



The effect of organizational justice program for nurses' leaders on the creativity of their staff nurses at work

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Abstract

Background: Organizational justice encourages the employee to work in healthy environment which is suitable to work creatively.

Aim: The current study aimed to explore The Effect of Organizational Justice Program for nurses' leaders on the Creativity of their Staff Nurses at Work.

Subjects and Methods: A convenience sample of nurses leaders were included (N=48). Also, convenience sample of staff nurses were included (N=110). Two tools were used before, after and follow up implementing educational program, named organizational justice scale and creativity questionnaire sheet.

Results: More than three quarters of the studied nurses' leaders had high level of organizational justice after implementation of educational program. More than half of the studied staff nurses had high level of creativity after implementation of educational program. There was a highly significant statistical positive correlation between total score of organizational justice scale and total score of creativity among the studied group.

Conclusion: The educational program for nurses' leaders was effective and improved their level of justice; thereby it contributes to improve the creativity level of staff nurses at work.

Recommendations: The study recommended with providing continuous training programs to develop nurses' leaders and nurses' capabilities which helps in improving their creativity.

Keywords: Creativity, nurses leaders, organizational justice, program, staff nurses

Introduction

Organizational justice plays an important role in shaping the behavior of organizational employees^[1, 2] which employee perceptions include fair behavior in the workplace and how these perceptions affect outcomes of the organization. Also determine whether employees have been treated fairly or not in their work and how this fair treatment affects work engagement and work creative behavior^[3, 4].

Organizational justice concept firstly was presented as a punishment and reward in different organizations, then equality rules and processes were added. And lastly human relations and interactions were added^[6, 5]. Organizational justice contains four dimensions of fairness mentioned as, processes as procedural justice, outcomes as distributive justice, and treatment as interactional justice which include informational and interpersonal justice^[7].

Creativity in different healthcare settings is a complex concept which is result from relational interactions among several essential components and external circumstances in the work environment which can hinder or facilitate employees' creative performance. Organizations should recognize the potential importance of creativity for achievement of employees' performance high levels, which

requires a supportive guidance in work environment^[8, 9].

Nurses' leaders are able to allow the creative process to be evolved in work environment as they can encourage creativity through honest and transparent relations with staff nurses^[10, 11]. They should provide different types of feedback cues to their staff nurses related to their creative actions, which encourage them to think creatively, and which affecting their decisions to engage creatively in the work units^[12, 13].

Organizational justice is considered main motivational factor for employees that directs them to exhibit a particular behavior or not. Organizational justice encourages the employee to work in healthy environment which is suitable to work creatively so, Organizational justice has a positive impact on the creative behavior at work^[14-16]. Organizational justice has also been a strong factor leads to employee creative work behavior^[17, 18].

Aim of the study

The current study aimed to explore The Effect of Organizational Justice Program for nurses' leaders on the Creativity of their Staff Nurses at Work.

Research hypotheses

1. There will be significant difference between nurses leaders' awareness about organizational justice before and after application of educational program.
2. Organizational justice educational program will affect the creativity of staff nurses at work positively.

Subject and Methods

Research design

Quasi-experimental research design was used in this study.

Setting

This study was conducted at one of the private hospital in Cairo – Egypt.

Subjects

First group

Convenience sample of nurses' leaders (nursing director, nursing supervisor, head nurse, and charge nurse), working in the in-patient units (intensive care units and wards) at the time of the study and having at least one year of work experience in managerial position, were included in the study (N=48).

Second group

Convenience sample of staff nurses working in the in-patient units (intensive care units and wards) at the time of the study and having at least one year of work experience were included in the study (N=110).

Tools of data collection

Two tools were used to collect the necessary data:

Tool 1: Organizational justice scale (OJS)

The tool was developed by (Colquitt, 2001) and modified by the researcher based on literature review to measure organizational justice from the beliefs and actions of nurses' leaders in the selected clinical settings. It was consisted of three parts:

Part 1: Personal Characteristics of the Participants

(Age, gender, hospital department, educational qualifications, years of experience, and current position).

Part 2: Knowledge about Organizational Justice Assessment Sheet

It was a self-administered sheet, this tool was used to assess nurses' leaders' knowledge about organizational justice. This tool composed of multiple choice questions. Every question has four choices. One choice only is right. It composed from 10 questions. It was related to definition and objective of organizational justice, principles of organizational justice and different dimensions of organizational justice.

Responses were measured on 2-points (0 = incorrect) and (1= correct).

Scoring system

Organizational justice knowledge assessment sheet scoring system was calculated according to three levels:

- Low < 60%
- Moderate $\geq 60\%$ - <75%
- High level $\geq 75\%$

Part 3: Practice observational checklist about Organizational Justice

It was an observational checklist which was consisted of (38 items) distributed in the following four dimensions: (a) Distributive justice (8 items), (b) Procedural justice (12 items), (c) Interpersonal justice (10 items), and (d) Informational justice (8 items) to assess the nurses' leaders level of practice regarding organizational justice.

Responses were measured on a three-point Likert scale from 3 (done), 2 (slightly done) 1 (not done) for each question.

Scoring system

Organizational justice scale scoring system was calculated according to three levels:

- Total score = (114) 100%
- Minimal score = 38
- Low level = (< 60%)
- Moderate level = ($\geq 60\%$ - < 75%)
- High level = ($\geq 75\%$)

Tool 2: Creativity questionnaire sheet

The tool will be developed by the researcher based on literature review to measure level of creativity of staff nurses in the clinical setting. It will consist of two parts:

Part 1: Personal Characteristics of the Participants

(Age, gender, hospital department, educational qualifications and years of experience)

Part 2: Creativity Questionnaire Sheet

It was a self-administered sheet, which was consisted of (53) items distributed in seven dimensions as following: (a) Nurses' Capabilities of Creativity (13 items), (b) Organizational Support (8 items), (c) Degree of Freedom (5 items), (d) Communication & Openness (5 items), (e) Nurses' leaders Support (9 items), (f) Problem Solving (5 items), (g) Constraints of Creativity in Work Settings (8 items).

Responses were measured on a three-point Likert scale ranging from 3 (agree) to 1 (disagree) for each question.

Scoring system

Creativity Questionnaire Sheet scoring system was calculated according to three levels:

- ✓ Total score = (159) 100%
- ✓ Minimal score = 53
- Low level = (< 60%)
- Moderate level = ($\geq 60\%$ - < 75%)
- High level = ($\geq 75\%$)

Validity of the tools

Two tools were translated into Arabic and tested by five experts specialized in nursing administration for validity and translation through an opinionnaire sheet. As a result the necessary modifications were done.

Reliability of the tools

Two tools were tested for their reliability using Cronbach's Alpha coefficient, which yielded (0.81) for the organizational justice scale and (0.77) for the creativity questionnaire sheet.

Ethical considerations

The ethical considerations of the research included that, the research approval was obtained from the ethical committee of faculty of nursing Helwan University before starting the study; the researcher assured anonymity and confidentiality of the collected data, which was used by the hem for the purpose scientific research. The nurses' leaders and staff nurses were informed that they had the freedom to choose to participate or not in the study. Also, they have the right to withdraw from the study at any time; ethics, values, culture and beliefs were respected; and study subjects were informed about research purposes.

IV Administrative Design

An official written letter was addressed to the manager of the selected hospital to obtain his approval to carry out this study he approved for data collection and suggested not mentioning the hospital name. Individual oral consent was also obtained from each nurse' leader and staff nurse in the study.

Fieldwork

The actual fieldwork started at the beginning of May 2021 and was completed by beginning of December 2021. The researcher met the nursing director and the HR manager to explain the aim of the study to gain their approval on data collection. The current study carried out on five phases:

Assessment phase

1. Assess nurses leaders' awareness about Organizational justice by Organizational justice scale before providing educational program sessions.
2. Assess staff nurses level of creativity by creativity questionnaire sheet before providing educational program sessions.

Designing phase

The researcher designed educational program about organizational justice for nurses' leaders based on reviewing the current literatures and results of assessment. It included topics such as organizational justice definition, benefits principals, process, ways, application and effect of organizational justice in addition to educational activities to foster understanding.

Implementation phase

1. The researcher implemented educational program sessions with nurses' leaders using various teaching methods such as (lecturers, group discussion, and brain storming), using media as audio visual materials such as (power point, flip chart, and white board), and using educational activities as scenarios. Using tablet device to show presentations and handout booklets were distributed to all participated nurses' leaders.
2. The researcher used the evaluation methods during educational sessions as participation during session, discussion during sessions, and feedback after session.
3. Educational sessions were done 2days/week and lasted for 4 weeks. Every day includes 3 sessions with the same title. Every session lasts for 2 hours in one unit and dividing participants into small groups to facilitate learning process and participation as well as not to hinder the daily work activities.

Evaluation phase

1. Reassess nurses leaders' awareness about Organizational justice by Organizational justice scale after providing educational program sessions.
2. Reassess staff nurses level of creativity after providing educational program sessions.
3. Many suggestions were reported during data collection and program.

Follow up phase

Follow up was done after application of Organizational justice program by 3 months.

- Assess nurses leaders' awareness about Organizational justice.
- Assess staff nurses level of creativity.

V-Statistical Design

Data entry and quantitative data analysis were done by the IBM - SPSS (Statistical Package for the Social Sciences) software (Version 24.0). Data were presented as mean and standard deviation (SD), values and percentages. T-test was used to compare between two groups. A chi-square (χ^2) statistical value used to measure how a model compares to actual observed data. The one- way ANOVA analysis (F-test) was used to determine whether statistically significant differences between two or more independent groups. Significant correlations between variables were determined by using Pearson correlation coefficient. The significance level was set at $P \leq 0.05$.

Results

Regarding the nurse's leaders age; more than three quarters (81.3%) of them were ranged between 30- <40 with ($\bar{x} \pm SD= 33.37 \pm 3.52$). while considering gender, about two thirds of them (66.7%) were male with male to female ratio=2:1. Moreover, the majority of them (97.9%) & (72.9%) were bachelor degree, worked in ICUs departments respectively. Additionally, half of studied nurse's leaders (50 %) had years of experience ranged between 5- <10 with ($\bar{x} \pm SD=5.1 + 2.4$) and about two thirds of them (62.5%) were charge nurses. In addition to presence of difference between observed and expected values with a statistical significant difference at $P \leq 0.05$. (Table 1)

According to staff nurses' age; more than half (50.9%) of their age is ranged between 20- <30 with $\bar{x} \pm SD= (30.1 \pm 2.9)$. while considering gender, more than two thirds (70%) were male with male to female ratio=2.3:1. Moreover, (93.6%) & (70.9%) respectively, were bachelor degree, worked in ICUs departments. Additionally, more than two thirds of them (72.8 %) had years of experience ranged between 5- <10 with ($\bar{x} \pm SD= 5.9+ 2.3$). In addition to presence of difference between observed and expected values with a statistical significant difference at $P \leq 0.05$ regarding to gender, nursing qualifications, hospital department & years of experience. (Table 2)

Nurses' leaders had low level of knowledge regarding organizational justice before educational program about organizational justice while the majority of them had high level of knowledge after and follow up the program (Figure 1).

Nurses' leaders had higher level of organizational justice practice after implementation of educational program than

before (Figure 2).
The studied staff nurses had higher level of creativity after implementation of educational program for nurses' managers than before (Figure 3).

There was a highly statistical significant positive correlation between total score of organizational justice scale and total score of creativity among the studied groups (Figure 4)

Table 1: Percent distribution of the studied nurse's managers personal characteristics (N=48).

Personal characteristics of the studied nurse's leaders		N	%	χ^2	P-Value
Age (in years)	20- <30	7	14.6	50.4	0.000**
	30- <40	39	81.3		
	40- <50	2	4.2		
$\bar{x} \pm SD$	33.37± 3.52				
Gender	Male	32	66.7	5.3	0.02*
	Female	16	33.3		
Ratio	M to F ratio=2:1				
Nursing qualifications	Bachelor	47	97.9	44.1	0.000**
	Master	1	2.1		
Hospital department	Ward	13	27.1	10.1	0.001**
	ICU	35	72.9		
Current position	Charge nurse	30	62.5	19.5	0.000**
	Head nurse	12	25		
	Nursing supervisor	6	12.5		
Years of experience	1- <5	22	45.8	18.5	0.000**
	5- <10	24	50		
	10- <20	2	4.2		
$\bar{x} \pm SD$	5.1+ 2.4				

(*): statistically significant at $P \leq 0.05$ (**): highly statistically significant at $p \leq 0.001$

Table 2: Percent distribution of the studied staff nurses personal characteristics (n=110)

Personal characteristics of the studied staff nurses		N	%	χ^2	P-Value
Age (in years)	20- <30	56	50.9	0.036	0.849
	30- <40	54	49.1		
Mean \pm SD	30.1 \pm 2.9				
Gender	Male	77	70	17.6	0.000**
	Female	33	30		
Ratio	M to F ratio=2.3:1				
Nursing qualifications	Technical institute	7	6.4	83.7	0.000**
	Bachelor	103	93.6		
Hospital department	Ward	32	29.1	19.2	0.001**
	ICU	78	70.9		
Years of experience	1- <5	24	21.8	81.2	0.001**
	5- <10	80	72.8		
	10- <20	6	5.4		
$\bar{x} \pm SD$	5.9+ 2.3				

(*): statistically significant at $P \leq 0.05$ (**): highly statistically significant at $p \leq 0.001$

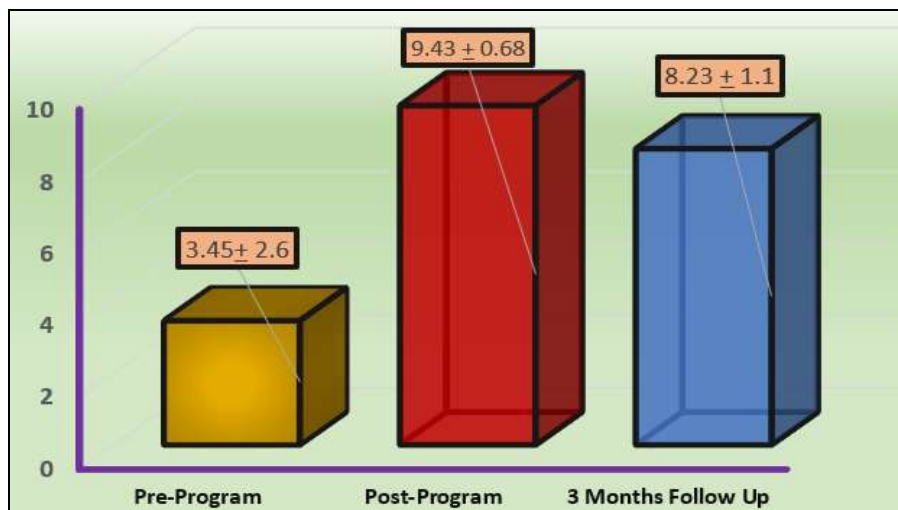


Fig 1: Total mean of knowledge scores regarding organizational justice during pre, post & follow up among the studied nurses' leaders (n=48).

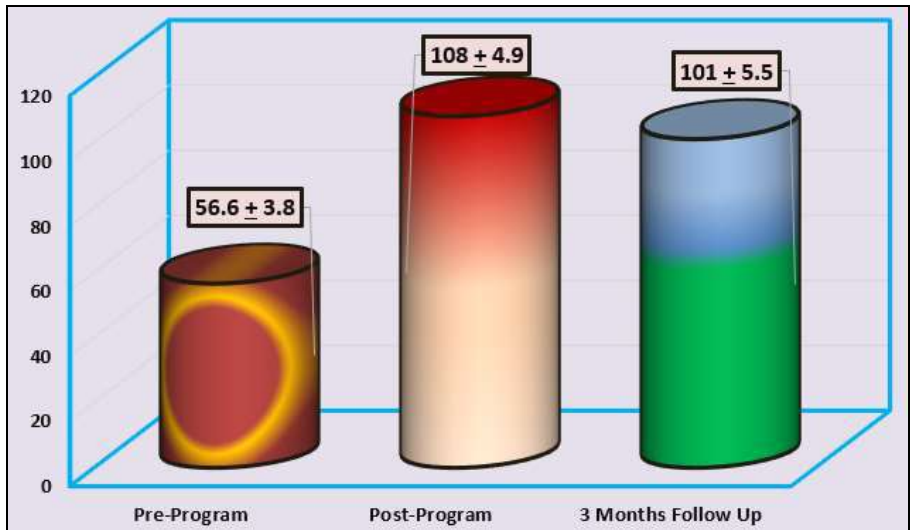


Fig 2: Total mean scores of organizational justice practice during pre, post & follow up among the studied nurses’ leaders (n=48).

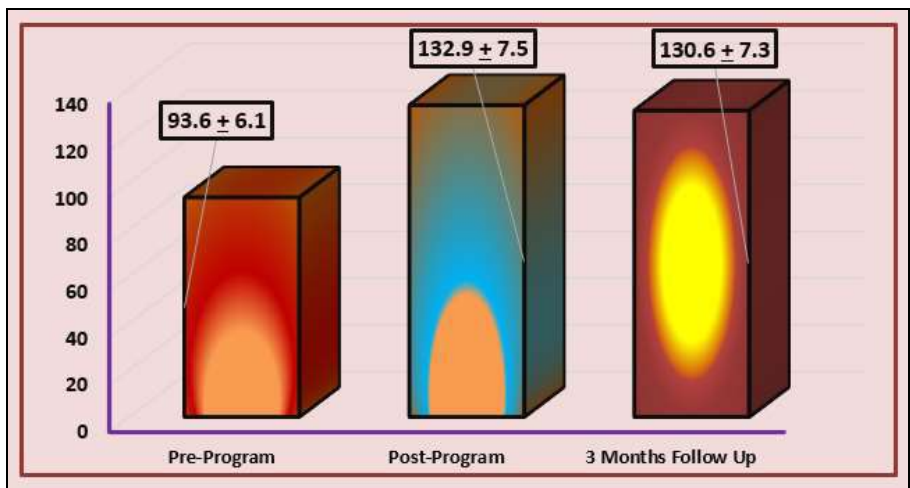


Fig 3: Total mean score of creativity during pre, post & follow up among the staff nurses (n=110).

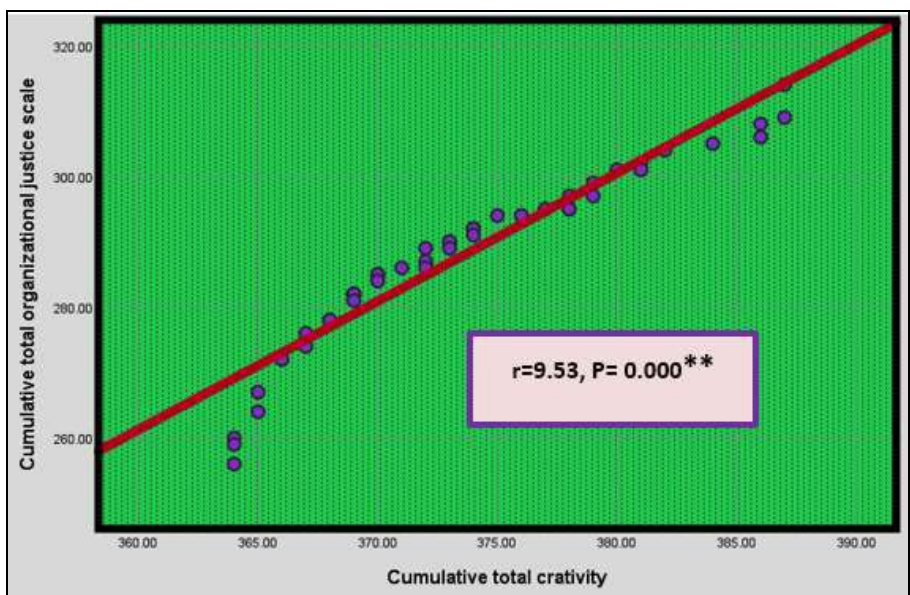


Fig 4: Correlation between cumulative total score of organizational justice scale and cumulative total score of creativity

Discussion

The current study presented that regarding the nurse leaders’ age; more than three quarters of them were ranged between

thirties to forties years while considering gender, more than two thirds were male, and the majority of them were bachelor degree, worked in ICUs departments. These

findings were in agreement with ^[19] who showed that more than three quarters of the participants were in the age between thirties to forties years with Bachelor's degree. In the same line ^[5] noted that the highest percentages of studied participants were working in Intensive Care Units. Similarly ^[20], presented that more than half of the participants had bachelor degree in nursing, and the majority of them had experience of from five to ten years. Additionally, the current results were contradicted with ^[21] who stated that the age of the participants was from twenties to thirties years and the majority of them were females. The highest percentages of studied sample were female, and about two-thirds of them were aged younger than thirty years, working in multi-specialty units, and were held a diploma of secondary technical nursing school.

The current study revealed that the studied group of nurses' leaders had high satisfactory level of knowledge regarding organizational justice during post and follow-up program phases than preprogram phase. Additionally, there was a highly statistically significant difference between level of knowledge regarding organizational justice during pre, post & follow up among the studied nurses' leaders. In this respect ^[18] mentioned that, nurse teachers had low level of awareness before implementing the program. Moreover, awareness levels increased obviously in both post and follow up program phases. Also, there were a highly statistical significant differences between all items as well as total awareness throughout program phases.

The current study dedicated that all of studied nurses' leaders had low level of organizational justice practice during preprogram phase, whereas all of them were high during post program, and follow up phase. Moreover, there was a highly statistically significant difference between total level and score of organizational during pre, post & follow up. These results were in harmony with ^[22] who noted that, slightly more than half of studied staff nurses had high perception level toward total organizational justice after program. On the other hand, ^[23] depicted that the difference between two groups were not significant.

The current results found that more than two thirds of the studied staff nurses' age is ranged between twenties to thirties with years of experiences ranged from five to ten years. While considering gender, more than two third were male, and the majority of them were bachelor degree, had experience from five to ten years worked in ICUs departments. These findings were consistent with ^[24] who illustrated that, the highest percentage of study subjects were in the age group less than thirty years, working in ICUs. Also these study findings were in disagreement with the current study as the majority of study subjects were female nurses, had less than five years of experience.

The current findings revealed that studied staff nurses had higher level of creativity after implementation of educational program for nurses' managers than before, and there was a highly statistically significant difference between total level of creativity during pre, post, and follow up program. In this respect ^[18] showed that the minority of nurse teachers had low level of innovative behavior at preprogram phase. As observed, during post program phase the nurse teachers level of innovative behavior was improved noticeably to be increased during post program and follow up. Also there were highly statistically

significant differences between all dimensions of the total innovative behavior among nurse teachers. The previous results were disagreed by ^[24] who presented that the highest proportion of studied group showed a moderate level of innovative behavior however the lowest proportion of them showed a high level of innovative behavior.

The current results clarified that, there was a highly statistical significant positive correlation between total organizational justice scale and total creativity among studied groups. These findings were agreed by ^[25] who showed that, a statistically significant positive correlation between creative work behavior and organizational support, Knowledge sharing behavior. In this respect, ^[16] invested the effect of organizational justice on innovative work behavior, who found a strong positive correlation between all dimensions of justice and innovative work behavior. In the same line, ^[26] noted that their study results showed a positive and significant difference between organizational justice and employee innovative work behavior.

Conclusion

Based on the study findings about the effect of nurses leaders' awareness program about organizational justice on the creativity of their staff nurses at work, It was concluded that, the educational program for nurses' leaders was effective and improved their level of justice; thereby it contributes to improve the creativity level of staff nurses at work.

Recommendations

Hospital need to: Introduce reward programs to motivate nurses to continuously think creatively to improve the quality of patient care.

Nurses' leaders need to: Provide support and guidance to staff nurses through open communication, problem-solving techniques, and shared decision making.

Staff nurses need to: be aware of new updates related to work through knowledge sharing via formal and informal meetings.

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