.482	.545	.840	.214	.252	.023	.211	.027	.211
	P			.000**	.000**	.000**	.000**	.000**	.704	.000**	.663	.000**
Use of emotion (3)	R			1	.520	.754	.320	.305	.057	.200	.165	.314
	P				.000**	.000**	.000**	.000**	.352	.001**	.007**	.000**
Regulation of emotion (4)	R				1	.823	.226	.304	.047	.165	.222	.293
	P					.000**	.000**	.000**	.442	.007**	.000**	.000**
Total EI (5)	R					1	.282	.342	.027	.239	.139	.305
	P						.000**	.000**	.660	.000**	.022*	.000**
Altruism (6)	R						1	.610	.107	.448	.344	.757
	P							.000**	.079	.000**	.000**	.000**
Conscientiousness (7)	R							1	.109	.596	.428	.815
	P								.075	.000**	.000**	.000**
Civic virtue (8)	R								1	.024	.107	.415
	P									.689	.078	.000**
Courtesy (9)	R									1	.159	.645
	P										.009**	.000**
Sportsmanship (10)	R										1	.659
	P											.000**
Total OCB (11)	R											1
	P											

\* Significant at P ≤ 0.05. \*\* Highly significant at P ≤ 0.01 Interpretation of (r) values Weak (0.1< 0.25) Moderate (0.25- 0.75) Strong (0.75 - 0.99) Perfect correlation (1)

#### 4. DISCUSSION

The findings of the present study revealed that, total EI and its four dimensions, namely: use of emotion, self-emotion appraisal, others' emotion appraisal and regulation of emotion got moderate mean percent score. This could be explained that, the nurses have the ability to: recognize their own emotions, be adaptable and flexible in handling changes, monitor others' feelings & emotions and discriminate among them. Also, use this evaluation to guide their thinking and actions. This finding also showed that, the nurses could control their emotions well, avoid bad emotions, and use effective emotional information to deal with problems rationally in order to achieve the goals they wanted to achieve.

This finding is consistent with Linda (2010) <sup>(16)</sup> who reported that, emotionally intelligent persons have the ability to take work related decisions, communicate respectively with others, regulate self and others emotions, respond with empathy to build trustful relationships and control over the stressful situations. Wassif (2016) <sup>(17)</sup> indicated that, study subjects have a proficient level in all components of EI.

Additionally, the result of this study in the same line with Mahmoud (2013) <sup>(18)</sup> and Abdallah & Mostafa (2021) <sup>(19)</sup> who found that, their study subjects perceived moderate level of EI; they argued that this moderate level of EI can help nurses to be effective in dealing with daily work demands. Also, they suggested that this moderate level may be due to the more information, practice of nursing and involvement with different types of patients which fuel the subjects with wide varieties of emotional experiences. On the other hand, Awad and Ashour (2020) <sup>(20)</sup> clarified that; nurses' perceived low mean percent score of EI and all its dimensions.

Regarding to use of emotion dimension it was the highest subscale and got high score among nurses followed by self-emotion appraisal, others' emotion appraisal; and finally, the least dimension was regulation of emotion (ROE). This finding was in the same line with George (2000) <sup>(21)</sup> who found that use of emotion dimension was the highest dimension.

This result was in agreement with Holbery (2014) <sup>(22)</sup>, Shanta and Gargiulo (2014) <sup>(23)</sup> who stated that, proper use of emotions can help the nurses to build empathetic interpersonal relationships, make them self-motivated and try to do the best to achieve appropriate goal-directed behavior. This result contradicted with Morse (2001), <sup>(24)</sup> and Awad and Ashour (2020) <sup>(20)</sup> who found that the highest mean percent score of EI is related to self- emotion appraisal dimension.

Regarding to regulation of emotion dimension it was the least EI dimensions. This may be due to sometimes nurses have no ability to treat their own emotions, control their feelings well, stay away from terrible feelings, and un able to utilize successful passionate data to manage issues carefully to accomplish the goal they needed to accomplish. On the other hand, Soto-Rubio, Giménez-Espert and Prado-Gascó (2020) <sup>(25)</sup> found that, the highest dimensional score was ROE.

According to Lim(2018) <sup>(26)</sup> who stated that emotionally intelligent nurses can better meet others' demands and expectations by grasping their emotions and they are more likely to seek efficient alternatives instead of being frustrated through encouraging themselves to do their best, even when experiencing negative emotions. Wong and Low (2004) <sup>(5)</sup> stated that, emotionally intelligent individuals who are able to recognize others' emotions are adaptable and flexible in handling change. They have the ability to monitor others' feelings and emotions, discriminate among them, and use this evaluation to guide their thinking and actions also, they have the ability to monitor others' feelings and needs and act accordingly to meet those needs.

The present study illustrated that about two thirds of nurses got high level of total EI. This may be due to that, the awareness of nurses' own and others' emotions enables them to establish sound interpersonal relationships with others. Nurses with high level of EI had the ability to recognize and understand what their emotions are and know how to apply them in improving their relationships and have frequent interactions with patients, families and colleagues, this interactions fuel them with wide varieties of emotional experiences that make them understand owns and others' emotions correctly and keep themselves quiet down rapidly when they become upset. This result congruent with Sharif et al. (2013) <sup>(27)</sup> who suggested that, nurses with higher levels of EI were more likely to successfully deal with the stressors that a demanding career entailed on a daily basis and nurses have good understanding, managing, control and regulate their emotion. This result contradicted with Awad and Ashour (2020) <sup>(20)</sup> who showed that, low level of EI, high degree of moral distress, moderate work engagement among nurses.

### Organizational citizenship behaviors

The present study illustrated that, staff nurses perceived high mean percent score for total organizational citizenship behaviors; as well as for courtesy, altruism and conscientiousness. Whereas sportsmanship and civic virtue got have the least mean percent score. This may be related to willingness of the nurses to help their peers who have been absent, ready to lend a helping hand to those who have work related problems and heavy work load; they also work extra hours and ready to orient new colleagues.

This result is parallel with Kamel, Mahfouz and Aref (2019) <sup>(28)</sup> who investigated the relationship between organizational justice and organizational citizenship behavior among staff nurses. They exhibit that, staff nurses' perception toward organizational citizenship behaviors had high mean percent score due to, the close relationship between nurses' colleagues in the hospital; helping each other who have weighty responsibility, they also do the best of them to follow hospital rules and regulations.

Regarding to courtesy dimension it had the highest mean percent score of OCB dimensions. This finding may be due to that, nurses try to prevent problems with other peers, respect their colleagues' rights and they are aware of their behaviors' consequences on the others.

This finding is in the same line with Abd El-Helium (2018) <sup>(30)</sup> who stated that the majority of staff nurses had high mean percent score of courtesy. Also, Kamel, Mahfouz and Aref (2019) <sup>(29)</sup> clarified that, the highest mean percentage of staff nurses perception was related to courtesy. Their findings could due to that, staff nurses tries to avoid creating problems for coworkers and considers the impact of their behaviors on colleagues. While yaghoubi et al. (2012), <sup>(31)</sup> taghinezhad et al. (2015) <sup>(32)</sup> and Jafarpanah and Rezaei (2020) <sup>(33)</sup> showed that, the OCB of nurses in dimensions of courtesy had the lowest mean percent score.

The present study showed that the lowest mean percent score is related to civic virtue. This finding may indicate low nurses' interest in participating in organizational affairs. It is recommended that nursing managers focus more on these dimensions, identify the factors that decrease these behaviors, and take appropriate management measures to promote this group of OCB. This result is similar to yaghoubi et al. (2012), <sup>(31)</sup> taghinezhad et al. (2015) <sup>(32)</sup> and Jafarpanah and Rezaei (2020) <sup>(34)</sup> their finding showed that, the OCB of nurses in dimensions of civic virtue had the lowest percentage scores.

In relation to total OCB levels, more than half of the nurses in the present study got high level of total OCB. This may be due to the presence of helping behaviors between the nurses. The nurses contribute in the success of the organization, offer more time and effort and help the co-worker complete their assigned duties consequently are able to do more than their defined responsibilities.

This result is in the same line with Khalifa and Awad (2018), <sup>(35)</sup> Kamel, Mahfouz and Aref (2019) <sup>(29)</sup>. Who clarified that, their study subject had high level of total OCB. Their finding may be due to that, nurses' help each other's when they have work load or work related problems, willingness to help others when needed and attend at work above the norm.

This finding of this study is in the same direction with Hadwa (2019) <sup>(36)</sup> who revealed that two-thirds of registered nurses had moderate perception level of total organizational citizenship behavior. On the contrast, Abed and Elewa (2016) <sup>(37)</sup> indicated that, the rate of OCB was lesser than average amongst the staff of teaching hospitals at Singapore. Also, Abdallah and Mostafa (2021) <sup>(19)</sup> revealed that, the majority of staff nurses perceived low level of organizational citizenship behavior.

### Relationship between demographic characteristics and EI

The present study showed that, there were highly statistical significant relation between nurses' demographic characteristics in term of years of nursing experience and years of unite experience; also, a statistical significant relation between age, educational qualification and their EI. This finding may be due to that, although EI skills may be a personality trait but it can be also acquired through frequent training and workshops, so young and less experienced nurses may have more opportunities to pass through various orientation programs, training and work experience to acquire more knowledge, practice and skills that provide them with high abilities to solve problems and make decisions. Also, when nurses' educational qualification increase, that helps them to deal with their own and others emotions, control and overcome obstacles. On the other hand, Van Dusseldorp et al. (2011) <sup>(38)</sup> Also, Kahraman and Hiçdurmaz (2016) <sup>(39)</sup> illustrated that

age was not associated with the EI of nurses. Additionally the finding is incongruent with Mahmoud (2013)<sup>(18)</sup> who found that, there were no statistically significant relation existed between age and EI.

This result is inconsistent with Abdallah & Mostafa (2021)<sup>(19)</sup> who reported that, the more experienced nurses being more expert, autonomous, and participating in their work decisions. While the present study contradicted with the finding of Allen et al. (2012)<sup>(39)</sup> who found that, there was no significant relationship noted between EI and nursing students' years of experience and level of education. Moreover the present study showed that, there were statistical significant relationship between working unit and nurses' EI. This finding may be due to that, nurses especially those who are working at ICUs are exposed to unpredictable behaviors due to stressful nature of the working environment, the unpredictability of the situations, and changeability of patients' conditions that need sufficient amount of emotional management, quick actions and unilateral decision making.

Furthermore, this study finding was consistent with Yunus (2012)<sup>(40)</sup> who found that, there was a statistical significant relation between the type of working units and the total EI. This finding is inconsistent with Edenin (2010)<sup>(41)</sup> who concluded that there was no statistical significant association between the total nurses' leaders EI and type of working units.

Moreover, the result of this study revealed that, there were statistically significant relation between gender of nurses and their level of EI. This result may be due to that, female nurses are more capable for understanding and controlling of their and others emotions more than men in unpredictable situations. This finding is in the same line with Tomar (2016)<sup>(42)</sup> who clarified that the women seemed to outweigh the men in the abilities of recognition and emotional expression as well as in the skill of empathy and the expression of interest in others. Also, Konstantinou et al. (2017)<sup>(43)</sup> asserted that, there was a statistical significant relationship existed between nurses' EI and their gender.

#### **Relationship between demographic characteristics and OCB**

The present study illustrated that, there were highly statistical significant relation between nurses' demographic characteristics in term of years of nursing experience, years of unite experience and age. This result may be due to, the managers share hospital's policy and procedures with young new nurses in addition to sharing them with knowledge and information through orientation programs to help them to achieve their duties and responsibilities in the best manner. Also, young and newly nurses obey hospital rules and regulations. In addition they are working beyond the expectations and above the norms to improve their professional performance and their image to keep their job.

This finding is in the same line with Stephens (2016),<sup>(44)</sup> who stated that, there was a significant direct relation between OCB and years of experience, which keep supervisors more likely to help less experienced nurses. Also, Ghanbari (2013)<sup>(45)</sup> claimed a significant relation between age and OCB. His finding may be due to that, younger nurses, who had to take extra-roles action, had complete awareness about its consequences, and who are more cooperative with their colleagues.

The present study demonstrated a significant relation between OCB and educational qualification. This finding may be due to, nurses with highly educational qualification may practice especial way of thinking that prevent problems and find appropriate solutions. This study is supported by Mahjoob, Shateri and Youzbashi (2012)<sup>(46)</sup> who showed that, nurses with high educational qualifications occupy higher ranks; and therefore had more responsibilities and feeling of fairness according to their level of education.

The present study illustrated that, there was statistical significant relation between OCB and working unit. It may be due to that, most of nurses were working at intensive care units where changing and complex environment, thus requiring nurses to perform work outside the duties listed in the job description, the ability to voluntarily helping the other with particular problems to complete their task under unusual circumstances or preventing problems due to stressful nature of the working environment of ICUs.

This finding in the same line with Abdallah and Mostafa (2021)<sup>(19)</sup> who claimed that, there was a statistically significant relation between OCB and type of working unit; it may be related to nature of work in ICUs that require nurses to demonstrate behavior that exceeds more than just their formal tasks.

The finding of the present study illustrated that, there were no significant relation between nurses' OCB and their gender and marital status. This finding was inconsistent with Mahmoud (2018)<sup>(18)</sup> and Elymani (2022)<sup>(47)</sup> who reported that, there were statistical significant relation between and gender, nurses marital status and OCB.

**Relationship between EI and organizational citizenship behaviors**

The present study clarified that; there were highly statistical positive correlations between total EI and its dimensions and total organizational citizenship behaviors and its dimensions except civic virtue. This result may be due to that, when nurses understand and control their own' and others emotion, set goals to accomplish, motivate themselves, this will be reflected on their behaviors with other's jobs, does not abuse the rights of others and avoid creating problems for coworkers. This finding goes in the same line with Cote and Miners (2006) <sup>(48)</sup> who found a positive relation between organizational citizenship behavior and EI. Their findings may be related to nurses who have more emotional bonding, stability of work life and highly emotional feelings toward their hospital could enhance their awareness of conscience, their voluntary involvement in tasks, not taking extra break time and obeying rules of the hospital. Moreover, nurses help other coworker and colleagues, who are absent and overcome problems of those who have heavy work load.

This finding goes in the same line with Vashisht (2017) <sup>(49)</sup> and Iqbal et al. (2020) <sup>(50)</sup> who indicated that, nurses EI and OCB was positively correlated. This result could be related to that, those staff nurses had the ability to understand their emotions and emotions of other peers with ability to express and regulate their emotions and create an environment which directs them towards constructive activities.

**5. CONCLUSION**

The result of the present study concluded that there are positive highly statistical significant relationships between total EI and OCB, among staff nurses working at Kafr El-Dawar General hospital. The OCB were highly significant predictors of EI.

**6. RECOMMENDATIONS****A- Hospitals administrators should:**

- Increase staff nurses satisfaction through competitive salaries, regular scheduling incentives, encouragement team spirit and establish regular meeting to discuss their problems
- Communicate clear goals and expectation to nurses, through sharing new ideas, which make them motivated and give them a sense of ownership to maintain their OCB.
- Provide equitable and fair in the developing, monitoring and enforcement of all management practices.

**B- Head nurse should:**

- Periodic meeting of staff nurses with a nursing director to discuss and solve their work problems and to ensure the justice/fairness in the distribution of their work tasks and encourage them to express their negative emotion through communicate openly with their head nurses.

**C- Further studies:**

- Study the impact of managers' leadership style on nursing staff perception of OCB.
- Study impact of OCB on nurses' productivity and quality of patient care.
- Study the impact of managers' EI on sub-ordinate OCB.
- Investigate the effects of work unite types on nurses organizational citizenship behaviors.

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