

## Relationship between Cyberloafing, Organizational Justice, Work Engagement and Organizational Trust among Nurses

*Elham Youssef Elhanafy*

Nursing Administration, Faculty of Nursing, Damanhour University, Egypt

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**Abstract:** The health organizations must have health workers who trust each other and the organization to reach their goals and to get ahead of their competitors. There is a close relationship between cyberloafing, organizational trust, justice and work engagement concepts. The increased trust of an employee to his or her company will make him/her feel part of an organization and increase the employee's commitment to work. Nurses as the frontline workers of the hospitals have a great effect on the patients' points of view and the quality of care. Aim of the study to explore the relationships between cyberloafing, organizational justice, work engagement and organizational trust among nurses. The correlational descriptive study design was utilized in carrying out this study, at Damanhour National Medical Institute. It included medical unit, surgical unit and critical care units (N=210), namely: medical units (N=55); surgical units (N=48); and critical care units (N=107). Four tools were used to collect the necessary data: Self-reporting Cyberloafing scale, Justice Scale, Trust Scale and Work Engagement Scale. Results: (57.1%) of studied nurses had a low level of total cyberloafing. Meanwhile, (28.6%) of them had a moderate level. While (14.3%) of them had a high level. (49%) of studied nurses had a moderate level of total organizational justice. Meanwhile, (38%) of studied nurses had a low level. While (13%) of them had a high level. (48%) of studied nurses had a moderate level of total organizational trust. While, (34%) of nurses had a low level. While (18%) of them had a high level. (61.4%) of studied nurses had a moderate level of total work engagement. Meantime, (24.3%) of nurses had a high level. While (14.3%) of them had a low level. Conclusions: There was a positive correlation between organizational trust, justice and work engagement. But there was a negative correlation between cyberloafing with "trust, justice and engagement".

**Key words:** Cyberloafing • Justice • Trust • Engagement

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### INTRODUCTION

It is of importance and urgency for hospitals to retain excellent nursing staff to improve patient satisfaction and hospital performance. However, it was found that simply increasing the salary is not the best method to resolve the problem of lacking nursing staff; it is necessary to focus on the impact of non-monetary factors. The delicate relationship between organizational justice, organizational trust, organizational identification and organizational commitment requires investigation and clarification from more studies if the application in nursing practice is to be expected [1].

In most medical institutions, the nursing department is the largest and nursing staff comprises 40–60 % of total human resources. Nurses tend to be the most numerous component of medical teams and tend to have the longest

and closest contact with patients. Therefore, nursing quality affects the overall image of a hospital and can even indirectly affect hospital operations. In recent years, the demand for nurses has increased in response to the growth in the elderly population and changes in lifestyles and treatment-seeking behavior. However, a shortage of clinical nurses has increased workloads and extended working hours. Nurses often have low morale, which causes high turnover. This affects the overall efficiency and quality of medical services in hospitals. Therefore, the organizational commitment of nurses has become a major issue in nursing science literature [2].

Organizational trust can enhance job satisfaction, organizational commitment and productivity of employees. A trusting atmosphere promotes cooperation, centralization of issues, effective communication and information sharing and can compensate for the limited

capabilities of employees. Organizational trust can also promote cooperation between employees and organizations, the organizational commitment of employees and the intention of the organization to retain employees. The above findings confirm that organizational trust is essential for an effective organization. Therefore, organizations cannot overlook the importance of trust. Organizations must actively seek an improved understanding of trust and must implement measures to increase the trust of their employees [3].

The literature on organizational trust describes it as a three-dimensional consisting of trust in colleagues, in the manager and the organization. Trust in colleagues is defined as a person's willingness to be defenseless against the actions of colleagues, whose behavior and actions he/she cannot control. Trust in the manager is defined as employees' willingness to be defenseless in their expectations based on their trust in the objectives, words, or actions of their managers. Trust in the institution is defined as employees' willingness to be defenseless against the actions and behavior of the organization, which they cannot control [4].

Trust most important part of each organization is its human resource. The way managers behave and treat staff would affect their attitudes and working behaviors. When people have a positive attitude toward their job, their manager, department or organization they work in, they become much more motivated to work efficiently. Nowadays, organizations are faced with educated staff, which is not only searching for better jobs but also expecting more respect. This issue is more important for healthcare organizations than other ones. Nurses as an indispensable component of the workforce in the healthcare system, constitute the largest professional group in the hospital and spend most of their lives over there [5].

Organizational justice is an important means of motivation in organizational behavior. Justice is a broad and multifaceted concept and discipline and in different branches of a philosophical concept with the meaning of non-discrimination and fair differences. Organizational justice is used to describe the perception of a group and individual fairness of the behavior conducted by an organization and their behavioral responses to such perception. Several strategies have been proposed to prevent the process of leaving the profession Such that it is possible to create a positive working environment, recognizing the need for flexibility and balance staff working conditions with his individual life. One of the factors in the context is organizational justice

that directly affects people's willingness to leave. Organizational trust encourages justice and fairness within organizations [6].

Organizational justice is defined as the nurses' perception of how fairly or unfairly healthcare organizations are treating them. It is one of the crucial props for organizational success and the main contributor to achieving job satisfaction among nurses. Numerous studies on organizational justice clarified that fairness perception results in several emotional, attitudinal and behavioral outcomes. The current study concerns investigating a behavioral outcome, namely Workplace Deviance (WPD) that has been proven by many studies as it is a yield of injustice perceived by employees in the organizational setting. Researchers have identified various antecedents that contribute to workplace deviance and organizational [7].

Work engagement in nursing is becoming strategically important as three important factors converge: a global shortage of nurses who are the largest group of healthcare providers; political resolve to restrain the growth of rising healthcare costs in industrialized nations; and a medical error rate that threatens the health of nations. Work engagement defined as a positive, fulfilling work-related state of mind and characterized by vigor, dedication and absorption'. Vigour refers to the willingness to invest effort in one's work, dedication is related to involvement and absorption is related to concentration and being engrossed in one's work [8].

People with high levels of engagement show positive attitudes towards their jobs and organizations, including job satisfaction and commitment to the company and they do not frequently shift jobs. Furthermore, those with high work engagement exhibit high learning motivation and proactive behaviors and they work diligently because they enjoy their work even when they are tired, describing fatigue as pleasant because they can associate it with positive achievements [9].

There are indications that the level of engagement is positively associated with job performance in terms of financial benefits, greater client loyalty and better adaptation to the working environment. Empirical studies are also available that indicate that engagement is positively related to health. For example, engaged employees have been shown to suffer less from depression and stress and to have fewer psychosomatic symptoms [10].

Cyberloafing refers to the use of company internet during work hours to engage in non-work-related activities. Cyberloafing differs from traditional loafing at work; it enables employees to engage in personal

activities while creating the illusion of being hard at work. In recent years, abuse of the company's internet resources by employees has received a considerable amount of attention among organizational scholars. The term cyberslacking or cyberloafing has been used to describe voluntary acts of employees using their companies' internet access for non-work-related purposes during working hours [11].

Cyberloafing behaviors are categorized into two dimensions: minor and serious. Minor is relating to the use of personal emails, i.e., viewing other sites that are not work-related. On the other hand, serious cyberloafing behaviors are the use of unsecured sites that might damage the organization system. Male employees engage further with cyberloafing than female employees and lack of self-control could play a factor in deviant behavior. Cyberloafing is a term used to describe the actions of employees who use their internet access at work for personal use while pretending to do legitimate work. Cyberloafing is derived from the term goldbricking, which originally referred to applying a gold coating to a brick of worthless metal. Goldbricking is the practice of doing less work than one can while maintaining the appearance of working [12].

Cyberloafing impacts the organizations financially and it appears to happen when the workload on the employee is low. System control alone cannot prevent cyberloafing; managers must make policies to raise awareness among employees of internet usage. Cyberloafing had a negative impact on nurses' organizational justice, organizational trust and lead to decrease work engagement [13].

#### **Aim of the Study:**

- To explore the relationships between cyberloafing, organizational justice, work engagement and organizational trust among nurses.

**Research Questions:** Is there a relation between:

- Cyberloafing and organizational trust?
- Cyberloafing and organizational justice?
- Cyberloafing and work engagement?
- Organizational justice and organizational trust?
- Organizational justice and work engagement?
- Work engagement and organizational trust?

## **MATERIALS AND METHODS**

**Research Design:** A correlation descriptive study design was utilized in carrying out this study.

**Setting:** The study was conducted at Damanhour National Medical Institute. It included medical unit, surgical unit and critical care units (N=210), namely: medical units (N=55) (General medical A & B; hepatology; renal; hematemesis and neurology); surgical units (N=48) (General surgical A, B, C, & D; neurosurgery; and E.N.T surgery) and critical care units (N=107) (Intensive care unit; coronary care unit and emergency recovery). The institute is affiliated to the General Organization for Teaching Hospital and Institutes and is considered the main teaching hospital in El-Beheira.

**Subjects:** The subjects composed of all available nurses who worked at the previously mentioned settings and the study subjects composed of 210 nurses regardless of their age, gender, qualification and experience. Where four nurses refused to participate in the study, another two did not complete the questionnaire and the remaining two did not return the questionnaire.

**Tools:** The data was collected through a self-administered questionnaire containing four major parts:

**Part I:** This part included questions related to demographic characteristics of studied nurses such as age, gender, working place, marital status, qualification and years of experiences.

**Part II:** The Self-reporting Cyberloafing scale was utilized to measure cyberloafing. The scale consists of 12 items as "send a personal email, online sports, instant message and download non-work related information" these variables were assessed with the scale developed by Van Doorn [14].

**Scoring System:** Responses were measured on a 3-point Likert rating scale Items were anchored from (1) Never to (2) sometimes (3) Always. The total score ranged from 12 to 36. The higher scores mean higher using cyberloafing. These scores were summed and were converted into a percent score. It was classified into 3 categories:

- High if scores > 60%
- Moderate if scores from 50- 60%
- Low if scores < 50%

**Part III:** The Justice Scale that was developed by Noruzy *et al.* [15] was used to measure justice. The instrument consists of 4 categories "Distributive justice 3 items as, my reward reflects the effort and I have put into my work.

Procedural justice 7 items as I am able to express my views at this company. Interpersonal justice 4 items as treats me in a polite manner. Informational justice 4 items as is open and frank in (His/her) communications with me.

**Scoring System:** Responses were measured on a 3-point Likert rating scale Items were anchored from (1) Never to (2) sometimes (3) Always. The total score ranged from 18 to 54. The higher scores mean higher Justice. These scores were summed and were converted into a percent score. It was classified into 3 categories:

- High if scores > 60%
- Moderate if scores from 50-60%
- Low if scores < 50%

**Part IV:** The Trust Scale was developed by Laschinger *et al.* [4] and was used to measure trust. The instrument consists of 5 categories and 29 items "Competency 4 items, Openness /Honesty 9 items, Concerns for Employees 7 items, Reliability 4 items and Identification 5 items"

**Scoring System:** Responses were measured on a 3-point Likert rating scale Items were anchored from (1) Never to (2) sometimes (3) Always. The total score ranged from 29 to 87. The higher scores mean higher trust. These scores were summed and were converted into a percent score. It was classified into 3 categories:

- High if scores > 60%
- Moderate if scores from 50-60%
- Low if scores < 50%

**Part V:** Work engagement was measured by using the Utrecht Work Engagement Scale developed by Fong and Ng [16]. The scale consists of 17 items and measures the three dimensions of work engagement: (1) Vigor (Six items, e.g. 'At my work I feel like bursting with energy, at my job I feel strong and vigorous.'). (2) Dedication (Five items, e.g. 'I find the work that I do meaningful and purposeful). I am enthusiastic about my job) and (3) Absorption (Six items, e.g. '1. Time flies when I am at work. 2. When I work, I forget everything else around me').

**Scoring System:** Responses were measured on a 3-point Likert rating scale Items were anchored from (1) Never to (2) sometimes (3) Always. The total score ranged from 17 to 51. The higher scores mean higher trust. These scores were summed and were converted into a percent score. It was classified into 3 categories:

- High if scores > 60%
- Moderate if scores from 50-60%
- Low if scores < 50%

**Preparatory Phase:** This phase included reviewing literature related to cyberloafing, organizational trust, organizational justice and work engagement. This served to develop the study tools for data collection. During this phase, the researcher also visited the selected places to get acquainted with the personnel and the study settings. Development of the tools was under supervisors' guidance and experts' opinions were considered.

**Ethical Considerations:** The research approval was obtained from the Faculty Ethical Committee before starting the study.

**The Ethical Research Considerations Include the Following:**

- The researcher was clarified the objectives and aim of the study to nurses included in the study before starting.
- Verbal approval was obtained from the nurses before inclusion in the study; a clear and simple explanation was given according to their level of understanding. They secured that all the gathered data as confidential and used for research purpose only.
- The researcher was assuring maintaining anonymity and confidentiality of subjects' data included in the study
- The nurses were informed that they are allowed to choose to participate or not in the study and they have the right to withdrawal from the study at any time.

**Pilot Study:** The pilot study was carried out on 21 nurses who represent 10% from the study sample to test the applicability of the constructed tools and the clarity of the included tools. The pilot has also served to estimate the time needed for each subject to fill in the questionnaire.

**Fieldwork:** Approval was obtained from the previously mentioned setting affiliated Damanhour National Medical Institute. A letter was issued to them from the Faculty of Nursing, explaining the aim of the study to obtain their permission and cooperation. Data were collected in three months, from the beginning of Jun 2016 to the end of August 2016.

The researcher first met with the nurses worked at the previously mentioned settings, explained the purpose of the study after introducing himself. The researcher was visiting the study setting 2days / week at morning shift (8 am - 2 pm) and afternoon shift (2 pm -8 pm) to collect data. The questionnaire was filled by nursing staff which takes 40-50 minutes.

**Administrative Design**

Official permission to conduct the study obtained from the medical director of Damanhour National Medical Institute. The researcher met the hospital director and explained the purpose and the methods of the data collection

**Statistical Analysis**

Data collected from the studied sample was revised, coded and entered using Personal Computer (PC). Computerized data entry and Statistical analysis were fulfilled using the Statistical Package for Social Sciences (SPSS) version 22. Data were presented using descriptive statistics in the form of frequencies, percentages. A chi-square test (X2) was used for comparisons between qualitative variables. Spearman correlation measures the strength and direction of the association between two ranked variables. T. paired test used to compare pre/post-workshop.

**RESULTS**

Table (1) shows that 28.6% of the studied nurses their age ranged between 25 - < 30 years, the mean age of them 36.54±8.91 year. As regard gender and marital status, 68.1 and 76.7% of the studied nurses were female and married, respectively. Concerning the educational level of nurses under study, it was found that 44.8% of them had a technical nursing degree. Regarding to the working place, 50.9% of the studied nurses' work at Intensive and critical care units. Also, 56.7% of the nurses under study their years of experience ranged between 5<15 years, with mean14.6±8.31 years.

Table (2) shows that the mean score of nurses regarding instant messaging was 2.57±0.46. Also, the mean scores of them related to entertainment websites and look for employment were 2.58±0.27 and 2.34±0.26, respectively. While, the mean scores of them regarding checking personal email and send personal email were 1.17±0.34 and 1.28±0.37, respectively.

Table 1: Distribution of nurses according to their demographic characteristics (N= 210)

Characteristics	No	%
<b>Age</b>		
20 - <25	55	26.2
25 - <30	60	28.6
30 - < 35	47	22.3
35 or more	48	22.9
̄S.D	36.54±8.91	
<b>Gender</b>		
Male	67	31.9
Female	143	68.1
<b>Marital Status</b>		
Married	161	76.7
Not Married	49	23.3
<b>Qualification</b>		
Secondary nursing degree	73	34.8
Technical nursing degree	94	44.8
Bachelor nursing degree	31	14.7
Higher education	12	5.7
<b>Working place</b>		
Intensive and critical care units	107	50.9
Medical units	55	26.2
Surgical unit	48	22.9
<b>Years of Experience</b>		
5<15 years	119	56.7
15 - <25 years	49	23.3
>25 years	42	20
̄ S.D	14.6±8.31	

Table 2: Mean scores of nurses regarding Cyber loafing (N= 210)

Items	Mean SD
1 Received personal email	1.41±0.27
2 Non-work related web-site	2.56±0.71
3 News websites	2.44±0.82
4 Check personal email	1.17±0.34
5 Send personal email	1.28±0.37
6 Instant messaging	2.57±0.46
7 Sports website	2.29±0.39
8 Entertainment website	2.58±0.27
9 Download non-work related information	2.28±0.31
10 Online shopping	1.92±0.47
11 Look for employment	2.34±0.26
12 Online games	2.41±0.43

Fig. (1) Shows that (57.1%) of studied nurses had a high level of total cyberloafing. Meanwhile, (28.6%) of them had a moderate level. While (14.3%) of them had a low level.

Regarding organizational justice, Table (3) shows that the mean score of nurses regarding procedural justice was 13.97±3.75. While the mean scores of them related to distributive justice was 6.98±2.66. Finally, the mean score of nurses regarding total organizational justice was 35.26±4.95.

### TOTAL CYBERLOAFING

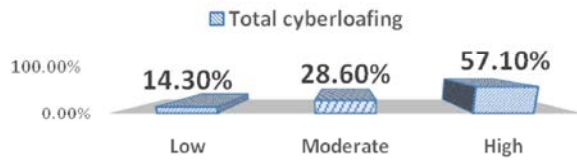


Fig. 1: Percentage distribution of nurses regarding total cyberloafing (N=210).

### Total organizational justice



Fig. 2: Percentage distribution of nurses regarding total organizational justice (N=210).

### Total organizational trust

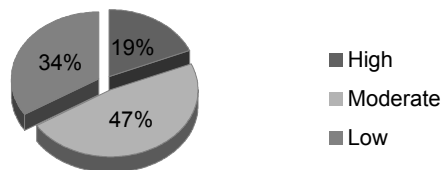


Fig. 3: Percentage distribution of nurses regarding total organizational trust (N=210).

Table 3: Mean scores of nurses regarding organizational justice (N= 210).

Items	Mean S.D
Distributive justice	6.98±2.66
Procedural justice	13.97±3.75
Interpersonal justice	7.68±1.99
Informational justice	8.94±2.47
Total	35.26±4.95

Table 4: Mean scores of nurses regarding organizational trust (N= 210).

Items	Mean SD.
1 Competency (4)	7.64 ± 1.97
2 Openness/Honesty (9)	19.21 ± 3.88
3 Concerns for Employees (7)	15.57±3.05
4 Reliability (4)	8.62 ± 1.86
5 Identification (5)	9.34 ± 2.16
Total	58.66±6.13

Table 5: Mean scores of nurses regarding work engagement (N= 210).

Items	Mean SD
1 Vigor (6)	13.28± 4.41
2 Dedication (5)	11.61± 3.91
3 Absorption (6)	13.57 ± 3.47
4 Total	37.19 ± 7.65

### Work engagement

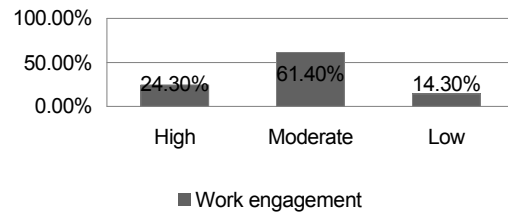


Fig. 4: Percentage distribution of nurses regarding total work engagement (N=210).

Fig. (2) Shows that (49%) of studied nurses had a moderate level of total organizational justice. Meanwhile, (38%) of them had a low level. While (13%) of them had a high level.

Table (4) shows that the mean score of nurses regarding openness/honesty and concerns for employees was  $19.21 \pm 3.88$  and  $15.57 \pm 3.05$ , respectively. While the mean scores of them related to competency was  $7.64 \pm 1.97$ . Finally, the mean score of nurses regarding total organizational trust was  $58.66 \pm 6.13$ .

Fig. (3) Shows that (47%) of studied nurses had a moderate level of total organizational trust. Meanwhile, (34%) of them had a low level. While (19%) of them had a high level

Regarding work engagement, Table (5) shows that the mean score of nurses regarding absorption was  $13.57 \pm 3.47$ . While the mean scores of them related to dedication was  $11.61 \pm 3.91$ . Finally, the mean score of nurses regarding total work engagement was  $37.19 \pm 7.65$ .

Fig. (4) shows that (61.4%) of studied nurses had a moderate level of total work engagement. Meanwhile, (24.3%) of them had a high level. While (14.3%) of them had a low level.

Table (6) illustrated that there was a highly statistically significant relation between total organizational trust of the studied nurses and their age, gender and years of experience at ( $P < 0.01$ ). While there was a statistically significant relationship with their qualification at ( $P = < 0.05$ ). On the other hand, there was no statistically significant relationship with their marital status and working place at ( $p = > 0.05$ ).

Table (7) shows that there was a highly statistically significant relation between total cyberloafing of the studied nurses and their age, qualification and years of experience at ( $P = < 0.01$ ). On the other hand, there was no statistically significant relationship with their gender, marital status and working place at ( $P = > 0.05$ ).

Table 6: Relation between Characteristics of staff Nurses and their Total organizational trust

Items		Organizational trust						X2calculated	P-Value
		High 39		Moderate 100		Low 71			
		N	%	N	%	N	%		
Age	20 - <25	20	51.3	30	30	5	7	9.614	.002**
	25 - <30	10	25.6	42	42	8	11.3		
	30 - < 35	6	15.4	18	18	23	32.4		
	>35	3	7.7	10	10	35	49.3		
Gender	Male	27	69.2	33	33	7	9.9	11.357	.000**
	Female	12	30.8	67	67	64	90.1		
Maritalstatus	Married	26	66.7	76	76	59	83.1	1.264	.064
	Not Married	13	32.3	24	24	12	16.9		
Qualification	Secondary nursing degree	19	48.7	42	42	9	12.7	7.145	.021*
	Technical Health Diploma	11	28.2	46	46	37	52.1		
	Bachelor	7	17.9	6	6	18	25.3		
	Higher education	2	5.2	3	3	7	9.8		
Years of Experience	5 -15	25	64.1	52	52	42	59.2	10.550	.001**
	15-25	12	30.8	28	28	9	12.7		
	>25 years	2	5.1	20	20	20	28.1		
Working place	Critical	24	61.5	57	57	26	36.6	2.034	.054
	Surgical	8	20.6	22	22	25	35.2		
	Medical	7	17.9	21	21	20	28.2		

Table 7: Relation between Characteristics of staff Nurses and their Total cyberloafing

Items		Cyberloafing						X2calculated	P-Value
		Low 30		Moderate 60		High 1 20			
		N	%	N	%	N	%		
Age	20 - <25	11	36.7	24	40	20	16.7	12.913	.001**
	25 - <30	9	30	20	33.3	31	25.8		
	30 - < 35	7	23.3	10	16.7	30	25		
	>35	3	10	6	10	39	32.5		
Gender	Male	11	36.7	18	30	38	31.7	2.789	.061
	Female	19	63.3	42	70	82	68.3		
Maritalstatus	Not Married	21	70	32	53.3	14	11.7	1.456	.068
	Married	9	30	28	46.7	106	88.3		
Qualification	Secondary nursing degree	1	3.3	15	25	57	47.5	14.089	.000**
	Technical Health Diploma	5	16.7	32	53.3	57	47.5		
	Bachelor	14	46.7	11	18.3	6	5		
	Higher education	10	33.3	2	3.4	0	0		
Years of Experience	5 -15	24	80	50	83.4	45	37.5	11.620	.003**
	15-25	4	13.3	5	8.3	40	33.3		
	>25 years	2	6.7	5	8.3	35	29.2		
Working place	Critical	14	46.6	31	51.7	74	61.7	1.047	.071
	Surgical	8	26.7	16	26.7	25	20.8		
	Medical	8	26.7	13	21.6	21	17.5		

Table 8: Relation between Characteristics of staff Nurses and their Total organizational justice

Items		Total Organizational justice						X2 calculated	P-Value
		High 27		Moderate 103		Low 80			
		N	%	N	%	N	%		
Age	20 - <25	0	0	16	15.5	39	48.7	7.146	.018*
	25 - <30	2	7.4	35	33.9	23	28.8		
	30 - < 35	8	29.6	25	24.3	14	17.5		
	>35	17	63	27	26.3	4	5		
Gender	Male	7	25.9	35	34	25	31.2	8.014	.014*
	Female	20	74.1	68	66	55	68.8		
Marital status	Married	22	81.5	93	90.3	46	57.5	9.062	.011*
	Not Married	5	18.5	10	9.7	34	42.5		
Qualification	Secondary nursing degree	14	51.8	53	51.4	6	7.5	11.376	.009**
	Technical Health Diploma	7	25.9	40	38.9	47	58.7		
	Bachelor	4	14.8	9	8.7	18	22.5		
	Higher education	2	7.4	1	1	9	11.3		
Years of Experience	5 -15	0	0	51	49.5	68	85	8.108	.017*
	15-25	8	29.6	30	29.1	11	13.8		
	>25 years	19	70.4	22	21.4	1	1.2		
Working place	Critical	17	63	56	54.4	46	57.5	2.420	.059
	Surgical	6	22.2	25	24.3	18	22.5		
	Medical	4	14.8	22	21.3	16	20		

Table 9: Relation between Characteristics of staff Nurses and their Total work engagement

Items		Work engagement						X2 calculated	P-Value
		High 51		Moderate 129		Low 30			
		N	%	N	%	N	%		
Age	20 - <25	5	9.8	40	31	10	33.3	14.076	.000**
	25 - <30	9	17.6	46	35.7	5	16.7		
	30 - < 35	16	31.4	23	17.8	8	26.7		
	>35	21	41.2	20	15.5	7	23.3		
Gender	Male	21	41.2	34	26.4	12	40	1.116	.071
	Female	30	58.8	95	73.6	18	60		
Marital status	Married	33	64.7	106	82.2	22	73.3	2.688	.061
	Not Married	18	35.3	23	17.8	8	26.7		
Qualification	Secondary nursing degree	7	13.7	51	39.5	15	50	11.257	.002**
	Technical Health Diploma	10	19.6	71	55	13	43.3		
	Bachelor	22	43.1	7	5.5	2	6.7		
	Higher education	12	23.6	0	0	0	0		
Years of Experience	5 -15	11	21.6	92	71.3	16	53.3	9.045	.011*
	15-25	14	27.5	27	20.9	8	26.7		
	>25 years	26	50.9	10	7.8	6	20		
Working place	Critical	35	68.6	65	50.4	7	23.3	7.986	.023*
	Surgical	10	19.6	42	32.6	3	10		
	Medical	6	11.7	22	17	20	66.7		

Table (8) show that there was a highly statistically significant relation between total organizational justice of the studied nurses and their qualification at (P= < 0.01). While, there was a statistically significant relation with their age, gender, marital status and years of experience at (P= < 0.05). On the other hand, there was no statistically significant relationship with their working place at (P= > 0.05).

Table (9) illustrated that there was a highly statistically significant relationship between total work engagement of the studied nurses and their age and qualification at (P< 0.01). While there was a statistically significant relationship with their years of experience and working place at (P < 0.05). On the other hand, there was no statistically significant relationship with their gender and marital status and at (p= > 0.05).



Table 10: Correlation between studied variable

Items	Cyberloafing	Organizational justice	Organizational trust	Work engagement
cyberloafing		R-.976 P. 0.001**	R. -.426 P. 0.018*	R -.617 P. 0.009**
Organizational justice	R -.976 P. 0.001**		R .946 P. value .000**	R .873 P.0.002**
Organizational trust	R-.426 P. 0.018*	R .946 P. 0.000**		R .901 P. 0.004**
Work engagement	R -.617 P. 0.009**	R .873 P. 0.002**	R .901 P.0.004**	

Table (10) shows that there was a significant negative correlation between total cyberloafing of the studied nurses' total organizational justice, total organizational trust and total work engagement. The table also shows that there was a highly significant positive correlation between total organizational justice of the studied nurses and their total organizational trust and total work engagement.

### DISCUSSION

According to the characteristics of studied nurses, the current study revealed that the mean age of them was 36.54±8.9 years and mean years' experience was 14.6±8.31 years. This result is supported by the study performed by Chen *et al.* [17] where they found that the mean age of studied nurses was 35.91±7.3 years and mean years' experience was 12.98±7.09 years. On the other hand, this result is in contrast with the study performed by Zhu *et al.* [18] who found that the nursing experience of studied nurses was 8.24±4.57 years.

According to the qualification of studied nurses, the current study revealed that slightly less than half of them had a secondary nursing degree, while only five percent of them had higher education "Master/Ph.D.". This results may due to the nurses are busy all the time at work and home and there is no approval for vacations to study. These results are in contrast with the study performed by Stander *et al.* [19] who found that more than one-quarter of nurses had a master's degree.

Regarding cyberloafing for nurses at work, the current study showed that the mean score of nurses regarding instant messaging was 2.57±0.46. Also, the mean scores of them related entertainment website and look for employment were 2.58±0.27 and 2.34±0.26, respectively. This result may due to spreading Personal mobile phones and other personal communication devices (Smartphones and tablet computers) provide users with an ever-increasing number and diversity of non-work-related activities while at work. This result supported by

the study performed by McBride *et al.* [13] who's reported that more than three-quarter checking/posting on social networking sites and instant messaging. This result is supported by the study performed by Etemadi *et al.* [20] who's reported mean scores of nurses related using entertainment websites & social media were 2.71±0.30 and 2.26±0.37, respectively.

According to total cyberloafing for nurses at work, the current study showed that more than half of the studied nurses had a high level of total cyberloafing. Meanwhile, more than one-quarter of them had a moderate level. This result may due to the availability of smartphones and low prices and ease of use of social networking sites and the widespread use of social networking sites such as Facebook, WhatsApp and Twitter. These results are consistent with the studies performed by Aghaz and Sheikh [21]. Holland *et al.* [22] reported that more than two-thirds had high cyberloafing at work.

Concerning organizational justice, the current study showed that the mean score of nurses regarding procedural justice was 13.97±3.75. While the mean scores of them related to distributive justice was 6.98±2.66 and the mean score of nurses regarding total organizational justice was 35.26±4.95. This result may due to absence of a clear job description of the nurses and the absence of the role of the head of nursing as a defender of the rights of nurses and physicians' superiority in dealing with nurses, which reduces the nurses' sense of fairness & justice. This result is in contrast with the study performed by Hao *et al.* [23] who reported that the mean score of nurses regarding total organizational justice was 51.68±9.48.

According to total organizational justice for nurses at work, the current study showed that around half of studied nurses had a moderate level of total organizational justice. While less than one-fifth of them had a high level of justice. This result may due to the Lack of supportive role of the hospital management to nurses and the feeling of pressures resulting from the views of the media and the

media without any response from nursing leaders. This result agrees with the studies performed by Tourani *et al.* [24] and Kuokkanen *et al.* [25] who reported that more than one-third of them had a low level of organizational justice and only less than one-quarter of them had a high level of justice.

Regarding organizational trust, the current study showed that the mean score of nurses regarding openness/honesty and concerns for employees was  $19.21 \pm 3.88$  and  $15.57 \pm 3.05$ , respectively. While the mean scores of them related to competency were  $7.64 \pm 1.97$  and the mean score of nurses regarding total organizational trust was  $58.66 \pm 6.13$ . These results may due to lack of justice and fairness, lack of equal opportunities and there is no equality in reward and punishment and Most of the time the penalty is unknown. These results are reinforced by the study performed by Abubakar *et al.* [26] which said that the mean scores of nurses' related total organizational trust were  $60.71 \pm 8.11$ .

Concerning organizational trust, the current study showed that around half of the studied nurses had a moderate level of total organizational trust. Meanwhile, one-third of them had a low level. This result may due to lack of equal opportunities and there is no equality in reward and punishment and Most of the time the penalty is unknown. These results are in disparity with the study performed by Sjahruddin and Sudiro [27] who announced that more than two-thirds of studied subjects trusted the organization.

The current study revealed that the mean score of nurses regarding total work engagement was  $37.19 \pm 7.65$ . Around two-thirds of studied nurses had a moderate level of total work engagement. Meanwhile, one-quarter of them had a high level. While less than one-fifth of them had a low level. This result may due to Low level of confidence and fairness of the above results and a high level of cyberloafing which harmed work engagement. It is also a low salary for a job that does not cover basic needs. These results supported the studies performed by Fiabane *et al.* [28] and Othman and Nasrudin [29] who said that most of the studied subjects had a moderate level of work engagement.

Regarding the relation between characteristics of nurses and organizational trust, the current study revealed a highly statistically significant relation between total organizational trust of the studied nurses and their age, gender and years of experience at ( $P = < 0.01$ ). While there was a statistically significant relationship with their qualification at ( $P = < 0.05$ ). On the other hand, there was

no statistically significant relationship with their marital status and working place at ( $p = > 0.05$ ). These results may due to, nurses' males had high trust than female and older nurses had low trust level. These results supported the study performed by Chen *et al.* [17] who reported that characteristics of nurses had an impact on organizational trust.

Regarding the relation between characteristics of nurses and cyberloafing, the current study revealed highly statistically significant relation between total cyberloafing of the studied nurses and their age, qualification and years of experience at ( $P = < 0.01$ ). On the other hand, there was no statistically significant relationship with their gender, marital status and working place at ( $p = > 0.05$ ). This result supports the study performed by McBride and LeVasseur [13] they reported that there was a relationship between characteristics of nurses and cyberloafing at work.

While the relation between characteristics of nurses and organizational justice, the current study showed that there were highly statistically significant relation between total organizational justice of the studied nurses and their qualification at ( $P = < 0.01$ ). While, there was statistically significant relation with their age, gender, marital status and years of experience at ( $P = < 0.05$ ). On the other hand, there was no statistically significant relationship with their working place at ( $p = > 0.05$ ). This result may due to female nurses have high justice than male, older nurses had high justice than younger and higher education had low justice than secondary or technical. These results in agreement with the study performed by Gillet *et al.* [30] they reported that highly significant relationship between organizational justice and their qualification and significant relation with years of experience.

while the relation between characteristics of nurses and work engagement, the current study revealed that there were highly statistically significant relation between total work engagement of the studied nurses and their age and qualification at ( $P = < 0.01$ ). While there was a statistically significant relationship with their years of experience and working place at ( $P = < 0.05$ ). On the other hand, there was no statistically significant relationship with their gender and marital status and at ( $p = > 0.05$ ). This results due to a high variation between nurses' age, qualification and work engagement. These results in disagreement with the study performed by Fiabane *et al.* [28] who found that there was no relationship between age and engagement and there was slight significant with gender and qualification.

About the correlation between the studied variable, the current study showed that there was a significant negative correlation between total cyberloafing of the studied nurses and total organizational justice, total organizational trust and total work engagement. These results may be due to nurses having high cyberloafing, negatively affecting justice, trust and engagement. This study performed by O'Neill *et al.* [31] reported that there was a negative correlation between total cyberloafing and total organizational trust and total work engagement.

As regards the correlation between the studied variable, the current study showed that there was a highly significant positive correlation between total organizational justice of the studied nurses and their total organizational trust and total work engagement. This result is supported by the studies performed by Sharma and Yadav [32] and Basit [33] which reported a high correlation between organizational justice, trust and work engagement.

### CONCLUSIONS

There was a significant negative correlation between total cyberloafing of the studied nurses and total organizational justice, total organizational trust and total work engagement. There was a highly significant positive correlation between total organizational justice of the studied nurses, their total organizational trust and total work engagement.

**Recommendations:** According to the results of the current study, the following recommendations were suggested:

- Continuous evaluation of organizational trust and justice to avoid nurses' turnover.
- Further researchers, about the relationship between cyberloafing, organizational justice, work engagement and organizational trust with increasing sample size and different settings.
- Preparing of continuous awareness workshops about cyberloafing. Prepare an educational program to enhance work engagement between the nurse's staff.

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