

## Relationship between Organizational Justice and Work Engagement among Staff Nurses

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### Abstract

**Background:** work engagement of staff nurses has a great effect on their productivity, patient outcomes, and organizational performance. It is important to explore what can be done to facilitate work engagement. **Aim of the Study:** This study aimed at determining relationship between organizational justice and work engagement among staff nurses. **Research design:** A descriptive correlational design was used in this study. **Setting:** The study was conducted in El Menshawey General Hospital in Tanta that affiliated to Ministry of Health. **Subjects:** 152 staff nurses out of 245 participated in the study. **Tools:** Data for this study were collected using two tools namely: organizational justice scale and work engagement scale **Results:** the majority of staff nurses (84.9%) had low perception toward distributive justice dimension, while about two thirds of staff nurses had low perception toward total organizational justice. Also, about two thirds of staff nurses had low level toward vigor dimension, while more than half of them (56.5%) had low level regarding total work engagement. **Conclusion:** There was a statistically significant positive relationship between total organizational justice and total work engagement among staff nurses. **Recommendations:** Nursing supervisors should consider enhancing engagement of their staff nurses through creating motivational work environment and improving staff nurses perception of organizational justice.

**Keywords:** Organizational Justice, Work Engagement, Staff Nurses.

### Introduction:

Organizational justice is concerned with how employees view organizational fairness and how this affects their behavior. In addition, researchers support that the way in which employees perceive justice in organizations has an effect on their attitudes and behaviors. Furthermore, employees' perceptions of justice in their organizations are considered important for the well-being of employees as well as for effective organizational operations (Demirkiran et al., 2018).

Organizational justice refers to the extent to which employees perceive work place procedures, interactions and outcomes

to be fair in nature. These perceptions can influence attitudes and behavior for good or bad. Organizational justice is among the important organizational parameters and is associated with important organizational process such as job satisfaction and organizational commitment (Dehkordi et al., 2017)

Work engagement is abroad concept that comprises as core features high involvement, affective energy, and self-presence at work. Work engagement has become the top issue on the minds of business leaders compete effectively; companies not only must recruit the top talent but must also inspire and enable employees to apply their full capabilities to

their work. Contemporary organizations need employees who are psychologically connected to their work, who are willing and able to invest themselves fully in their roles, who are proactive and committed to high quality performance standers. They need employees who are engaged with their work (Ching, 2016).

Organizational justice would be directly associated with the quality of social exchange between individuals and their organizations and in turn may lead to employee engagement. Therefore, when employees have high perceptions of justice in their organization, they are also more likely to feel obliged to be fair in how they perform their roles by giving more of themselves through greater levels of engagement. On the contrary, low perceptions of fairness are likely to cause employees to withdraw and disengage themselves from their work roles. (Ghosh, et al. 2018)

#### **Significant of the study:**

From researcher's point of view organizational justice play a crucial role in success of any organization, as employees receive instructions from management and react to such decisions daily, their perception of those decisions as being fair or un fair is very important because it can influence the employees' subsequent behavior (e.g., job satisfaction, job commitment and work engagement), in essence the perception of justice affect organizational performance and success by building trust between staff nurses and supervisors that increase work engagement among staff nurses. So this study concerned with identifying the relationship between organizational justice and work engagement among staff nurses.

#### **Aim of the study:**

This study aimed at determining relationship between organizational justice and work engagement among staff nurses.

#### **Research question:**

Is there a relationship between organizational justice and work engagement among staff nurses?

#### **Subjects and Methods:**

##### **I. Technical Design:**

It included research design, study settings, subjects and tools of data collection.

##### **Research Design:**

A descriptive correlational design was used in this study.

##### **Study Settings:**

This study was conducted in El Menshawy General Hospital in Tanta that affiliated to Ministry of Health. The hospital consists of three buildings connected with each other. It includes 5 critical care units and medical, surgical, neurological, pediatric, orthopedic, gynecological, urological, hemodialysis and ear nose trachea departments. Total capacity is 218beds.

##### **Subjects:**

Subjects of this study included 152 out of 245 who were working at a pre mentioned setting.

##### **Tools of data collection:**

Data for this study were collected using two tools namely: organizational justice scale and work engagement scale.

**First tool: Organizational justice scale:** This tool aimed at assessing staff nurses' perception of organizational justice. It consisted of two parts, as the following:-

**Part 1:** - This part was intended to collect data related personal and job characteristics of the study subjects including

gender, age, level of education and years of experience in nursing.

**Part2:** - This part aimed to determine staff nurses' perception of organizational justice. It adopted from **Geatar, (2018)** based on **Niehoff and Moorman (1993)**. It consisted of 19 items divided into three dimensions: Distributive justice (5 items), Procedural justice (5 items), Interactional justice(9 items).

**Scoring system:** Responses were measured on (5-point) Likert scale and polarized in (1= strongly disagree, 2= disagree, 3=neutral, 4= agree, 5= strongly agree). The scores of the statements of each component were summed –up, converted into percent score, and the total divided by the numbers of items, giving the mean score for each component. The respondent perception of organizational justice was considered low if the total percent score was less than 60% , moderate if the score 60- <75% and high if the score 75% or more.

**Second tool: Utrecht work engagement scale:** It aimed at assessing level of work engagement among staff nurses. This tool adopted from **Abd Elkader, (2017)** based on **Schaufeli and Bakker (2004)**. It consisted of 17 items divided into three dimensions; vigour (6 items), dedication (5 items) and absorption (6 items).

**Scoring system:** Each item was scored on (5- point) Likert scale and polarized in (1= absolutely, 2= rarely, 3= sometime, 4= often, 5= always). The scores of the statements of each component were summed –up, converted into percent score, and the total divided by the numbers of items, giving the mean score for each component. These scores were converted into percent score of work engagement. It was considered low if the total percent score was less than 60% and high if the score was equal and more 60%.

### **Operational Designed:**

The operational design for this study included preparatory phase, pilot study and filed work.

### **Preparatory Phase:**

In this phase the researcher reviewed the current available related local and international literature, material in textbooks, scientific journals and internet services to acquaint with the subject.

### **Tools Reliability:**

The reliability test was done to assure the consistency, to determine how strongly the attributes were related to each other and to the composite score. Cronbach's Alpha coefficients of internal consistency were used to assess the internal reliability of the study tools. Organizational justice questionnaire was 0.978 and work engagement questionnaire was 0.93.

### **Pilot study:**

The pilot study was carried out on 25 staff nurses who represented 10% of the total study subjects. The aim of the pilot study was to confirm understanding, clarity and applicability of the tools in addition to estimate the time required for filling the tools sheet. The time consumed for fulfilling the study tools was 15-30 minutes. Data obtained from the pilot study was analyzed, and no modifications were done. The pilot study was conducted throughout one week before data collection. Those participants were excluded from the main study sample.

### **C- Field work:**

After securing the official approvals for conducting the study, the researcher met the director of the hospital and nursing director to obtain their approval and to determine the suitable time to collect data. The field work of the study took one month

started at the beginning of January 2020 and was completed by its end. The researcher met the head nurse of each unit for determining the suitable time to collect the data. The researcher explained the aim and component of the questionnaire then distributed the questionnaire sheet to staff nurses in their work settings at different times and attended during the filling of the questionnaire to clarify any ambiguity and answer any questions. Data was collected three days per week at the morning and afternoon shifts. Every staff nurse took about (15- 30) minutes to complete questionnaire sheet. The researcher collected about 35 to 40 questionnaires every week. The researcher checked each filled questionnaire to ensure its completion.

### **Ethical consideration:**

Prior study conduction, approval was obtained from the ethical scientific research committee at faculty of nursing Ain Shams University. In addition, the researcher met the medical and nursing directors and explained the aim of the study to take their approval. Before distributing the questionnaire, the purpose of the study and the components of the tools were explained to the participants at the study setting. The study subjects assured that anonymity and confidentiality would be guaranteed and they

### **Results:**

Table (1) shows that less than half (47%) of staff nurses were (30-40) years old. Also, less than half (46%) of them had 10-20 years of experience.

Figure (1) shows that the majority (89.5%) of staff nurses were females.

Figure (2) shows that less than half (46%) of staff nurses had nursing diploma, while only 4% of them had master degree in nursing.

Figure (3) shows that the majority (84.9%) of staff nurses had low perception

informed that they allowed choosing to participate or not in the study and that they have the right to withdraw from the study at any time.

### **Administrative design:**

An official permission to conduct the study was directed from the dean of the Faculty of Nursing/ Ain Shams University to El Menshawy general hospital directors to obtain their approval to carry out this study. This letter included the aim of the study and photocopy from data collection tools in order to get the permission and help for the data collection.

### **Statistical design:**

Data entry was done using SPSS version 25 computer software package. Quality control was done at the stages of the coding and data entry. Statistical presentation and analysis of this study was conducted using the frequency distribution for qualitative variables and mean and standard deviation for quantitative variables. Pearson correlation co- efficient ( $r$ ) was used for assessment of the inter relation among quantitative variables. Chi-square test was used to assess the relation between demographic data, total work engagement and organizational justice.

regarding distributive justice, and about one third (33.6%) of them had moderate perception regarding the interactional justice. While only 16.4% of them had high perception regarding procedural justice.

Figure (4) shows that about two thirds (67.8%) of them had low perception regarding total organizational justice.

Figure (5) shows that about two thirds (67%) of staff nurses had low perception regarding vigor, While less than two thirds (63.2%) of them had high perception regarding dedication.

Figure (6) shows that more than half (56.5%) of them had low perception regarding total work engagement.

Table (2) shows that there were highly significant statistical positive correlations between total organizational justice and vigor ( $r=.271, p<0.001$ ), dedication ( $r=.384, p<0.001$ ) and absorption ( $r=.384, p<0.001$ ). Also, there were highly significant statistical positive correlations between total work engagement and distributive justice ( $r=.325, p<0.001$ ), procedural justice ( $r=.301, p<0.001$ ), and interactional justice ( $r=.297, p<0.001$ ).

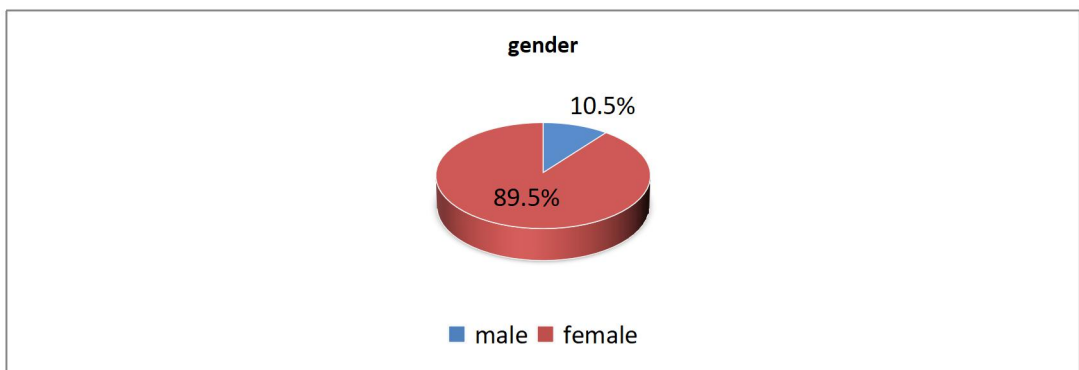
Table (3) shows that there were highly significant statistical positive correlations between total organizational justice and total work engagement ( $r=.355, p<0.001$ )

Table (12) shows that there was significant statistical relation between staff nurses perception of organizational justice and their experiences level ( $\chi^2=15.4, p= .01$ ).

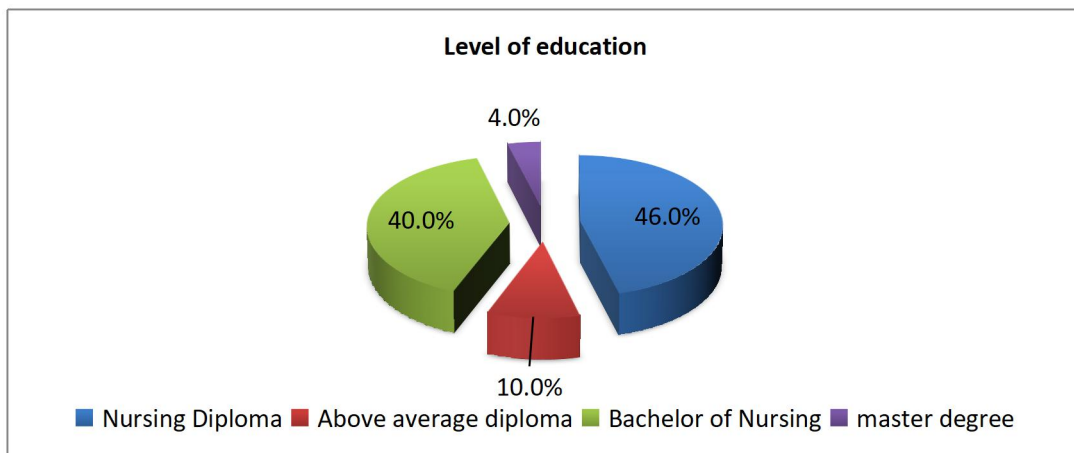
Table (13) shows that there was significant statistically relation between total work engagement and participants' age ( $\chi^2=10.39, p= .006$ ), qualification ( $\chi^2=16.67, p= .00$ ), and experiences level ( $\chi^2= 14.75, p= 0.002$ ).

**Table (1): frequency distribution of participants' age and years of experience (n=152)**

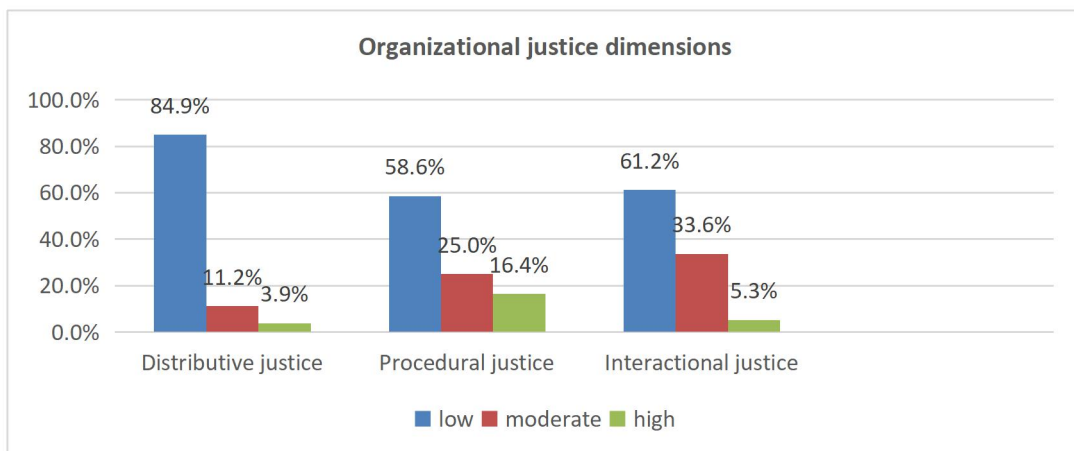
Demographic characteristics	No.	%
<b>Age (years):-</b>		
< 30	48	32
30- 40	72	47
>40	32	21
<b>Mean± SD</b>		38.90±7.21
<b>Years of Experiences ( years):-</b>		
<10	56	37
10- 20	70	46
>20	26	17
<b>Mean± SD</b>		18.16±7.41



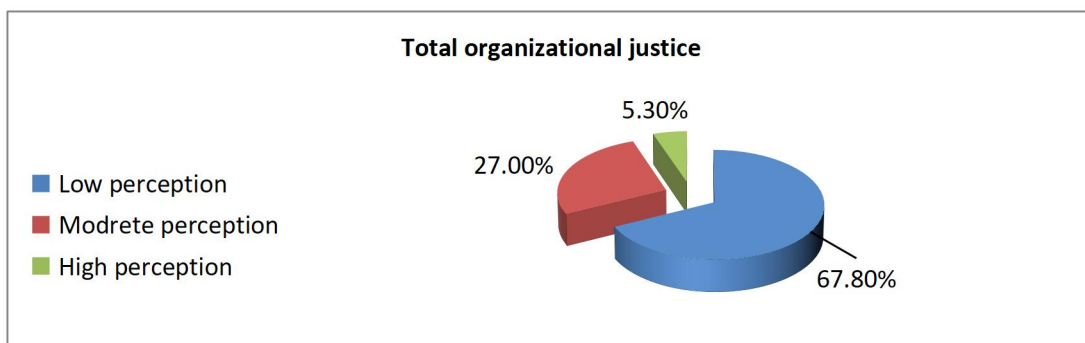
**Figure (1): Distribution of staff nurses regarding gender (n= 152).**



**Figure (2):** frequency distribution of staff nurses regarding level of education (n=152)



**Figure (3):** frequency distribution of staff nurses' perception regarding levels of organizational justice dimensions (n=152)



**Figure (4):** Total organizational justice perception of staff nurses (n=152)

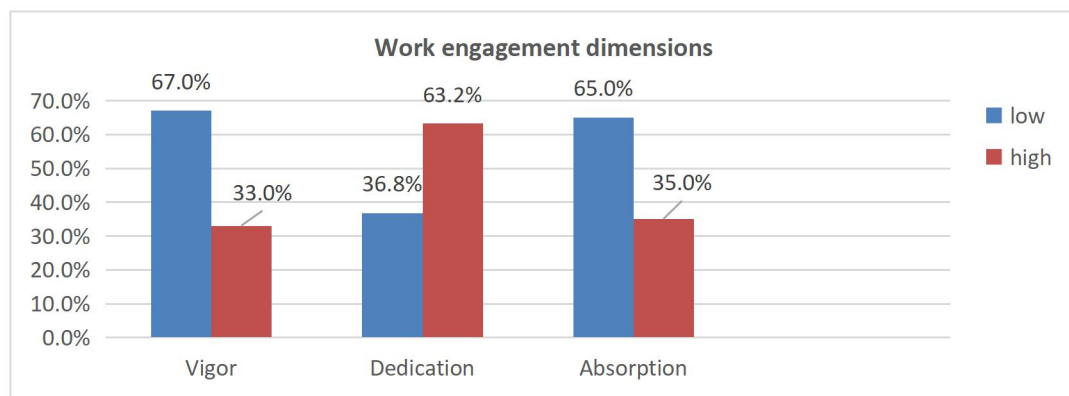


Figure (5): frequency distribution of staff nurses' perception regarding levels of work engagement dimensions (n=152)

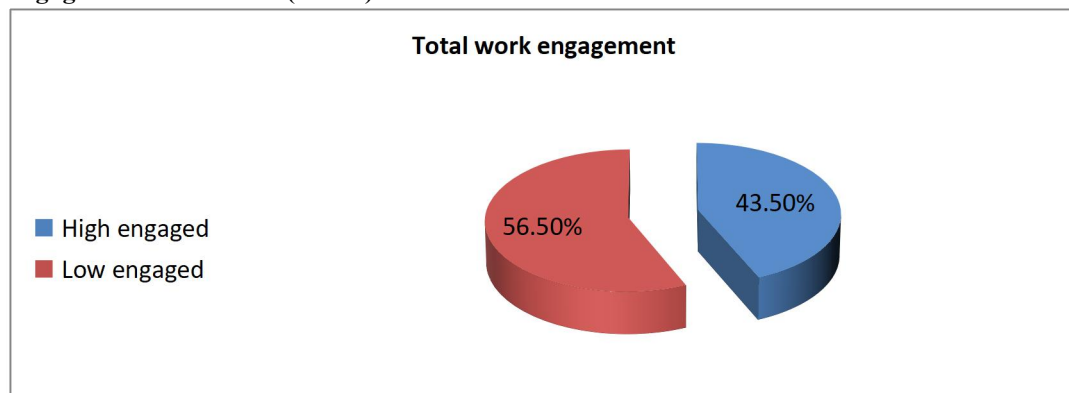


Figure (6): staff nurses perception regarding total work engagement (n=152)

Table (2): correlation matrix between organizational justice dimensions and work engagement dimensions (n=152)

Dimensions	Pearson Correlation	Vigor	Dedication	Absorption	Total engagement	work
Distributive justice	r	.199	.412	.282	.325	
	p	.014	.000	.000	<0.001**	
Procedural justice	r	.253	.326*	.247	.301	
	p	.002	.000	.002	<0.001**	
Interactional justice	r	.237	.295	.282	.297	
	p	.003	.000	.000	<0.001**	
Total organizational justice	r	.271	.384	.318	.355	
	p	<0.001**	<0.001**	<0.001**	<0.001**	

\*\* Highly significant at p<0.001

\* Significant at p< 0.05

**Table (3): correlation between total organizational justice and total work engagement (n=152)**

Dimensions	Pearson Correlation	Total work engagement
Total organizational justice	r	.355
	p	<0.001**

**Table (4): Relation between demographic characteristics of the studied staff nurses and their perception of organizational justice (n=152)**

Total organizational justice	Categories	low		Moderate		High		Chi square test	
		No.	%	No.	%	No.	%	$\chi^2$	P-value
Age	< 30	31	64.6	15	31.3	2	4.2	6.54	0.16
	30- 40	54	75	16	22.2	2	2.8		
	>40	18	56.3	10	31.3	4	12.5		
Gender	Male	10	62.5	6	37.5	0	0	1.75	0.42
	Female	93	68.4	35	25.7	8	5.9		
Qualification	Nursing diploma	48	64.9	18	24.3	8	10.3	9.13	0.06
	Nursing diploma & specialty	45	71.4	18	28.6	0	0		
	BSc	10	66.7	5	33.3	0	0		
Experiences level	<10	38	67.9	16	28.6	2	3.6	15.4	0.01*
	10- 20	53	75.7	15	21.4	2	2.9		
	>20	12	46.2	10	38.5	4	15.3		

\* Significant at  $p < 0.05$ **Table (5): Relation between demographic characteristics of the studied staff nurses and their level of work engagement (n=152)**

Total work engagement	Categories	Low		High		Chi square test	
		No.	%	No.	%	$\chi^2$	P- value
Age	< 30	34	70.8	14	29.2	10.39	0.006*
	30- 40	48	66.7	24	33.3		
	>40	12	37.5	20	62.5		
Gender	Male	10	62.5	6	37.5	.003	0.95
	Female	84	61.8	52	38.2		
Qualification	Nursing diploma	36	48.6	38	51.4	16.67	0.00*
	Nursing diploma & specialty	51	81	12	19		
	BSc	7	46.7	8	53.3		
Experiences level	<10	41	73.2	15	26.8	14.75	0.002*
	10- 20	45	64.3	25	35.7		
	>20	8	30.8	18	69.2		

\* Significant at  $p < 0.05$



## Discussion

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Justice is an important and venerable subject in human civilization. Organizational justice refers to the extent to which nurses perceive work place procedures, interactions and outcomes to be fair in nature. The promotion and maintenance of justice behaviors in hospital and among nurses is really necessary for increasing positive attitudes, inspiring loyalty and motivate individuals to devote more efforts in their work. If nurses perceive that they are treated with fairness, this translates into self-confidence, self- efficacy and citizenship behavior, reflected in improved patient outcomes and organizational performance. (Hatam et al., 2017)

The present study was aimed at determining relationship between organizational justice and work engagement among staff nurses. The study subjects were (152) staff nurses working in El Menshawy general hospital that affiliated to ministry of health.

Regarding to the first variable investigated in the present study was organizational justice. The present study finding revealed that about two thirds of studied staff nurses had low perception toward total organizational justice. This result may be duo to staff nurses perceived that, their supervisors aren't fair in taking work decisions, and not explain the major justifications about the decisions made. This finding was consistent with study conducted by **El-Nagar, (2019)** who mentioned that staff nurses had low perception toward total organizational justice.

Also, this study is relevant with **Kazamel, (2020)** who found that staff nurses had low perception toward total organizational justice. In contrary with the study finding a study conducted by **Hatam et al., (2017)** who mentioned that staff nurses had high perception toward total organizational justice. Also this study finding

disagreed with a study conducted by **Ito et al., (2015)** who mentioned that staff nurses had moderate perception toward total organizational justice.

Regarding studied staff nurses perception toward distributive justice domain, the finding of the present study showed that the majority of the studied staff nurses had low perception toward the item "Financial incentives I get are very suitable for my work". This may be due to staff nurses' salaries not suitable with their responsibilities and duties in their work, also the long working hours especially during night shift and during holidays that affect negatively on their family and social life.

In additional to that the finding of the present study showed that the majority of the studied staff nurses had low perception toward distributive justice dimension. This may be due to unfairness distribution of work load and financial incentives. This finding is in agreement with **Geater, (2018)** who found that half of the studied nurses had low perception level toward distributive justice. In contrary with this study finding a study conducted by **Abu Tayeh et al., (2016)** who found that more than half of the studied participants have high perception toward distributive justice.

Regarding to the present study finding concerning procedural justice, more than half of studied staff nurses had low perception toward the item "Nurses are allowed to reject or oppose the decisions issued by the director". This result may be due to the director need to be more assertive and listen to staff nurses opinions and take their opinions in the consideration.

In additional to that the finding of the present study showed that more than half of the studied staff nurses had low perception toward procedural justice dimension. This result may be due to lack of staff nurses participation in decision making especially in issues and problems related to nurses. This finding is agreed with **Geater (2018)** who

found that more than half of the studied nurses had low perception level toward procedural justice.

Also, this finding was in the same line with the finding of **Kazamel, (2020)** who found that staff nurses had low perception toward procedural justice. In contrary with the study finding a study conducted by **Ito et al., (2015)** who mentioned that staff nurses had moderate perception regarding procedural justice.

Regarding studied staff nurses perception toward interactional justice, the present study finding mentioned that about two thirds of the studied staff nurses had low perception toward the item "my manager explains to me clearly any decisions related to my job". This result may be due to lack of communication and interactions between manager and staff nurses.

In additional to that the finding of the present study showed that about three fifth of the studied staff nurses had low perception toward interactional justice dimension. This result may be due to head nurses' bias in in treating staff nurses and they not explain the major justifications about the decisions made for staff nurses. In consistent with this study finding a study conducted by **Ali et al., (2018)** who mentioned that, the highest percentages of nurses perceived a low level of interactional justice. In contrary with the study finding a study conducted by **kazamel, (2020)** who mentioned that studied staff nurses had high perception toward interactional justice. Also this study finding disagreed with the study conducted by **Geater, (2018)** who found that staff nurses had moderate perception toward interactional justice.

Moreover the study finding revealed that, there was no statistically significant relationship between staff nurses perception of organizational justice and their age group, gender and qualification. This result may be due to staff nurses' perceived inadequate fairness delivered from the organization,

work stressors and unsafe area of working environment. Meanwhile, the study finding revealed that there was statistically significance relation between staff nurses perception of organizational justice and their experiences level. This result may be due to more experienced nurses are likely to be emotionally attached to the organization show more commitments toward their organization and receive better hierarchical positions in their job.

This finding is consistent with **Kazamel, (2020)** who mentioned that, there was no statistically significant correlation between staff nurses perception of organizational justice and nurses' age group, gender and qualification. While the present study finding dis agreed with the same researcher who found that there was no statistically significant relation between staff nurses perception of organizational justice and their experiences level, where this study finding found that there was statistically significant relation between staff nurses perception of organizational justice and their experiences level.

In contrary with the study finding **Mohamed et al., (2018)** who found that, a significant relationship between organizational justice and: age, gender and qualification of studied participants were found. However this study finding agreed with the same researcher that there was statistical significant relation between staff nurses perception of organizational justice and their years of experience.

The second variable in this study was work engagement; regarding to staff nurses perception toward total work engagement the finding of the present study showed that more than half of staff nurses had low perception regarding total work engagement. This result may be due to poor communication, bureaucratic management and job dissatisfaction. This study finding agreed with **Shang et al., (2018)** who mentioned that nurses had low level of work engagement.

This finding disagreed with **Abd Elkader, (2017)** who found that less than three quarter of participants had high work engagement level, also this study finding in contrary with a study conducted by **Ozer et al, (2017)** who found that the health care employees had moderate level of work engagement.

According to the present study finding concerning vigor dimension; the majority of studied staff nurses had low level toward the item "I can continue working for very long periods" this may be due to increase workload of staff nurses and decrease their supervisors' motivation to them. In addition to that the present study showed that staff nurses had low perception regarding vigor dimension. This may be due to lack of their enthusiasm and their supervisors' bias in treating them. This study finding was consistent with the findings of **Mokoka et al., (2014)** who showed that staff nurses had low perception regarding vigor dimension. While this study finding disagreed with **Abd Elkader, (2017)** who found that studied participants had high perception regarding vigor dimension.

Regarding to the present study finding concerning dedication dimension; about two third of studied staff nurses had high level toward the item "I am proud on the work that I do" this may be due to they feel that their work full of meaning and purpose. In addition to that the finding of the present study showed that more than half of staff nurses had high perception toward dedication dimension. This may be due to they feel comfortable with their work conditions and they are proud on the work that they do. This finding is agreed with **Abd Elkader, (2017)** who found that the majority of participants had high engagement level regarding dedication dimension. Meanwhile this study finding disagreed with **Shang et al., (2018)** who mentioned that nurses had low level of dedication dimension

Regarding absorption dimension; the finding of the present study showed that the

majority of staff nurses had low level toward the item "I didn't feel any tired during working". This may be due to increase work responsibilities and duties of staff nurses. Furthermore the present study finding showed that studied staff nurses had low level toward absorption dimension. This result may be due to increase work load and lack of supervisors' support and motivation.

In agreement with this study finding **Shang et al., (2018)** who mentioned that nurses had low level of absorption dimension. Meanwhile the present study finding disagreed with **Abd Elkader (2017)** who found that the majority of participants had high engagement level regarding absorption dimension.

In conclusion the present study finding revealed that, the highest perception level was dedication dimension. This finding could be due to staff nurses feel that their work has significance and purpose. On the other hand vigor was the lowest level. This finding could be due to job dissatisfaction, poor communication and lack of enthusiasm of staff nurses. In agreement with this study finding **Janaro et al., (2015)** who mentioned that dedication dimension was the highest level and vigor was the lowest level.

According to the study finding, there was no statistically significant relation between total work engagement and gender of studied staff nurses, but there was statistically significant relation between work engagement and studied staff nurses' age, qualification and experiences level. This may be due to older age and more experienced nurses had more loyalty to their work place. This result was constant with **Czerw and Grabowki, 2015** who found that age and years of experiences affect work engagement.

Regarding to correlation between organizational justice dimensions and work engagement dimensions, the finding of the present study showed that there were highly significant statistical positive correlations between total organizational justice and vigor,

dedication and absorption. Also there were highly significant statistical positive correlations between total work engagement and distributive justice, procedure justice and interactional justice. The finding of the present study was supported by a study conducted by **Ozer et al., (2017)**.

Regarding to correlation between total organizational justice and total work engagement the finding of the present study showed that there was highly significant statistical positive correlation between total organizational justice and total work engagement. This result may due to perception of injustice in the work place decrease employees' commitment and their loyalty to their work.

The research question was confirmed by that, there was a statistically significant positive correlation between organizational justice and work engagement among studied staff nurses. This finding indicated that, when staff nurses aren't treated fairly and valued by their supervisors and organizational management; nurses become less enthusiastic, less committed and not loyal to their work.

The findings of the current study are consistent with **Ozer et al. (2017)** who mentioned that there was positive correlation between total organizational justice and total work engagement. Also, the findings of the current study agreed with **Shang et al., (2018)** who mentioned that that there was positive correlation between organizational justice and work engagement

### **Conclusion**

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In the light of the current study findings, it can be concluded that, the majority of staff nurses had low perception level toward distributive justice dimension, while about two thirds of staff nurses had low perception level toward total organizational justice. Also, about two thirds of staff nurses had low perception level toward vigor

dimension, while more than half of them had low perception regarding total work engagement.

### **Recommendations:**

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Based on the main study findings the followings were recommended:

1.Nursing supervisors should consider enhancing engagement of their staff nurses through creating motivational work environment and improving staff nurses perception of organizational justice.

2.Managers have to ensure fairness in distribution of rewards and incentives to staff nurses.

3.Encourage staff nurses' participation in decision making.

### **Future researches can be suggested:**

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1. Assessing the relationship between organizational justice and job performance and productivity among nurses.

2. Investigating the relationship between quality of work life and work engagement among nurses.

### **References:**

- Abd Elkader, A.K. (2017)**, "Relationship between quality of work life and work engagement among head nurses.
- Abu Tayeh, B., (2016):** The effect of organizational justice on organizational citizenship behavior in government ministries centers in Jordan, Islamic university. Economic and administrative studies journal, 20: 145-186.
- Ali, R., Koth, F. and Rashed, N. (2018):** Examining The Relations Between Organizational Justice, Turnover and Burnout among Staff Nurses. Journal of Health, Medicine and Nursing, 50(1): 108- 120.

- Ching, S.L. (2016).** Job Embeddedness, Work Engagement, And Ethical Work Climate On Turnover Intention Of Academic Staff In Private Higher Educational Institutions (Doctoral dissertation, Universiti Sains Malaysia).
- Czerw, A., Graboski, D., (2015):** Work attitudes and work ethics as predictors of work engagement among polish employees polish psychological bulletin 46 (4) 503- 512
- Dehkordi, F, Mohamadi, S and Yektayer, M. (2017):** Relationship of organizational justice and organizational commitment of the nurses in general directorate of youth and sports in chahar Mahal, European journal of experimental biology, frkpkkeiwjwerjfkferfmrkigm3 (5) : 376- 380
- Demirkiran, M., Taskaya, S., & Dinc, M. (2018).** A study on the relationship between organizational justice and organizational Citizenship Behavior in Hospitals. Int. J. Bus. Manage. Econ. Res, 7, 547-554.
- El-Naggar, D. (2019):** Organizational Justice and Job Satisfaction among Nurses. Un Published Master's Thesis. Faculty of Nursing, Ain Shams University, Pp. 88-98.
- Geater, R.M (2018), ' Influence of organizational justice on organizational citizenship behavior among nurses, No 179**
- Ghosh, P., Rai, A., Sinha., A. (2018).** Organizational justice and employee engagement Exploring the linkage in public sector banks in India pp 634- 640
- Hatam, N., Fardid, M. and Kavosi, Z. (2017):** Perceptions of Organizational Justice among Nurses Working in University Hospitals of Shiraz: A Comparison Between General and Specialty Settings. Nursing Midwifery Studies Journal, 2(4): 77-82.
- Ito, Y., Nakamura, S., Kimura, R., Mori, M., Okanoya, J., Somemura, H. and Tanaka, K. (2015):** Relationship between organizational justice and psychological distress among hospital nurses. Kitset Medical Journal, 45(1): 38-44.
- Janaro, c., Flores, N., Orgaz, M.B.,(2015).** Vigor and dedication in nursing professionals :Toward a beter understanding of work engagement. Journal of advanced nursing, 67, 865-875.
- Kazamel,S.H.(2020).** Organizational justice and its influence on workplace deviance behavior among staff nurses
- Mohamed, H., Higaze, M. and Goda, S. (2018):** Organizational Justice and Workplace Bullying: The Experience of Nurses. American Journal of Nursing Research, 6(4): 208-213
- Mokoka, E., Oosthuizen, M.J., and Ehlers V.J. (2014).** Retaining professional nurses in South Africa: nurse managers' perspectives. Health SA Gesondheid, 15(1): 1-9
- Niehoff, B. and Moorman, R. (1993):** Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. Academy of management Journal, 36: 527-556
- Ozer, O., Ugurluoglu, O., Saygili, M. (2017).** Effect of organizational justice on work engagement in health care sector of turkey. Journal of health management, 19, 73-83
- Schaufeli, W. B., & Bakker, A. B. (2004).** Defining and measuring work engagement: Bringing clarity to the concept. Work engagement: A handbook of essential theory and research, 12, 10-24.
- Shang S, Wan Q, Zhou W, Li Z, Yu F.(2018).** Work engagement and its predictors in registered nurses: A cross-sectional design. Nursing Health Sci. 2018 Dec;20(4):415-421.