American Journal of Nursing Research, 2018, Vol. 6, No. 6, 576-585 Available online at http://pubs.sciepub.com/ajnr/6/6/28 ©Science and Education Publishing DOI:10.12691/ajnr-6-6-28



Organizational Justice, Organizational Citizenship Behavior and Turnover Intention among Nurses: The Mediating Effect of Transformational Leadership

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Received September 12, 2018; Revised October 23, 2018; Accepted October 28, 2018

Abstract Nurse Supervisors should do their best to sustain transformational and interactional justice behaviors relationship with staff nurses. This will not only improve nurses' commitment to the organization and decrease turnover intention, but also encourage their organizational citizenship behavior and improve the organizational effectiveness. This study aimed to investigate the relationship among organizational justice, transformational leadership, organizational citizenship behavior, and turnover intention among nurses at Zagazig University Hospitals. A descriptive correlational design was used for this study. A stratified random sample of 384 nurses was chosen from the above mentioned settings. A questionnaire sheet was used to collect data for this study that was composed of four parts: Organizational justice scale, organizational citizenship behavior, turnover intention scale, and multifactor leadership questionnaire. Results revealed that 66.1% and 51.3% of nurses had positive perceptions of transformational leadership and organizational justice, respectively. Likewise, 66.7% and 46.9% of nurses had moderate levels of organizational citizenship behavior and turnover intention, respectively. Moreover, there was significant relationship between organizational justice, transformational leadership, organizational citizenship behavior, and turnover intention, where P-value < 0.05. Conclusion: The organizational justice is effective in improving nurses' organizational citizenship behavior and reducing their turnover intention. As well, transformational leadership full mediated the relationship between organizational justice as regards organizational citizenship behavior and turnover intention. Recommendation: Hospital administrators should develop fair and consistent procedures regarding nursing personnel, performance assessment, distribution of outcomes, rewards, and promotions to improve the perception of organizational justice.

Keywords: organizational justice, transformational leadership, organizational citizenship behavior, turnover intention

Cite This Article: Fatma Gouda Metwally, Azza Abdeldayem Ata, and Asmaa Kamal Ahmed, "Organizational Justice, Organizational Citizenship Behavior and Turnover Intention among Nurses: The Mediating Effect of Transformational Leadership." *American Journal of Nursing Research*, vol. 6, no. x (2018): 576-585. doi: 10.12691/ajnr-6-6-28.

1. Introduction

Nurses are regarded the core of healthcare institutions and nurses' retention remains a challenge for the nursing administrators. Therefore, organizational justice (OJ) as an organizational measure must be established through building sound transformational leadership (TL) style in order to motivate nurses to perform citizenship behavior and remain in the organization. This is necessary to ensure the continuity of high quality of patient care, organizational efficiency, performance, and productivity [1,2].

The way nurse managers behave and treat nurses would influence their attitudes and work behaviors [3]. When staff nurses have a positive attitude towards their

job, department, or organization; they become more motivated to work effectively [4]. Healthcare organizations are now confronted with trained nurses, who not only seek better employment, but also expect more respect [3]. Accordingly, OJ has become a key element for organizations as it directly affects the attitude and behaviors of nurses and enhances the perception of institutional fairness among them [5].

OJ is a significant motivating means of the organizational behaviors. Justice is a broad and multifaceted concept and discipline with the meaning of non-discrimination and fair differences. OJ is used to describe the perception of a group and individual fairness of an organizational behavior and their behavioral responses to that perception [6]. Likewise, OJ is defined as the conditions in which nurses believe that their organization is treating them fairly or not [5].

There are three types of OJ including the distributive, procedural, and interactional justice. Distributive justice is based on the principle of equity [7]. It is the subjective perception of nurses that the organizational resources and outcomes are fairly distributed and allocated so that they can attain the organizational objectives. A distribution would only be perceived fair if it is compatible with the allocation rules [8]. Likewise, procedural justice is defined as the perceptions of fairness in the creation and implementation of human resources policies and interventions. As well, interactional justice can be described as perceived fairness relating to the interpersonal dealing within an organization to determine outcomes and nurses' feelings of how fairly their managers treat them. It focuses on teamwork and interdepartmental relations [7].

Justice is important because it emphasizes on staff nurses' perception of fairness that influences their performance, commitment, retention, and create organizational citizenship behavior (OCB), which is not directly or clearly acknowledged by the official reward system, and in the aggregate encourages the effective and efficient functioning of the organization [9,10].

OCB is defined as "the behavior that moves beyond the official requirements of a job and is beneficial to the organization". OCB included five dimensions as follows: Altruism, conscientiousness, sportsmanship, courtesy and civic virtue. Altruism can be defined as the contributions to effectiveness that taking the form of assisting specific individuals, such as peers, nurse supervisors, patients, or relatives. Likewise, conscientiousness involves loyal adherence to rules about work procedures and behaviors. As well, sportsmanship is the readiness to tolerate conditions without complaining. On the other hand, courtesy is the discretionary way of avoiding work related problems with others, and finally, civic virtue is an individual behavior that is indicating that the nurse participates in and is reasonably worried about the organization life [11].

Today one of the problems facing all organizations is maintaining the professional nurses, regardless of type or geographical place [6]. Organizational justice is one of the factors that is directly affecting nurses' turnover intention; whereas nurses' negative perceptions toward the organizational justice may lead to elevated turnover intention, low performance, low citizenship behaviors and commitment [11]. Turnover intention is defined as the wish or willingness of a nurse to leave his/her present organization. Additionally, it can be described as a nurse's conscious and intentional willingness to voluntarily withdraw permanently from the employer hospital. The desire and readiness of nurses to leave an employer hospital stem from a variety of reasons such as reduced workforce, jobrelated stress, salary and benefits, management strategies, unfair and inequitable application of staff policies and procedures for assessment of promotions and unfriendly treatment from supervisors and peers [12].

In order to reduce turnover rate, it is essential to use TL style [1]. This leadership style plays an essential role in facilitating the application of OJ behaviors that could in turn motivate nurses to perform citizenship behavior and stay in the hospital [13]. TL represents as the ideal style of nursing leadership because it allows the creation of adaptive and cohesive work teams that can lead to improved quality of patient care. Transformational leaders

encourage followers to transcend their self-interests and achieve exceptional objectives by displaying idealized influence or charisma, inspirational motivation, intellectual stimulation, and individualized consideration. Idealized influence or charisma can be defined as the leader's ability to articulate clear visions that are compatible with the organizational objectives, thereby fostering the trust and respect of followers [1].

However, inspirational motivation happens when leaders act as role models showing determination and confidence while motivating the followers to exceed performance norms. Intellectual stimulation happens when the leader promotes the followers to be innovators and try to find resolutions to the challenging problems. Individualized consideration happens when leaders devote efforts and attentions towards their followers' developmental needs to certify that they are responsible for their own growth as well as others' growth [1]. By applying such behaviors, transformational leaders stimulate nurses to work extraordinary to attain the organizational goals [14].

1.1. Significance of the Study

Health care organizations around the world are striving to deliver high quality of patient care while suffering from nursing shortages that could be a critical problem and affect turnover intention among nurses. In order to decrease turnover intention rate, it is essential for healthcare organizations to have transformational leaders who can display fair practices in their daily interactions with subordinates [1]. Additionally, transformational leaders are likely to increase nurses' perception of organizational justice by applying their values and beliefs and maintaining constantly high standards of ethics among all group members. In turn, nurses will be motivated to do more than initially planned and they will feel an intrinsic sense of obligation and responsibility to return the actions of their supervisors' by exerting increased organizational citizenship behavior efforts and intentionally stay in the organization [15]. The results of this study will help fill in the gaps in understanding the mediating effect of transformational leadership on the relationship between organizational justice as regards organizational citizenship behavior and turnover intention among nurses. This could lead to positive outcomes for both the healthcare providers and patients such as high quality of care, greater satisfaction, productivity, organizational commitment, and engagement.

1.2. Theoretical Framework

Based on Carter et al. [16] who stated that transformational leaders apply their influence by sharing a convincing vision with subordinates, inspiring their aspirations, and encouraging them to increase their capacity and perform beyond the expectations arising from the financial exchange contract with the organization. Such behaviors should promote the recognition by subordinates of convictions and standards that are consistent with the actions of nurse managers and improve the sense of obligation of subordinates to reciprocate with higher work effort. Supervisors who express these behaviors during the interpersonal interactions are likely

to be the primary subordinates' feelings of being treated with equality, respect, and dignity. These feelings are the hallmarks of the organizational justice. According to the social exchange and social identity theories, if the nurse manager treated staff nurses in a faire manner and supported their personal and work related requirements for consideration and respect, this should encourage them to exert extra efforts to recompense their nurse managers' actions by exerting increased organizational citizenship behaviors efforts and intentionally stay in the organization.

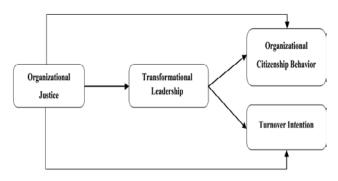


Figure 1. Theoretical framework of the study

1.3. Aim

The present study aimed to investigate the relationship among organizational justice, transformational leadership, organizational citizenship behavior, and turnover intention among nurses at Zagazig University Hospitals.

1.4. Research Questions

- What is the nurses' perception towards organizational justice?
- What is the nurses' perception towards transformational leadership?
- What is the level of nurses' organizational citizenship behavior?
- What is the level of turnover intention among nurses?
- What are the relations among organizational justice, transformational leadership, organizational citizenship behavior, and turnover intention?
- Does transformational leadership mediate the relationship between organizational justice and organizational citizenship behavior?
- Does transformational leadership mediate the relationship between organizational justice and turnover intention?

2. Methodology

2.1. Design

A descriptive correlational design was used for this study.

2.2. Setting

This study was conducted at all Zagazig University Hospitals (academic hospital), Egypt, which includes two sectors involving eight teaching hospitals. The emergency sector included four hospitals; New-Surgical hospital (600 beds), Internal-Medicine hospital (322 beds), Emergency hospital (185 beds), and the Delivery and premature hospital (57 beds). El-Salam sectors include four hospitals; three of them provide free treatment, these were: Cardiac and Chest hospital (212 beds), El-Salam hospital (254 beds), and The Pediatric hospital (220 beds) and the last one provides economic treatment, is El-Sadat Hospital (104 beds). With total bed capacity 1954 beds. These hospitals provide inpatient and outpatient services with a total number of 2446 staff nurses.

2.3. Subjects

A stratified random sample was used. The required number of nurses from each hospital was calculated with the following formula (number of nurses in each hospital × required sample size / total number of nurses in all hospitals). Accordingly 384 nurses were chosen randomly as follows; New-Surgical Hospital (83 nurses), Internal-Medicine Hospital (75 nurses), Emergency Hospital (38 nurses), Delivery and Premature Hospital (23 nurses), Cardiac and Chest Hospital (63 nurses), El-Salam Hospital (47 nurses), El-Sadat Hospital (11 nurses), and Pediatric Hospital (44 nurses).

2.4. Sample Size

The ideal sample size was estimated at a confidence interval of 95%, margin of errors 5.0%, a total population size of 2446 nurses, and by using the following formula $[X^2 \text{ NP } (1-P) / d^2 (N-1) + X^2 P (1-P)]^{(17)}$; the required sample size was 384 nurses having the following inclusion criteria: At least one year of experience and accept to participate in the study

2.5. Instruments

A questionnaire sheet used to collect data for this study and composed of five parts:

Part 1: Personal and job characteristics of staff nurses developed by the researcher to collect data about: Age, gender, marital status, years of experience, and educational qualification.

Part 2: Organizational justice scale: Was developed by Niehoff and Moorman [18] to measure nurses' perception of organizational justice. The scale included 20 items divided into three domains: Distributive justice (5 items), procedural justice (6 items) and interactional justice (9 items). The responses of nurses were measured on a five point Likert scale ranged from strongly agree (5) to strongly disagree (1). The total scores of the scale range from 20-100. The nurse's score was considered a positive perception of organizational justice if it was $\geq 60\%$ and negative perception if it was < 60%. The reliability of the tool was measured by Cronbach alpha coefficient and it was 0.93.

Part 3: Multifactor Leadership Questionnaire (MLQ-Form 5): This part was developed by Avolio, and Bass [21] to assess nurses' perception of transformational leadership style. It involved 20 items that were categorized into five dimensions (four items for each):

Idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, and individual consideration. Items were rated on a five point Likert scale ranged from always (5) to never (1). The total scores range from 20–100. In this study, a score was considered a positive perception if it was \geq 60% and a negative perception if it was < 60%. The reliability of the questionnaire was tested using the internal consistency method that used Cronbach alpha coefficient and it was 0.98.

Part 4: Organizational Citizenship Behavior (OCB): This 24-items scale was developed by Organ in Podsakoff et al. [19]. There are five dimensions in this scale: Altruism, conscientiousness, sportsmanship, courtesy and civic virtue. All dimensions had five items except civic virtue has four items. The nurses' responses were measured on five point Likert scale ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). Only five items are negatively keyed. The total scores of the scale range from 24–120. Scores ≥ 96 indicated a high level, from 72 to 95 indicated a moderate level, and < 72 indicated a low level. The reliability of the tool was measured through assessing its internal consistency which used Cronbach alpha coefficient and it was 0.96

Part 5: Turnover Intention scale: This part is developed by Lyons [20] and included three items asking respondents how likely they are to stay in their current position or leave. The three items were repeated to ask about the propensity to leave the profession. The responses were on a 3-point Likert scale: Yes, Uncertain, and No scored 3, 2, and 1 respectively. Only two items are negatively keyed; so that higher score means lower turnover intention. The total scores of the scale range from 6–18. Scores ≤ 9 indicated a high level, from 10 to 13 indicated a moderate level, and > 13 indicated a low level. The reliability of the tool was measured by assessing its internal consistency that used Cronbach alpha coefficient and it was 0.78

2.6. Field Work

Data collection took four months from the beginning of November 2017 till the end of February 2018 during morning and afternoon shifts. The preparatory phase was done by explaining briefly the purpose of the study to the nurses. The time consumed to answer each questionnaire sheet ranged from 25 to 40 minutes.

2.7. Pilot Study

A pilot study was carried out on 38 nurses (10% of the study sample) to check the clarity of the tools and to estimate the time needed to fill in the questionnaire sheets by each participant. Required modifications were done and the subjects who participated in the pilot study were excluded from the main study sample.

2.8. Content Validity

Data were collected using a self-administered questionnaire, after the translation of the instrument to Arabic. The content and face validity were established by a jury of experts (5 professors & assistant professors) from academic nursing staff, Zagazig and Ain-Shams

Universities. According to their opinions, all necessary modifications were done.

2.8. Administrative and Ethical Consideration

Approval to conduct the study was obtained from the medical and nursing directors of the hospitals and the head nurses of the units after explaining the aim of the study. The participants were informed that their participation in the study is completely voluntary and the cover letter introducing the study addressed the confidentiality of the participants. Consent was established with the completion of the questionnaires.

2.9. Statistical Analysis

Data entry and statistical analysis were done using the Statistical Package for Social Science (SPSS), version 17.0. The cleaning of data was done to be sure that there was no missing or abnormal data. Data were presented using descriptive statistics in the form of frequencies and percentages for categorical variables, and means and standard deviations for continuous variables. Pearson correlation analysis was used for assessment of the interrelationships between total scale scores. Multiple Linear inner regression analysis was used to assess the mediation effect.

3. Results

Table 1 clarifies that 43.5% of nurses' age ranged from 30 to < 40 years, with a mean age of 35.27 ± 8.38 . As well, the highest percentages of nurses were female, married, worked for less than 10 years of experience, and had technical diploma in nursing (74.7%, 82.3 %, 68.5%, and 57%, respectively).

Table 2 indicates the distribution of study variables' mean scores as reported by studied nurses. As shown from the table, the highest mean scores of the organizational justice were for interactional justice followed by procedural justice (28.39 \pm 5.26, and 17.13 \pm 376, respectively). As well, the total mean score of organizational justice was 60.68 ± 10.16 . Concerning the transformational leadership domains, the highest mean scores were for inspirational motivation followed by idealized behaviors and individual consideration $(13.97\pm3.15, 13.87 \pm3.46, \text{ and } 13.87\pm3.00, \text{ respectively}).$ Additionally, the total mean score of transformational leadership was 68.34 ± 15.85 . As for the organizational citizenship behaviors, the highest mean scores were for altruism followed by conscientiousness (19.28 \pm 2.49, and 18.07 ± 3.30 , respectively), whereas the lowest mean score was for civic virtue (14.08 \pm 2.49) and the total mean score of organizational citizenship behaviors was 87.08 ± 12.09 . Moreover, the total mean score of turnover intention according to nurses' responses was 11.69±3.43.

Figure 2 illustrates nurses' perception as regards transformational leadership and organizational justice. As observed from the figure 66.1% of nurses had a positive perception of transformational leadership. Likewise, 51.3 % of them had a positive perception of organizational justice.

Table 1. Personal and job characteristics of the studied nurses $\left(n{=}384\right)$

(11 201)		
Personal and job characteristics	No	%
Age in year:		
• < 30	112	29.2
• 30 - < 40	167	43.5
• ≥ 40	105	27.3
Mean ± SD		35.27 ±8.38
Gender:		
• Male	97	25.3
• Female	287	74.7
Marital status:		
• Single	62	16.1
Married	316	82.3
• Widow	6	1.6
Experience:		
• < 10	263	68.5
• ≥ 10	121	31.5
Mean ± SD		7.68 ±5.03
Educational qualification:		
Nursing diploma	85	22.1
Technical diploma in nursing	219	57.0
Bachelor of nursing	80	20.8

Table 2. Distribution of different study variables' mean scores as reported by studied nurses $(n\!=\!384)$

Study variables	Mean	±	SD
Organizational justice domains:			
Distributive justice	15.17	±	2.95
Procedural justice	17.13	±	3.76
Interactional justice	28.39	±	5.26
Total mean score of organizational justice	60.68	±	10.16
Transformational leadership domains:			
Idealized attributes	13.15	±	3.73
Idealized behaviors	13.87	±	3.46
Inspirational motivation	13.97	±	3.15
Intellectual stimulation	13.49	±	3.36
Individual consideration	13.87	±	3.00
Total mean score of transformational leadership	68.34	±	15.85
Organizational citizenship behaviors domains:			
• Altruism	19.28	±	2.49
Courtesy	17.73	±	2.94
Sportsmanship	17.92	±	3.04
Civic virtue	14.08	±	2.49
Conscientiousness	18.07	±	3.30
Total mean score of citizenship behaviors	87.08	±	12.09
Total mean score of turnover intention	11.69	±	3.43

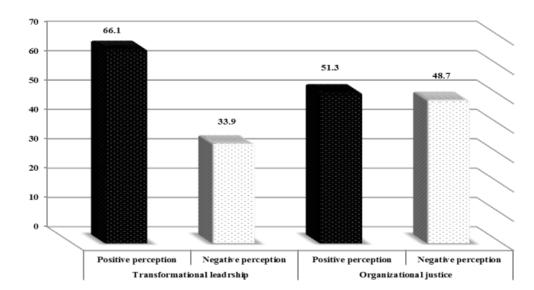


Figure 2. Nurses' perception as regards transformational leadership and organizational justice (n=384)

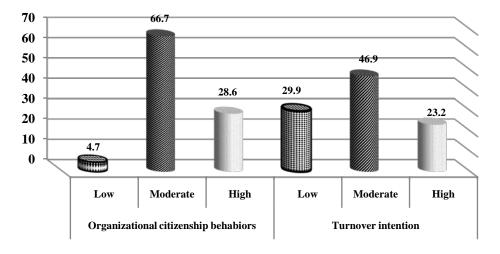


Figure 3. Levels of citizenship behaviors and turnover intention among the studied nurses (n=384)

Figure 3 explains the levels of citizenship behaviors and turnover intention among the studied nurses. It is clear from this figure that 66.7% of nurses had a moderate level of organizational citizenship behaviors. Similarly, the highest percentage of them (46.9%) had a moderate level of turnover intention.

Table 3 presents the correlation between the different study variables; this table displays that transformational leadership was significantly and positively correlated to organizational justice and organizational citizenship behaviors (r=0.614, P=0.000 and r=0.431, P=0.000, respectively). In addition, there was a significant and positive correlation between organizational justice and citizenship behavior (r=0.286, P=0.000). However, there were negative and significant correlations between nurses' turnover intention as regards their transformational leadership, organization justice, and citizenship behavior (r= - 0.279, P=0.000, r= - 0.269, P=0.000, and r= - 0.330, P=0.000, respectively).

Mediator explanation: There are three conditions must be met to establish a mediator. First, the independent variable (organizational justice) must be related to the mediator (transformational leadership). Second, the mediator (transformational leadership) must be related to the dependent variables (organizational citizenship behavior and turnover intention). Third, significant relationship between independent variable (organizational justice) and dependent variables (organizational citizenship behavior and turnover intention) will be reduced (partial mediation) or no longer be significant (full mediation) when controlling for the mediator (transformational leadership) [22]. Conditions one and two have been met as

described above in Table 3. For condition three, linear regression will be used in Table 4 and Table 5.

Table 4 proves that when transformational leadership was included in the organizational justice – organizational citizenship behaviors interaction model, the regression coefficient of organizational justice was reduced from β = 0.341, P= 0.000 to β =0.042, P= 0.547 (no significant). Additionally, organizational justice responsible for 8.2% of the variation in nurses' citizenship behaviors (R2= 0.082) in the direct model and this effect increased to 18.6% (R2=0.186) in the mediated model. Accordingly, this confirmed that transformational leadership is a perfect mediator in the relationship between organizational justice and organizational citizenship behavior.

Table 5 ascertains that organizational justice was negatively and significantly associated with nurses' turnover intention and when transformational leadership was involved in the organizational justice – turnover intention interaction model, regression coefficient of organizational justice was decreased from β = - 0.070, P = 0.001 to β = - 0.025, P= 0.141 (no significant). Also, organizational justice was responsible for only 0.6% of the variation in nurses' turnover intention (R2= 0.006) in the direct model and this influence increased to 3.5% (R2= 0.035) in the mediated model. Consequently, the transformational leadership style has a full mediation effect on the relationship between organizational justice and nurses' turnover intention.

Table 6 demonstrates that there was no significant relationship between nurses' personal and job characteristics as regards the different study variables, where P-value>0.05.

		-	-	-				
Study variables	Transformationa	l leadership	Organization	al justice	Organizational citizenship behaviors			
	r	p	r	р	r	p		
Organizational justice	0.614**	0.000						
Organizational citizenship behaviors	0.431**	0.000	0.286**	0.000				
Turnover intention	- 0.279**	0.000	- 0.269**	0.000	- 0.330**	0.000		

Table 3. Correlation between the different study variables as reported by studied nurses (n=384).

Table 4. Regression analysis to study the mediating effect of transformational leadership on the relationship between organizational justice and nurses' citizenship behavior (n=384)

Items	R	\mathbb{R}^2	Unstandard	4	C:	
		K	β	Std. Error	1	Sig.
Organizational justice	0.286	0.082	0.341	0.058	5.84**	0.000
Organizational justice	0.432	0.196	0.042	0.070	0.602	0.547
Transformational leadership	0.432	0.186	0.312	0.045	6.98**	0.000

^{*}Statistically significant at P < 0.05, ** Highly statistically significant at P < 0.01.

Table 5. Regression analysis to study the mediating effect of transformational leadership on the relationship between organizational justice and nurses' turnover intention (n=384)

Items	R	\mathbb{R}^2	Unstandard		G:-	
		K	β	Std. Error	١	Sig.
Organizational justice	0.075	0.006	- 0.070	0.022	-3.26**	0.001
Organizational justice	0.107	0.025	- 0.025	0.017	-1.47	0.141
Transformational leadership	0.187	0.035	- 0.047	0.014	-3.39**	0.001

^{*}Statistically significant at P < 0.05, ** Highly statistically significant at P < 0.01.

^{*}Statistically significant at P < 0.05, ** Highly statistically significant at P < 0.01.

Variables	Transformational leadership		Organizational justice			Organizational citizenship behaviors			Turnover intention			
, ariables	Mean	±	SD	Mean	±	SD	Mean	±	SD	Mean	±	SD
Age in years												
• < 30	69.39	±	16.02	61.42	±	10.88	88.59	±	10.74	11.92	±	3.52
• 30 - < 40	67.36	±	15.92	60.56	±	9.72	86.05	±	13.04	11.59	±	3.20
• ≥ 40	68.79	±	15.61	60.10	±	10.09	87.11	±	11.82	11.62	±	3.70
ANOVA F testP-value	0.60—0.54		0.48—0.61			1.48—0.22			0.34—0.70			
Gender:												
• Male	69.23	±	16.30	60.94	±	10.54	87.21	±	12.20	11.86	±	3.48
• Female	65.71	±	14.16	59.94	±	8.92	86.69	±	11.81	11.20	±	3.23
Independent t-testP-value	1.8	1.89—0.05		0.83—0.40		0.36—0.71			1.65—0.10			
Marital status:												
• Single	68.32	±	16.25	60.89	±	11.11	88.31	±	11.02	11.56	±	2.86
Married	68.16	±	15.75	60.59	±	9.99	86.81	±	12.33	11.78	±	3.51
• Widow	78.17	±	16.37	63.33	±	9.87	88.67	±	10.34	8.17	±	2.85
ANOVA F testP-value	1.1	7—0.3	1	0.22—0.79		0.44—0.63			1.36—0.23			
Years of experience												
• < 10	68.78	±	15.88	60.63	±	10.27	87.17	±	11.92	11.70	±	3.56
• ≥ 10	67.39	±	15.81	60.80	±	9.95	86.88	±	12.50	11.64	±	3.14
Independent t-testP-value	0.80—0.42		-0.15—0.87		0.22—0.82			0.13—0.89				
Educational qualification:												
Nursing diploma	67.96	±	15.28	60.52	±	10.94	88.07	±	10.13	11.94	±	3.15
Technical diploma in nursing	68.54	±	16.39	61.28	±	10.26	87.34	±	12.46	11.68	±	3.46
Bachelor of nursing	68.25	±	15.09	59.23	±	8.89	85.33	±	12.91	11.44	±	3.66
ANOVA F testP-value	0.04—0.95		1.21—0.29			1.17—0.30			0.43—0.65			

Table 6. Relation between personal and job characteristics of the studied nurses and different study variables (n=384)

4. Discussion

Nurses' turnover is one of the most costly issues of today's organizations to the point that the price of a resigning staff is about a year's wage [23]. Undoubtedly, elevated volunteer turnover levels are often unfavorable to organizational performance and work outcomes [24]. Besides, even if that turnover intention does not lead to real turnover, it has adverse effects on organizational effectiveness and the quality of patient care [25]. OJ perception is one of the potential factors that are a useful antecedent of that turnover intention. The positive perception of the OJ enhances greater OCB, greater work satisfaction, and reduced turnover intention. This observation finds support in social exchange theory, which posits that if the healthcare organizations had transformational leaders who treated nurses in a fairly manner, nurses would perceive benefits in their work exchanges and continue to participate in these exchanges by helping others, apply extra efforts in citizenship behaviors, and committed to the organization [26].

Therefore this study aimed to investigate the relationship among OJ, TL, OCB, and turnover intention among nurses at Zagazig University Hospitals.

As regards the total mean score and perception of the OJ; the results of this research showed that the highest

mean score was for the interactional justice; while the lowest was for distributive justice. Additionally, more than half of the studied nurses had positive perception of the OJ. These findings could be due to that the head nurses treated staff nurses in a fairly and respectful manner and allocate resources in honest way that could positively effect on the interactional justice. On the other hand, nurses may feel that there were an unequal distribution of incentives, inequity between the effort they exert and the salaries they received, the personal bias of the superior, and lack of their involvement in decision making process related to their work that could negatively affect the distributive justice.

The previous study findings are supported by other previous studies as the one carried out by Abdul Rauf [27], who examined the impact of OJ perception on OCB, in Sri Lanka, and the other done by Vaamonde et al. [26], who studied the relationship between OJ and turnover intention, in Argentina, and they found that the participants' perception of the OJ was positive and the highest mean score was for the interactional justice; while the lowest was for distributive justice. However, these findings were dissimilar with a study carried out by Tourani et al. [28] to investigate the relationship between OJ and turnover intention, in Iran, and found that the nurses' perception of the OJ was negative.

^{*}Significant at p < 0.05.

As for the total mean score and perception of the TL; the study findings displayed that the highest mean score was for the inspirational motivation; while the lowest was for the idealized attributes. Additionally, two thirds of the studied nurses had a positive perception of the TL style. The possible explanation for these findings might be due to that the head nurses who apply TL are naturally enthusiastic, optimistic, and can visualize a more attractive future state. Likewise, they may empower nurses and support them to make decisions and motivate them to internalize and prioritize a greater collective cause over their interests to achieve the organizational vision without expecting personal and tangible benefits. These behaviors could improve nurses' self-worth and selfconfidence that could, in turn, improve their perception about this leadership style.

These findings are in agreement with other previous studies as the one carried out by Olu-Abiodun & Abiodun [29], who studied the perception of TL among nurses, in Nigeria, and the other done by Majeed et al. [14], who explored relationship between TL and OCB, in Malaysia, and they found that nurses had a positive perception about TL style. Likewise, Higgins [30], who conducted a study to determine the influence of nurse managers' TL on nurse and patient outcomes in Canada; found that the inspirational motivation was scored as the highest domain of the TL. However, these findings were incongruent with those of a study conducted in the Kingdom of Saudi Arabia, by Aboshaiqah et al. [31] to determine nurses' perception of managers' leadership styles, and found that nurses had a fair perception about their supervisors' TL style. Similarly, in a study carried out by Duque et al. [32] to examine the relationship between leadership styles and turnover intention in the United States of America (USA), and asserted that the intellectual stimulation was scored as the lowest domain of the TL.

Concerning the total mean score and level of the OCB; the study results demonstrated that the highest mean score was for the altruism; whereas the lowest was for civic virtue. As well, two thirds of the studied nurses had a moderate level of OCB. These results could be due to that staff nurses prefer to assist particular others, such as colleagues, nurse managers, patients or even their families, rather than keeping up with the significant issues within the organization. In the same way, in other studies carried out by Bahrami et al. [33], in Iran, where they assessed the relationship between OJ and OCB; and Khalid et al. [34], who investigated the impact of OJ on OCB, in Pakistan, and they found that the mean score of the OCB was moderate. As well, Khalifa and Awad [35] found in a study determining the relationship between OJ and OCB, in Egypt, that nurses moderately perceived the OCB and altruism as a domain of that variable constituted the highest mean percent score.

Conversely, the previous findings are in disagreement with that of Altuntas and Baykal [36], who determined the OCB levels of nurses, in Turkey, and found that the OCB level of nurses was high. As well, Bahrami et al. [33] found that the highest mean score of OCB domains was for conscientiousness; however, the lowest was for the sportsmanship. Additionally, Mahmoud and Ibrahim [37], who carried out a study in Egypt, to assess factors in nurses' organizational citizenship behavior; and Khalifa

and Awad [35] found that the lowest mean percent score was for the conscientiousness domain of OCB.

Regarding the level of turnover intention among nurses; the results of this research indicated that the highest percentage of the studied nurses had a moderate level of turnover intention. This means that staff nurses were uncertain about leaving or staying in the hospitals. This might be due to that the studied nurses worked in governmental teaching hospitals that could make them not threatened to think about leaving the organization. This finding is contradicting with that of a study done by Almalki et al. [38], in the Kingdom of Saudi Arabia, to examine the relationship between quality of work life and turnover intention and found that the highest percentage of nurses had a low level of turnover intention. Likewise, in other studies carried out by Mosallam et al. [39], in Egypt, where they assessed turnover intention among intensive care unit nurses; and Kaddourah et al. [40], who investigated quality of work life and turnover intention, in the Kingdom of Saudi Arabia, and they found that the majority of nurses had a high level of turnover intention.

As regards the correlation between the different study variables and the mediating effect of TL style; the current study findings displayed that TL was significantly and positively correlated to OJ and OCB. In addition, there was a significant and positive correlation between OJ and OCB. However, there were negative and significant correlations between nurses' turnover intention as regards their OJ, TL, and OCB. Moreover, TL fully mediated the relationship between OJ as regards OCB and turnover intention. This might be due to that when the head nurses display TL style in the hospital; this can prompt staff nurses' respect and identification. As a consequence of this influence, nurses perceive that their nurse supervisors are fair with them and give rewards according to their work. In turn, nurses will feel an intrinsic sense of obligation and responsibility to reciprocate their nurse managers' actions by exerting increased OCB efforts and intentionally stays in the hospital.

These findings go in the same line with a study conducted in U.S.A., by Carter et al. [16] to examine the mediating influence of interactional justice on relations between TL and OCB, and found that TL was significantly and positively correlated to OJ and OCB. Likewise, Majeed et al. [14] found that there was a statistically significant positive correlation between TL and OCB. Similarly, Abdul Rauf [27], Khalid et al. [34], Mahmoud and Ibrahim [37], and Khalifa and Awad [35] found that OJ was significantly and positively correlated to OCB. Moreover, these findings are consistent with those of studies done by Sokhanvar et al. [41], who investigated the relationship between OJ and turnover intention, in Iran, Tourani et al. [28], and Vaamonde et al. [26], and they found that there was a statistically significant negative correlation between OJ and nurses' turnover intention. In this respect, in other studies carried out by Gul et al. [42], who examined the association between leadership styles and turnover intentions, in Pakistan, Siew [13], who investigated the relationship between leadership styles and turnover intention, in Malaysia, and Naseer et al [43], who studied the impact of leadership styles on staff nurses' turnover intentions, in Pakistan, and they found that TL negatively and

significantly correlated to nurses' turnover intention. Furthermore, Tsai and Wu [44], who studied the relationship between OCB, job satisfaction and turnover intention, in Taiwan, found that the turnover intention of clinical nurses is related to their OCB.

Concerning the relationship between studied nurses' personal and job characteristics as regards the different study variables; the research findings indicated that there was no significant relationship between nurses' personal and job characteristics as regards the different study variables. This might be due to there were other factors that could affect nurses' OJ, TL, OCB, and turnover intention such as the organizational rules, policies, regulations, nurse supervisors' personality, salaries, work requirements, and job satisfaction. In the same way, Sokhanvar et al. [41] asserted that no relationship was found between demographic variables as regards OJ and turnover intention.

5. Conclusion

The organizational justice is effective in improving nurses' organizational citizenship behavior and reducing their turnover intention. As well, transformational leadership full mediated the relationship between organizational justice as regards organizational citizenship behavior and turnover intention.

6. Recommendations

Based on the results of the research hospital administrators should:

- Concern about nurses' welfare and show support, consideration, and helpfulness.
- Develop fair and consistent procedures regarding nursing personnel, performance assessment, distribution of outcomes, rewards, and promotions.
- Foster the development of a close relationship between nurse managers and nurses.
- Improve nurses' perception about the organizational justice to increase their engagement in organizational citizenship behavior.
- Provide training programs for the nurse managers about transformational leadership style and encourage them to apply it.
- Encourage nurse managers to use a free flow of information, trust to nurses, open and two ways communication to improve interactional justice.

7. Further Researches about

- The relationship between organizational justice, transformational leadership, organizational citizenship behavior, and turnover intention in the governmental and private hospitals: A comparative study.
- The relationship between organizational justice, transformational leadership, organizational citizenship behavior, and turnover intention in the academic sectors in Egypt.

References

- [1] Cheng, C., Bartram, T., Karimi, L., & Leggat, S. (2016). Transformational leadership and social identity as predictors of team climate, perceived quality of care, burnout and turnover intention among nurses. *Journal of Personnel Review*; 45 (6): 1200-1216.
- [2] Labrague, L.J., Petitte, D.M., Tsaras, K., Cruz, J.P., Colet, P.C., & Gloe, D.S. (2018). Organizational commitment and turnover intention among rural nurses in the Philippines: Implications for nursing management. *International Journal of Nursing Sciences*; 5: 403-408.
- [3] Jafari P., & Bidarian S. (2012). The relationship between organizational justice and organizational citizenship behavior. *Journal of Procedia-Social Behavior Sciences*; 47: 1815-20.
- [4] Bidarian S. & Jafari P., (2012). The relationship between organizational justice and organizational trust. *Journal of Procedia-Social Behavior Sciences*; 47: 1622-6.
- [5] Hatam, N., Fardid, M., & Kavosi, Z. (2013). Perceptions of organizational justice among nurses working in university hospitals of shiraz: A comparison between general and specialty settings. *Nursing and Midwifery Studies Journal*; 2(4): 77-82.
- [6] Fathabad, H.S., Yazdanpanah, A., Hessam, S., Chimeh, E. E., & Aghlmand, S. (2016). Organizational justice and the shortage of nurses in medical & educational hospitals, in Urmia-2014. *Global Journal of Health Science*; 8(2): 99-105.
- [7] Ledimo, O. (2015). Development and validation of an organizational justice measurement instrument for a South African context. Risk Governance & Control: Financial Markets & Institutions Journal; 5: 27-38.
- [8] Pilvinyte, M. (2013). Perceptions of organizational justice, restorative organizational justice, and their relatedness to perceptions of organizational attractiveness. Published master dissertation. Faculty of Humanities, University of the Witwatersrand, Johannesburg, P.12.
- [9] Bauer, T.N., & Erdogan, B. (2012). Outcomes of organizational socialization. Inc. Weinberg (Ed.), Oxford Handbook of Organizational Socialization, Oxford, UK: Oxford University Press. Pp. 97-112.
- [10] Ledimo, O. (2015). An assessment of organizational justice perceptions across three generational cohorts. *Journal of Governance and Regulation*; 4 (4): 69-78.
- [11] Yardan, E.D., Kose, S.D., & Kose, T. (2014). The effect of employees' perceptions of organizational justice on organizational citizenship behavior: An application in Turkish public hospital. *Journal of Human Resources Management and Labor Studies*; 2 (2): 129-148.
- [12] Timinepere, C.O., Agbaeze, E.K., Ogbo, A., & Uche, N.C. (2018). Organizational Justice and turnover intention among medical and non-medical workers in University Teaching Hospitals. *Mediterranean Journal of Social Sciences*; 9 (2):149-160.
- [13] Siew, L.K. (2017). Analysis of the relationship between leadership styles and turnover intention within small medium enterprise in Malaysia. *Journal of Arts & Social Sciences*; 1 (1):1-11.
- [14] Majeed, N., Ramaya, T., Mustamil, N., Nazri, M. & Jamshed, S. (2017). Transformational leadership and organizational citizenship behavior: Modeling emotional intelligence as mediator. *Journal of Management and Marketing: Challenges for the Knowledge Society Journal*; 12 (4): 571-590.
- [15] Gillet, N., Fouquereau, E., Antignac, A.B., Mokounkolo, R. & Colombat, P. (2013). The mediating role of organizational justice in the relationship between transformational leadership and nurses' quality of work life: A cross-sectional questionnaire survey. *International Journal of Nursing Studies*; 50 (10):1359-1367.
- [16] Carter1, M.Z., Mossholder, K.W., Feild, H.S. & Armenakis, A.A. (2014). Transformational leadership, interactional justice, and organizational citizenship behavior: The effects of racial and gender dissimilarity between supervisors and subordinates. *Group* & *Organization Management Journal*; 39(6):691-719.
- [17] Krejcie, R.V. & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurements*; 30: 607-610.
- [18] Niehoff, B., & Moorman, R. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management Journal*; 3: 527-556.

- [19] Organ, D.W. (1988a). Organizational citizenship behavior: The good soldier syndrome. Lexington MA: Lexington Books. In Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. Leadership Quarterly Journal; 1(2): 107-142.
- [20] Lyons, T. F. (1971). Role clarity, need for clarity, satisfaction, tension, and withdrawal. *Organizational Behavior and Human Performance Journal*; 6: 99-110.
- [21] Avolio, B.J. & Bass, B.M. (2004). Multifactor leadership questionnaire sampler set. 3rd Ed. Mind garden Inc. Retrieved in July 19, 2017, from: www.mindgarden.com.
- [22] Saks, A.M., Rotman, J. L. R. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*; 21(7):600-619.
- [23] Boros, S., & Curseu, P. L. (2013). Is it here where I belong? An integrative model of turnover intentions. *Journal of Applied Social Psychology*; 43:1553-1562.
- [24] Flint, D., Haley, L.M., & McNally, J.J. (2013). Individual and organizational determinants of turnover intent. *Personnel Review Journal*; 42: 552-572.
- [25] Ferreira, A.I., Martinez, L.F., Lamelas, J.P., & Rodrigues, R.I. (2017). Mediation of job embeddedness and satisfaction in the relationship between task characteristics and turnover: A multilevel study in Portuguese hotels. *International Journal of Contemporary Hospitality Management*; 29: 248-267.
- [26] Vaamonde, J.D., Omara, A., & Salessiad, S. (2018). From organizational justice perceptions to turnover intentions: The mediating effects of burnout and job satisfaction. *Europe's Journal* of *Psychology*; 14(3): 554-570.
- [27] Abdul-Rauf, F.H. (2014). Perception of organizational justice as a predictor of organizational citizenship behavior: an empirical study at schools in Sri Lanka. European Journal of Business and Management; 6 (12): 124-131.
- [28] Tourani1, S., Khosravizadeh, O., Omrani, A., Sokhanvar, M., Kakemam, E., & Najafi, B. (2016). The relationship between organizational justice and turnover intention of hospital nurses in Iran. *Mater Sociomed Journal*; 28 (3): 205-209.
- [29] Olu-Abiodun, O., & Abiodun, O. (2017). Perception of transformational leadership behaviour among general hospital nurses in Ogun State, Nigeria. *International Journal of Africa Nursing Sciences*; 6: 22-27.
- [30] Higgins, E. A. (2015). The Influence of Nurse Manager Transformational Leadership on Nurse and Patient Outcomes: Mediating Effects of Supportive Practice Environments, Organizational Citizenship Behaviors, Patient Safety Culture and Nurse Job. Published doctorate dissertation, The School of Graduate and Postdoctoral Studies, The University of Western Ontario, Canada, P. 106.
- [31] Aboshaiqah, A.E., Hamdan-Mansour, A.M, Sherrod, D.R., Alkhaibary, A., & Alkhaibary, S. (2014). Nurses' perception of managers' leadership styles and its associated outcomes. *American Journal of Nursing Research*; 2(4): 57-62.

- [32] Duque, L. Faulkenburg, M., Wilkin, L., & Daniel, T. (2015). A study on the relationship between leadership styles and employee turnover intentions in higher education. Published doctorate dissertation, The Faculty of Sullivan University, USA, P. 68.
- [33] Bahrami, M.A., Montazeralfaraj, R., Gazar, S.H., Tafti, A.D. (2013). Relationship between Organizational Perceived Justice and Organizational Citizenship Behavior among an Iranian Hospital's Employees. Electronic physician; 6(2): 838-844.
- [34] Khalid, S., Muqadas, F., Farooqi, Y.A., & Ayesha Nazish, A. (2014). Impact of Lmx on Organizational Justice and Organizational Justice on Organizational Citizenship Behavior. International Journal of Business and Management Invention; 3(10): 21-29.
- [35] Khalifa, S.M.A., & Nadia Hassan Ali Awad, N.H.A. (2018). The relationship between organizational justice and citizenship behavior as perceived by medical-surgical care nurses. *Journal of Nursing and Health Science*; 7 (4): 31-37.
- [36] Altuntaş, S., & Baykal, U. (2014). Organizational citizenship behavior levels of nurses and effective factors. *Organizational Citizenship Behavior in Nurses Journal*; 2 (1): 89-98.
- [37] Mahmoud, A., & Ibrahim, S. (2016). Factors in nurses' organizational citizenship behavior. *Journal of Nursing and Health Science*; 5 (2): 22-28.
- [38] Almalki, M.J., Fitz, G.G., Clark, M. (2012). The relationship between quality of work life and turnover intention of primary health care nurses in Saudi Arabia. Published doctorate thesis, Jazan College of Health Sciences, Saudi Arabia, P. 209.
- [39] Mosallam, R., Hamidi, S., & Hamidi, M. (2015). Turnover intention among intensive care unit nurses in Alexandria, Egypt. The Journal of The Egyptian Public Health Association; 90 (2): 46-51.
- [40] Kaddourah, B., Abu-Shaheen, A.K., & Al-Tannir, M. (2018): Quality of nursing work life and turnover intention among nurses of tertiary care hospitals in Riyadh: a cross-sectional survey. BMC Nursing Open Access Journal. Retrieved in October 3, 2018, from: https://bmcnurs.biomedcentral.com/articles/10.1186/s12912-018-0312-0.
- [41] Sokhanvar, M., Hasanpoor, E., Hajihashemi, S., & Kakemam, E. (2016). The relationship between organizational justice and turnover intention: A survey on hospital nurses. *Patient Safety and Quality Improvement Journal*; 4(2):358-362.
- [42] Gul, S., Ahmad, B., Rehman, S., Shabir, N., & Razzaq, N. (2012). Leadership styles, turnover intentions and the mediating role of organizational commitment. *Information and Knowledge Management Journal*; 2 (7): 44-51.
- [43] Naseer, A., Perveen, K., Afzal, M., Waqas, A., & Gillani, S.A. (2017). The impact of leadership styles on staff nurses' turnover intentions. Saudi Journal of Medical and Pharmaceutical Sciences; 3 (10):1133-1138.
- [44] Tsai, Y., & Wu, S.W. (2010). The relationships between organizational citizenship behavior, job satisfaction and turnover intention. *Journal of Clinical Nursing*; 19: 3564-357.