

## **Effect of professional nursing practice environment and Psychological empowerment on nurses' readiness for change**

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### **Abstract:**

**Background:** The nursing shortage is an international problem and improving the practice environment has been shown to be a successful strategy against this phenomenon. Psychological empowerment of nurses and supportive practice environment is significantly associated with higher job satisfaction, job retention, quality of care and stimulating and managing organizational change. **The Aim of the study:** to assess the effect of a professional nursing practice environment and psychological empowerment on nurses' readiness for change. **Subjects and Methods: Research design:** A descriptive correlational design was used. **Setting:** the study was conducted at New Surgery Hospital in Zagazig University Hospitals. **Subjects:** A convenient sample of the nurses (n= 300). **Tools of data collection:** Three tools were used for data collection: Readiness for change scale; practice environment scale of the nursing work index, and nurses' psychological empowerment questionnaire. **Results:** the highest percentage of nurses had a high level of readiness for change and psychological empowerment (77% & 65%, respectively). The majority of the nurses (79%) had a moderate level of professional nursing practice environment. **Conclusion:** There was a positive statistically significant correlation between readiness for change and professional nursing practice environment scores. Also, there was a positive statistically significant correlation between professional nursing practice environment and psychological empowerment scores. **Recommendations:** Nurse Managers should encourage staff nurses to participate in making decision and listen to nurses concerns, Nurse Managers should conduct in-service training program about change that can support nurses to be adapted with change, and reduce emotional exhaustion and Nurse Managers should develop new ways to involve staff nurses in clinical decision making.

**Key Words:** Professional, Practice environment, Psychological empowerment, Readiness for change.

### **Introduction**

Favorable nursing practice environment associated with greater nurse professionalism, improved job satisfaction, decrease burnout and higher retention rate among nurses as well as improved patient outcomes. Nurses who are psychologically empowered were more likely to feel respected in the workplace and highly committed to the organization. Psychologically empowerment of nurses and supportive practice environment for nurses become more likely to engage or committed with the organization, higher self-efficacy, and good interpersonal relationship at work

this influence on nurses' readiness for change <sup>(1,2)</sup>

The nursing professional practice environment is defined as the organizational properties that facilitate or constrain the nursing professional practice. To create a positive practice environment appropriate support is needed to attract and retain nurses so that positive consequences can be achieved for patients and a nurse's satisfaction <sup>(3)</sup>. The professional work environment is characterized by nurse participation in hospital affairs, nursing foundations for quality of care, nursing management ability, support and leadership, adequate staffing and

resource, and collaborative nurse-physician relationships<sup>(4)</sup>.

Psychologically empowerment is another variable impact on nurses' readiness for change. It is a process by which people gain greater control over their lives, democratic participation in the life of their community and critical understanding of their environment<sup>(5)</sup>. Psychological empowerment consists of four dimensions *meaning*: which defines as congruence between the work goals and employee's belief, values and behaviors; *competence*: which refers to self-efficacy specific to one's work, or belief in one's capability to perform work activities with skill; *self-determinant*: which is defined as a sense of choice in initiating an regulating one's action . It reflects a sense of autonomy or choice over the initiation and continuation of work behavior and processes, and *impact*: which reflects the degree to which one's action can influence strategic, administrative, or operating outcomes at work<sup>(6,7)</sup>. Psychologically empowerment and favorable practice environment encourage nurses to readiness for change, do the job well, develop meaning in the work, more likely to be stimulated to be innovative, cope better with high uncertainty, and overcome on the problems that face<sup>(8)</sup>.

Readiness for change refers to the extent that employees will start or continue to engage in behaviors such as support or participate associated with change. It is comprising four dimensions which are; appropriateness which mean employee perceive that the change is appropriate to the organization; managerial support which mean employees perceive that managers are supportive of change; self-efficacy which mean employees perceive that they possess the skills and competence to successfully cope with change and personal valence which mean employees believe the change will be personally beneficial<sup>(9)</sup>. trust, the relationship between staff and

management, fear and concern about what might be lost, staff experience, seriousness of the change, past history with both personal and work related change, effectiveness of communication, staff and management commitment to the organization and the organization environment influence individual readiness for change<sup>(10)</sup>.

### Significance of study:

Nurses play an important role and critical factors in the change process and in the success of organizational change. Many studies in nursing founded that 70 % of all change initiatives fail due to the resistance to change which is closely linked with the development of negative attitudes to change, so there are needed of nurses' readiness for change<sup>(11)</sup>. There is only one study carried out by<sup>(4)</sup> who assess the impact of psychological empowerment on nurses' readiness for change and found that the psychological empowerment effect on individual readiness for change. Now a day, there is a rapid change in the health care system, this requires a positive behavior and attitude of nurses towards change play essential role in changing the attitude, So the researcher will carrying this study that may help to find a strategy that foster nurses readiness to change and creating a supportive practice environment for nurse.

### Aim of the study:

The aim of the study was to assess the effect of a professional nursing practice environment and psychological empowerment on nurses' readiness for change.

### Research Questions:

- 1- Is there a relationship between professional nursing practice environment and nurses' readiness for change?
- 2- Is there a relationship between psychological empowerment and nurses' readiness for change?

- 3- What is the level of readiness for change among nurses?
- 4- What is the level of psychological empowerment among nurses?
- 5- What is the level of professional nursing practice environment from nurses' view of point?

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

##### **Research design:**

A descriptive correlational design was used for this study.

##### **Study Setting:**

The study was carried out at New Surgical Hospital in Zagazig University Hospitals.

##### **Study Subjects:**

A convenient sample of nurses who are worked in the above mentioned setting (n= 300) who have at least one year of experience in nursing.

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

In order to fulfill the objectives of the study three tools were used to collect the data:

##### **Tool 1: Readiness for change scale:**

It was developed by Hanpachern,<sup>(12)</sup> to measure nurses' readiness for change. It consists of two parts:

**Part I:** Personal characteristics sheet for nurses to collect data about age, gender, educational qualification, years of experience and job title.

**Part II:** Readiness for change scale to measure nurses' readiness for change. It consisted of 14 items.

##### **Scoring system:**

The responses of the statements were measured by using 3 points Likert scale ranging from 1 = disagree to 3= agree. The score of items was summed-up and the total divided by the number of the items,

giving the mean score. The level of nurses' readiness for change score was

. **Low:** if the score <50%

**Moderate:** if the score range from 50%-75%.

**High:** if the score > 75%.

##### **Tool II: Practice environment scale of the nursing work index (PES-NWI)**

It was developed by Lake<sup>(13)</sup>, to measure characteristics within the nursing practice environment from the nurses' view of point. It consists of 31 items grouped under five components namely; nursing participation in hospital affairs(9 items) ,nursing foundations for quality of care(10 items) ,nurse manager ability(5 items) ,staffing and resource adequacy (4 items) , and the degree of collegial nurse / physician relationships(3 items.)

##### **Scoring system:**

The responses of the statements were measured by using 3 points Likert scale ranging from "1= disagree to "3= agree". The score of items was summed-up and the total divided by the number of the items, giving the mean score. The level of nursing practice environment score was

Low: if the score <50%.

Moderate: if the score range from 50%-75%.

High: if the score > 75%.

##### **Tool III: Nurses' psychological empowerment questionnaire:**

It was developed by Spreitzer<sup>(14)</sup> to measure nurses' psychological empowerment level. It consists of 20 items grouped under four dimensions; Meaning (3 items), Autonomy (4 items), impact (4 items) and competence (8 items).

##### **Scoring system:**

The responses of the statements were measured by using 3 points Likert scale ranging from "1= disagree to "3= agree". The score of items was summed-up and the total divided by the number of the items, giving the mean score.

The level of psychological empowerment score was

Low: if the score <50%.

Moderate: if the score range from 50%-75%.

High: if the score > 75%.

**Content Validity and Reliability:**

Content validity for tools by a panel of five experts: four professors and assistant professors with specialty of nursing administration at the faculty of nursing, Ain Shams University and the remaining one professor of community nursing department at the faculty of Nursing, Zagazig University. Experts were requested to express their opinions and comments on the tool and provide any suggestions for any additions or omissions of items. According to their opinions, all recommended modifications were performed by the researcher. The reliability of the tools of data collection measured through estimating its internal consistency which used Cronbach alpha coefficient. The reliability coefficient for the readiness to change scale was 0.89, 92 for Practice environment scale of the nursing work index and coefficient for Nurses' psychological empowerment questionnaire was 0.89.

**Field work:**

The data collection phases of the study lasted long three months from April to June 2017. The researcher met both medical and nursing directors of hospital to explain the purpose of the study and obtained official permissions then determined the proper time to data collection .The final form of the tools was handed to the nurses in their work setting by the researcher to elicit their opinion. The purpose of the study was explained to the participated and ways to fill in the questionnaire sheets. The researcher visited the selected setting four days per weeks from 7:00 am- 1; 00 pm to collect the data from nurses in both night and morning shifts, starting by distributing the tools to the study subjects and asking them to fill it completely. They were completed at the same time of distribution and took about 30-45minutes.The researcher available at the time of collection for

any clarification and checked each tool after completion by nurses to ensure the completion of all information. The researcher collected data by herself.

**Pilot study:**

A pilot study was carried out on 30 nurses from the different departments of the hospitals to test clarity and applicability of the data collection tools, in addition, to estimate the time required for the filling the tools. The pilot study was conducted one week before the collection of the data. The necessary modifications were made according to the result of the pilot study. Nurses were selected randomly and excluded from the main study sample.

**Administration and ethical Considerations:**

Approval from the dean of Faculty of Nursing, Zagazig University to the Nursing and Medical director of the New Surgical Hospital, Zagazig University to carry out the study and approval was obtained from Scientific Research Ethical Committee in Faculty of Nursing at Zagazig University.

**Statistical Analysis:**

Data entry and analysis were done using V16 of the Statistical Package for Social Sciences (SPSS). Data were presented using descriptive Statistics in the form of frequencies and percentages for qualitative variables, means, medians and standard deviation for qualitative variables. Quantitative continuous data were compared using t- tests and ANOVA tests were used.

**Results:**

**Table (1)** indicates that, the majority of nurses were female, had a nursing diploma, were in the age grouped less than or equal forty old years & had had less than or equal twenty years of experience (96.0%, 64.7%,70.7%& 76.7% respectively). And the highest percentage of them had the job title of nurses (80.7%).

**Table (2)** shows the frequency of readiness to change as reported by

nurses. It is clear from the table the highest percentage of nurses agreed that "they learn new things"(82%). While the lowest percentage of them agreed that change create new ideas (37%).

**Figure (1)** Illustrates that the highest percentage of nurses had a high level of readiness for change (77%).

The mean scores of the professional nursing practice environment domains as reported by nurses illustrated in **Table (3)** the table reveals that the highest mean score of professional nursing practice environment was related to collegial nurse-physician relationships ( $2.43 \pm 0.67$ ). While the lowest mean score was related to the adequacy of staffing and resource( $1.86 \pm 0.82$ ).

**Figure (2)** Illustrates that the highest percentage of nurses had a moderate level of professional nursing practice environment (79%).

The psychological empowerment domains as reported by nurses illustrated in **Table (4)**. The table reveals that the highest mean score of psychological empowerment domains was related to meaning ( $2.77 \pm 0.53$ ). While impact dimension come at the last with a mean represented ( $2.05 \pm 0.73$ ).

**Figure (3)** illustrated that the highest percentage of nurses had a high level of psychological empowerment (65%).

**Table (5)** Indicates that there is no statistical significance relation between personal characteristics of nurses and their readiness to change.

**Table (6)** Indicates that there is no statistical significance relation between personal characteristics of nurses and professional nursing practice environment score.

**Table (7)** Indicates that there is no statistically a significance relation between personal characteristics of nurses and psychological empowerment score.

Correlation between total scores of readiness for change, professional nursing practice environment and psychological empowerment illustrated in **Table (8)**. The table reveals that there was a positive statistically significant correlation between readiness for change and professional nursing practice environment ( $r=0.059$  &  $p= 0.059$ ). Also, there was a positive statistically significant correlation between professional nursing practice environment and psychological empowerment ( $r=0.102$  &  $p= 0.078$ ).

## Discussion

Attracting and retaining well-qualified nurses to develop the healthcare system and ensure patient safety is a global concern, so the quality of the practice environment plays a crucial role<sup>(15)</sup>. Empowering employee through the work flexibility to improve employee confidence and provide the employee with a favorable nursing practice environment that enhance the readiness for change in any organizations<sup>(16)</sup>.

The aim of this study was to assess the effect of a professional nursing practice environment and psychological empowerment on nurses' readiness for change. Two questions were answered in the present study. The first question was there is a relationship between professional nursing practice environment score and nurses' readiness for change? And the second was there is a relationship between psychological empowerment score and nurses' readiness for change? Before discussing the results related to answering the study questions, light ought to be coordinated to sociodemographic characteristics of the studied groups.

The findings of the current study showed that the highest percentages of the nurses were females and had a nursing diploma. This result could be due to the high numbers of students who enter the faculty or school of

nursing are females and the main core of nursing occupation is feminists, as well as the presence of nursing school attached to the hospital, this school of nursing is affiliated with the hospital, was closed off several years back, the hospital started to depend. This results agreement with the study carried out in Beni Suef, Egypt by El-Sayed et al.,<sup>(17)</sup> who assess the factors associated with nurses' readiness for organizational change and founded that the majority of the nurses were female and had a nursing diploma. Also, the study carried out in Kingdom of Saudi Arabia by Ahmed<sup>(18)</sup> who designs a self-learning package to control the exposure of nurses to occupational hazards and found that the majority of nurses were females and had a nursing diploma .

In contrast with this results the study carried out in Mansoura, Egypt by Abd El-kaway& Sleem<sup>(19)</sup> who investigated the factors affecting nurses readiness for change and founded that the majority of nurses had bachelor degree in nursing and the study conducted in Tehran by Ghanlyoun et al,<sup>(20)</sup> who assess the relationship between the psychological empowerment and job burnout of nurses and founded that all of the staff nurses were male.

The findings of the current study demonstrated that the majority working as staff nurse. This may be due to the interest of the community to the nursing profession as an occupation to get the salary. This result agreement with the study carried out in all Zagazig University Hospitals, Egypt by Hassona<sup>(21)</sup> who identify the relationship between the structure empowerment, work engagement and job satisfaction among nursing staff and found that all the study sample were nurses and the study of Ahmed<sup>(18)</sup> who found that the majority of the study sample were nurses.

The finding of the current study shows that the mean age of nurses

was twenty-nine years old and had less than or equal twenty years of experience. The explanation of these results may be due to the majority of nurses were young; older nurses usually leave the country to work in other countries because outside jobs offer them higher salaries than those offered in Egypt. The financial situation of the government hospitals in Egypt was generally fair to poor, as compared with that in private hospitals. These results agree with the study carried out in Zagazig University, Egypt by Abd El-Gaid<sup>(22)</sup> who assess intraoperative nurses' role regarding patient safety and health hazards and found that the mean age of nurses was twenty-nine years old and had less than twenty years of experience. In contrast with this result the study done in the Northeastern United States by Wittenstein<sup>(23)</sup> who assess the factors influencing individual readiness for change in the health care environment and found that the majority of nurses had the age group range between forty-one and sixty years old..

The finding of the current study shows that the highest percentage of nurses had a high level of readiness for change. From the researcher perspective, this result may be explained by the fact that studied nurses prepared during their study in school/ college how to deal with change through studying change, causes of change, and steps to manage change process and how to deal with resistance in a good manner. So, they can apply this very easily and deal with resistance professionally. Additionally, everyone sees herself/himself as the best in doing things. This results in disagreement with the study of Abd El-kaway& Sleem<sup>(19)</sup> and El-Sayed et al<sup>(17)</sup> who founded that the nurses had a moderate level of readiness for change.

The finding of the current study shows that the highest percentage of nurses had moderate perception

toward professional nursing practice environment. This may be due indicating that nurses performing a practice with more autonomy, greater control over the environment, and good relations with the medical team. This result was supported by the study carried out in USA by Hauck et al. <sup>(24)</sup> who assess the relation between structural empowerment and anticipated turnover among critical care nurses and the study of Raquel <sup>(25)</sup>, who assess the relation between professional nursing practice environment and emotional exhaustion among intensive care nurses in England and both studies found that nurses had moderate perception toward professional nursing practice environment. In contrast, Duva <sup>(26)</sup> who assess the factors impacting staff nurse care coordination and found that there was a high attribute favoring professional nursing practice environment. In the same issue Lambrou et al. <sup>(27)</sup> who assess the relationship between nurses' perceptions of their professional practice environment and job satisfaction and found that nurses perceived their professional working environment as stressful and this is due to low attributes favoring professional.

The finding of the current study shows that the highest mean score of professional nursing practice environment domain as reported by nurses was related to collegial nurse physician relationships. This may be due to nurse and physician working together with mutual respect and trust for benefit of the patient. This finding agreed with the study carried out in New Jersey by Flynn et al. <sup>(28)</sup> who assess the effect of nursing practice environments on quality outcomes in nursing homes and found that the registered nurse-physician relationships had the highest mean score of professional nursing practice environment domain. While this result disagreement with the study carried out in China by Wang and Liu <sup>(1)</sup> who

assess the impact of professional nursing practice environment and psychological empowerment on nurses' work engagement and the study carried out in New Jersey by Hessels et al. <sup>(29)</sup> who determine the relationship between the professional nursing environment and missed nursing care and found that the foundation for quality had the highest mean score of professional nursing practice environment domain in both studies. Also the study carried out in four large states of California, Florida, Pennsylvania and New Jersey by Olds et al <sup>(30)</sup> who examined nurse work environment, safety climate and patient outcomes and found that the foundation for quality had the highest mean score of professional nursing practice environment domains.

The finding of the current study shows that the lowest mean score of professional nursing practice environment domain as reported by nurses was related to staffing and resource adequacy. This may be due to a shortage of nurses as well as the unavailability of some equipment and supplies that use the nurses in carrying out the assigned duties. This result agreement with the study carried out in Xinjiang by Yan et al. <sup>(31)</sup> who analyze the correlated influential factors between work-related musculoskeletal disorders and nursing practice environment quality of life and social support and the study carried out in Campuses by Collins <sup>(32)</sup> who assess the impact of nursing professional practice models on medical nurse empowerment and job satisfaction and found that the adequate staff and support resources to provide quality patient care had the lowest mean score of professional nursing practice environment domain in both studies . But this result disagreement with the study of Flynn et al. <sup>(28)</sup> who found that the nurse participation in hospital affairs had the lowest mean score of professional nursing practice environment domain.

The finding of the current study shows that the highest percentage of studied subject highly experienced psychological empowerment and perceived that the level of nurses' empowerment is high. This may be due to participative management style of nurse manager that delegate some authority to nurses staff to make decision that effect on them, provide nurses with technical knowledge that they need in practical experience, and give them the opportunity for independence & freedom in how they do their job, this increase nurses satisfaction with their accomplishment and recognize that job activities are personally meaningful to them. This result agrees with the study carried in Jordan by Saif and Saleh <sup>(6)</sup> who assess the impact of psychological empowerment on job satisfaction and found that the Jordanian nurses had a high level of psychological empowerment. And the study carried out in Zagazig University, Egypt by Ibrahim <sup>(33)</sup> who measure the effect of a nursing care training program on staff nurses performance and empowerment and found that the nurses had the high level of psychological empowerment

In addition to the study carried out in Assuit, Egypt by Hossny et al., <sup>(34)</sup> who determine effect of workplace civility climate, structural and psychological empowerment on organizational commitment of newly graduated nurses and found that the nurses had the high level of psychological empowerment. On the other hand this result disagreement with the study done in Menofia, Egypt by Ibrahim et al., <sup>(35)</sup> who assess the relationship between psychological empowerment and perceived autonomy of nurses and found that the nurses had a moderate level of psychological empowerment.

The finding of the current study shows that the highest mean score of psychological empowerment as reported by nurses was related to

meaning dimension. From the researcher perspective, this result may be explained by the nurse manager add and delegate some responsibility to nurses this enabling them to become energized at work meaning can be considered to be the engine of empowerment. Sense of meaning empowers nurses to have confidence in what they do. This result in agreement with the study carried out in Kota Kinabalu by Ambad <sup>(36)</sup> who investigate the relationship between psychological empowerment and organizational commitment among employee and the study of Saif and Saleh <sup>(6)</sup> who found that the meaning had highest mean score of psychological empowerment dimension. While the current study result disagreement with the study of Wang and Liu <sup>(1)</sup>; Ibrahim <sup>(33)</sup> and Ghanlyoun et al. <sup>(20)</sup> who found that the competence dimension had the higher mean score of psychological empowerment dimension among nurses.

The finding of the current study shows that the lowest mean score of psychological empowerment dimension as reported by nurses was related to impact. This may be due to few of nurses view themselves a significant influence over what happens in their department and they have the authority to make the decision when needed. This finding agreed with the studies of Ambad <sup>(36)</sup>; Saif and Saleh <sup>(6)</sup> and Hossny et al., <sup>(34)</sup> who found that the impact had the lowest mean score of psychological empowerment dimension. While the current study result disagreement with the study of Ibrahim <sup>(33)</sup> who found that autonomy dimension had the lowest mean score of psychological empowerment and the study of Ghanlyoun et al. <sup>(20)</sup> who found that the impact had the highest mean score of psychological empowerment dimension among nurses.

The finding of the current study revealed that there are no statistically

significance relation between personal characteristics of nurses and their readiness to change. This may be due readiness to change is affected by other factors such as; support given from top management to nurses in decision-making processes, good communication system, clear information about change. Therefore, nurses may be more committed to their healthcare organization, and motivated to participate in any change program. In addition to good social relationship reported by nurses in the workplace, all of these may affect their readiness to change rather than personal characteristics. This result agreement with the studies of Abd El-kaway& Sleem<sup>(19)</sup> and the study carried out in Pakistan by Shah<sup>(37)</sup> who examine the role of trust in management on developing of employees attitude and behaviors to organizational change and found that there is no statistically significant relationship between demographic characteristics of nurses and their readiness to change. While this findings disagreement with the study of El-Sayed et al.,<sup>(17)</sup> who founded that there are strong positive correlations between nurses' readiness for change and their demographic characteristics.

The finding of the current study revealed that there is no statistically significant relationship between personal characteristics of nurses and their perception toward professional nursing practice environment. This may be due the healthful practice environment affected by many factors such as; the presence of enough numbers of competent nurses to provide care to clients with quality and equilibrium between work and home life, visible leadership act as a counsel for nursing care and encourage participation in decision making, continued growth and development for nurses, recognition of the value of nurses' contributions through reward and pay for performance, collaborative practice culture through present of collegial, clear, open and

trusting communication. This result agrees with the study of Abd El-kaway& Sleem<sup>(19)</sup> who found that there is no statistically significant relationship between personal characteristics of nurses and their perception toward professional nursing practice environment. While this result disagreement with the study of El-Sayed et al.,<sup>(17)</sup> who founded that there are strong positive correlations between nurses' perception of the professional nursing practice environment and their personal characteristics.

The finding of the current study revealed that there are no statistically significance relation between personal characteristics of nurses and psychological empowerment score. This may be due to the psychological empowerment enhance through many factors such as; emotional intelligence, resilience, mentoring, precepting, role development, coaching, and succession planning not personal characteristics of nurses. This result disagreement with the studies of Ibrahim<sup>(33)</sup> and Ibrahim et al.,<sup>(35)</sup> who found that there was statistically significant relation between socio-demographic characteristics of nurses and the psychological empowerment score.

Concerning the correlation among study variables, the results of the current study showed that there was a positive statistically significant correlation between readiness for change and professional nursing practice environment score. This finding indicated that, as the perception of the professional nursing practice environment improved, nurses' readiness for organizational change also improved. This result is in agreement with that of Wittenstein<sup>(23)</sup>, who also found a significant positive association between professional nursing practice environment and nurses' readiness for organizational change. Also, the study of EL-sayed et al.,<sup>(17)</sup> who found there was a positive

statistically significant correlation between readiness for change and professional nursing practice environment. From the researcher's point of view, the work environment that allows nurses to make decisions for the patient and freedom to make essential work decisions may enhance their readiness for change. Moreover, getting support from their supervisor, enough time and opportunity to discuss patient care problems with other nurses, and working as a team with physicians through good relationship and collaboration may enhance the readiness of nurses to organizational change.

The finding of the current study revealed that there was a positive statistically significant correlation in a professional nursing practice environment and psychological empowerment score. From the researcher's point of view, nurses who are psychologically empowered will not wait passively for instructions but will actively change and affect their work environment which leads to greater efficiency and also there are more loyal to the organization. This result agreement with the study of EL-Sayed et al.,<sup>(17)</sup> who found that there was a positive statistically significant correlation professional nursing practice environment and psychological empowerment.

### **Conclusion:**

The highest percentage of nurses had a high level of readiness for change and psychological empowerment. Also, the majority of nurses had a moderate level of the professional nursing practice environment. There was a positive statistically significant correlation between readiness to change and professional nursing practice environment among nurses and there was a positive statistically significant correlation between professional nursing practice environment and psychological empowerment scores.

### **Recommendations:**

Based on the results of this study it is recommended that

#### ***Recommendations related to improving nurses practice environment:***

- 1- The nurse manager should measure nurses' perceptions toward the practice environment yearly.
- 2- Nursing managers should conduct the conference with the staff nurses for discussion and identifying professional nursing practice environment characteristics and how to react to it for the effective work environment.

#### ***Recommendations related to improving nurses' readiness for change:***

- 1- Nurse Managers should conduct in-service training program about change that can support nurses to be adapted with change, and reduce emotional exhaustion.
- 2- Nurse Managers should develop new ways to involve staff nurses in clinical decision making.
- 3- Hospital administrators should implement structure empowerment factors to enhance nurses' readiness toward change

#### ***Recommendations related to improving nurses' psychological empowerment:***

- 1- Nurse Managers should enhance the psychological empowerment of nurses through enhancing meaningfulness of their job objectives, allowing nurses to be identified as important members of the organization and increasing motivation for high performance.

- 2- Nurse Managers should encourage soul of teamwork among nurses to improve their empowerment.
- 3- Committee should be established to allow nurses to form new relationships, learn new knowledge and skills and gain recognition by having the opportunity to demonstrate nurses' abilities.
- 4- Nurses should be allowed to participate in decision making to empowered nurses as well as increasing their feeling of autonomy.
- 5- Staff development program should be done for nurse managers in how to integrate staff nurses in decision making and to deal effectively with new ideas to promote organizational climate and psychological empowerment of nurses.

**Table (1)** Personal characteristics of nurses (N=300)

Personal characteristics	N	%
<b>Age</b>		
-≤40	212	70.7
->40	88	29.3
<b>Range</b>	<b>59&lt;- 21</b>	
<b>Mean ±SD</b>	<b>.29±.456</b>	
<b>Gender</b>		
-Female	288	96.0
-Male	12	4.0
<b>Educational level</b>		
-Nursing Diploma	194	64.7
-Technical Institute of health	48	16.0
-Bachelor of Nursing	58	19.3
<b>Years of experience</b>		
-≤20	203	76.7
->20	97	32.3
<b>job tittle</b>		
-Nurse	242	80.7
-Head nurses	58	19.3

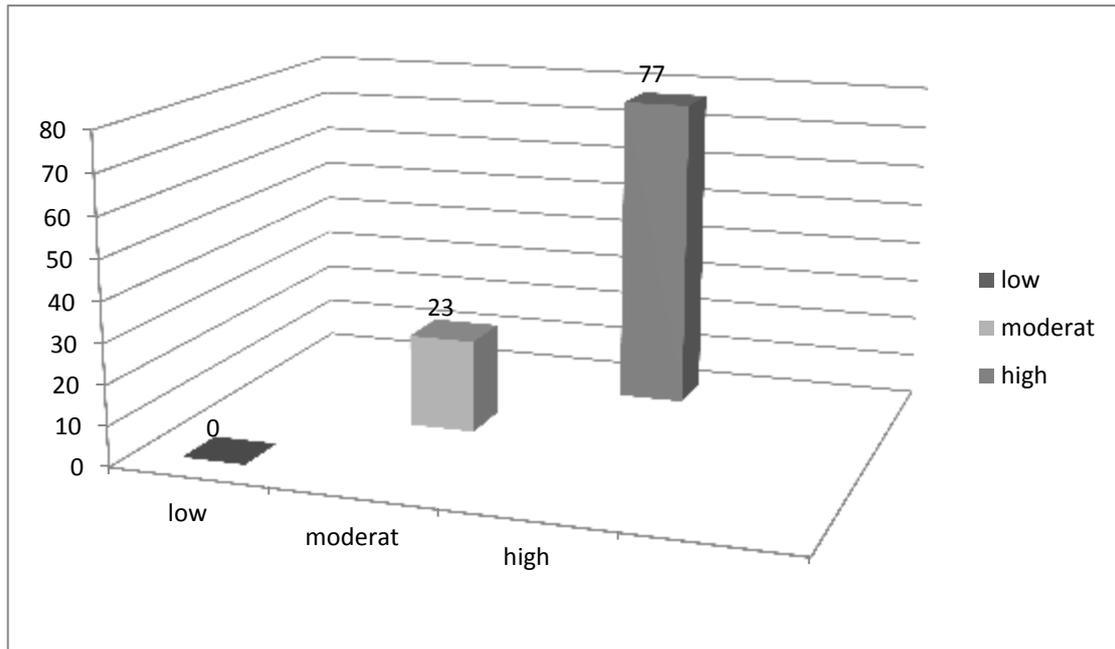


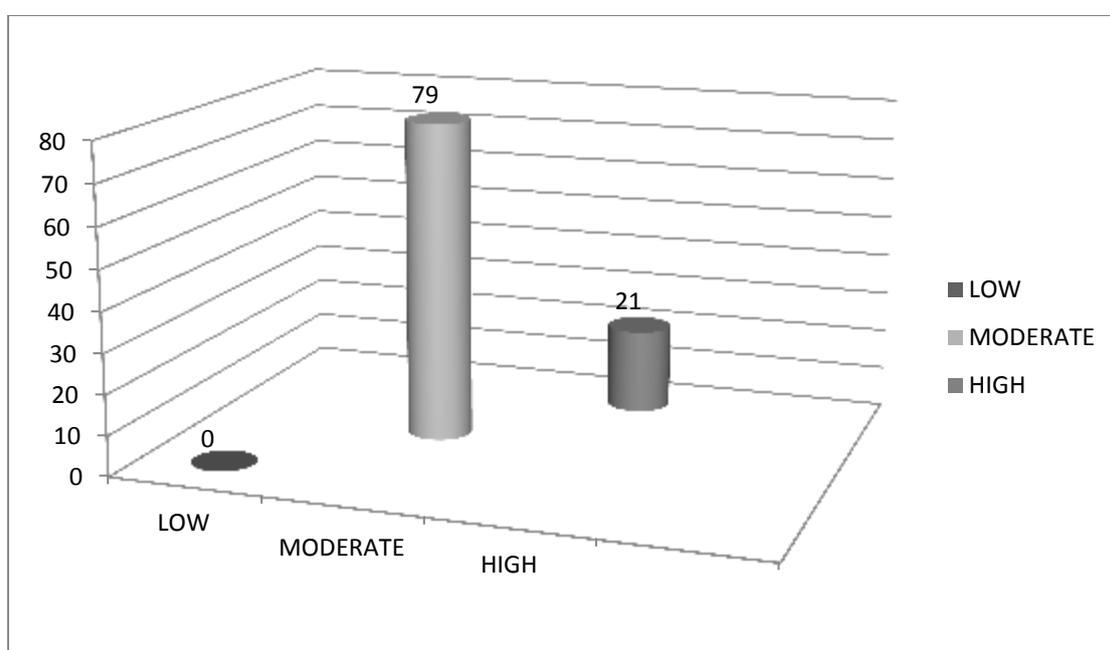
Figure (1) Total levels of readiness for change as reported by nurses (n=300)

Table (2) Frequency of readiness for change as reported by nurses (n=300)

Items of readiness to change	Disagree		Sometime agree		Agree	
	N	%	N	%	N	%
Work more because of the change is	27	9	79	26	194	65
Solve organization problems is	29	10	115	38	156	52
Be a part of the new project is	62	21	114	38	124	41
Create new ideas is	46	15	143	48	111	37
Find ways to make the change fail is	43	14	128	43	129	43
Do things in a new or creative way is	34	11	136	45	130	43
Change the way I work because of the change is	27	9	111	37	162	54
Take responsibility for the change if it fails in my area is	68	23	83	28	149	50
Be a part of the change program is	49	16	97	32	154	51
Learn new things is	13	4	42	14	245	82
Change something even if it appears to be working is	23	8	101	34	176	59
Support change is	21	7	83	28	196	65
Improve what we're currently doing rather than implement a major change is	24	8	101	34	175	58
Sell ideas about the	41	14	138	46	121	40
<b>Total</b>	-	-	96	32	204	68

**Table (3)** Mean scores of the professional nursing practice environment domains as reported by nurses (n=300)

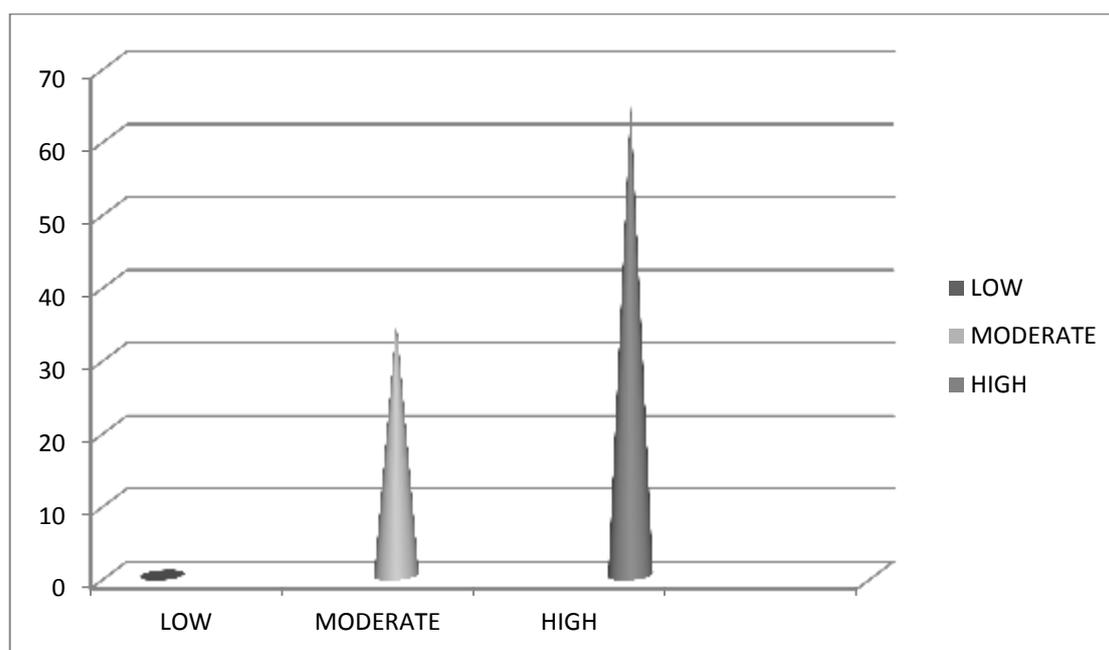
Practice Environment Domain	Mean	±	SD
Nurse participation in hospital affairs	1.90	±	0.80
Nursing foundations for quality of care	2.26	±	0.75
Nurse manger ability, leadership, and support of Nurses	2.10	±	0.77
Staffing and resource adequacy	1.86	±	0.82
Collegial nurse physician relationships	2.43	±	0.67
<b>Total score</b>	<b>2.11</b>	<b>±</b>	<b>0.762</b>



**Figure (2)** Total levels of professional nursing practice environment as reported by nurses (n=300)

**Table (4)** Mean scores of psychological empowerment domains as reported by nurses (n=300)

Domain of psychological Empowerment	Mean	±	SD
Meaning	2.77	±	0.53
Autonomy	2.17	±	0.73
Impact	2.05	±	0.73
Competence	2.32	±	0.71
<b>Total score</b>	<b>2.33</b>	<b>±</b>	<b>0.68</b>



**Figure (3)** Total levels of psychological empowerment as reported by nurses (n=300)

**Table (5)** Relation between personal characteristics of nurses and their readiness to change (n=300)

Personal characteristics	N	Readiness to change			F or T	ANOVA & T-test	
		Mean	±	SD		test value	p-value
<b>Age</b>							
≤40	212	33.6981±		2.81219	T	-.177	.860
>40	88	33.7614±		2.84057			
<b>Educational level</b>	194	33.6804±		2.81942	F	0.092	0.912
Nursing Diploma							
Technical Institute of health Bachelor of Nursing	48	33.8750±		3.17319			
	58	33.7069±		2.52015			
<b>Gender</b>							
Female	288	33.6910±		2.81206	T	-0.737	0.476
Male	12	34.3333±		2.96444			
<b>Years of Experience</b>							
≤20	203	33.7882±		2.80019	T	0.631	0.529
>20	97	33.5670±		2.85740			
<b>Job title</b>							
Nurse	242	33.7190±		2.88715	T	0.032	0.975
Head nurses	58	33.7069±		2.52015			

\*Significant at p < 0.05

**Table (6)** Relation between personal characteristics of nurses and professional nursing practice environment score (n=300)

Personal characteristics	N	Practice Environment			F or T	ANOVA & T-test	
		Mean	±	S. D		test value	p-value
<b>Age</b>							
≤40	212	156.6161±		5.57542	T	-.050	.960
>40	88	156.6477±		4.66348			
<b>Educational level</b>	19	156.7565±		5.23885	F	1.698	0.185
Nursing Diploma							
Technical Institute Bachelor of Nursing	48	155.3958±		5.46455			
	58	157.2069±		5.38275			
<b>Gender</b>							
Female	288	156.6551±		5.29509	T	0.420	0.682
Male	12	155.9167±		5.99179			
<b>Years of Experience</b>							
≤20	202	156.6832±		5.49252	T	0.281	0.779
>20	97	156.5052±		4.95211			
<b>Job title</b>							
Nurse	241	156.4855±		5.30102	T	-0.919	0.361
Head nurses	58	157.2069±		5.38275			

**Table (7)** Relation between personal characteristics of nurses and psychological empowerment score (n=300)

Personal characteristics	N	Psychological Empowerment			F or T	ANOVA & T-test	
		Mean	±	S. D		test value	p-value
<b>Age</b>							
≤40	212	43.7689±		3.57961	T	-0.080	.936
>40	88	43.8068±		3.79309			
<b>Educational level</b>							
Nursing Diploma	194	43.7938±		3.61470	F	0.429	0.651
Technical Institute	48	43.3958±		3.83011			
Bachelor of Nursing	58	44.0517±		3.58566			
<b>Gender</b>							
Female	288	43.7951±		3.69240	T	0.633	0.536
Male	12	43.4167±		1.92865			
<b>Years of Experience</b>							
≤20	203	43.7586±		3.56077	T	-0.144	0.886
>20	97	43.8247±		3.81065			
<b>Job title</b>							
Nurse	242	43.7149±		3.65375	T	-0.640	0.524
Head nurses	58	44.0517		3.58566			

\*Significant at p < 0.05

**Table (8)** Correlation between total scores of readiness for change, professional nursing practice environment and psychological empowerment (n=300)

Variable	total score of readiness for change		total score of professional nursing practice environment		total score of psychological empowerment	
	R	P – VALUE	R	P – VALUE	R	P – VALUE
total score of readiness for change	-	-	0.059*	0.059	0.048	0.411
total score of professional nursing practice environment	0.059*	0.059	-	-	0.102*	0.078
total score of psychological empowerment	0.048	0.411	0.102*	0.078	-	-

**References:**

- 1- Wang, Sh. & Liu, Y. Impact of Professional Nursing Practice Environment and Psychological Empowerment on Nurses Work Engagement: Test of structural equation Modeling. *Journal of Nursing Management* .2013; 23(3), 287-296.
- 2- Lizar, A.A. & Mangundiaya, W. L.; Rachmawan, A. The Role of Psychological Capital and Psychological Empowerment on Individual Readiness for Change. *Proceeding of the Australian Academy of Business and Social Science Conference ( In Partnership with the Journal of Developing Areas) 2014*. ISBN 978-0-9925622-0-5.49(5),343-352.
- 3- Wang ,Y.; Dong, W.; Mauk, K.; Li, P.; Wan, J.; Chen, Ch.&Hao, Mo .Nurses Practice Environment and Their Job satisfaction:Astudy on Nurses Caring for older Adults in Shanghai. 2015: 10(9). Doi: 10.1371/ journal. Pone.0138035.
- 4-Rivaz, M.; Momennasab, M.; Yektatalab, SH.& Ebadi, A. Adequate Resources as Essential Component in the Nursing Practice Environment.2017: doi: 10.7860/JCDR/2017/25349.9986.11(6): ICo1-Ic04.
- 5-Ozbagl, G.K. & Cekmecelioglu, H.G. Linking Psychological Empowerment, Individual Creativity and Firm Innovativeness: A Research on Turkish Manufacturing Industry. *Business Management Dynamics*.2014; ,3 (10). PP. 1-13.
- 6-Saif, N.I. & Saleh, A.Sh. Psychological Empowerment and Job Satisfaction in Jordanian Hospitals. *International Journal of Humanities and Social Science*. 2013: 3(16).
- 7-Cooper, C.L. & Leiter, M.P. *The Routledge Companion to Wellbeing at Workplace empowerment* .Taylor&Francis.111-143.
- 8-Huang, J. The relationship between employee psychological empowerment and proactive behavior: self-efficacy as mediator of social behavior and personality .*Scientific Journal Publisher*. 2017: 45 (7) 1157-1166.
- 9-Treuer, K.; Karantzas, G.; McCabe, M.; Mellor, D. ; Konis, A.; Davison,T.E. & O,Connor, D.Organizational factors associated with readiness for change in residual aged care settings. . 2018; Doi: 10.1186/s12913-018-2832-4. 18:77.
- 10-Finkelman, A. Leadership and Management for Nurses .*Core Competencies for Quality Care .Change and Decision Making* .Second Edition: 2012. 61-75.
- 11-Julita, S. & Abdul Rahman, Wan R. Relationship of Organizational Commitment, Locus of Control, and Readiness to Change among Nurses. *Psycho- Behavioral Science and Quality of Life. The 6Th International Postgraduates Research Colloquium: 2014; 166-170.*
- 12-Hanpachern C .An extension of the theory of margin: a framework for assessing readiness for change. *Hum Res Dev Q*.1998. 9:339–350.
- 13-Lake, T. Development of the Practice Environment Scale of the Nursing Work Index.*Research in Nursing & Health*. 2002; 25(3), 176-188.
- 14-Speritzer, GM. Psychological empowerment in the work place. Dimensions, measurement, and validation, *Academy of management journal*, 1995: (38), 1442-1465.
- 15-Rivaz, M.; Momennasab, M.;Yektatalab, SH.& Ebadi, A. Adequate Resources as Essential Component in the Nursing Practice Environment. 2017:11(6): doi:10.7860/JCDR/2017/25349.9986. ICo1-Ic04.
- 16-Emsza, P.B.; Eliyana, A. &Istyarini, W. The Relationship Between Self Efficacy and Readiness for Change; The Mediator Roles of Employee Empowerment .*Mediterranean Journal of Social Sciences*. 2016;7 (3).
- 17-El-Sayed, F.F., Seada,A.M.,&El-Guindy, H.A:Factors Associated with nurses Readiness for Organizational Change at Beni-Sueif University Hospital. *Faculty of Nursing. Beni-Sueif University. Egypt Nurs*. 2017,14(2). .

- 18-Ahmed ,A. Designs a self-learning package to control the exposure of nurses to occupational hazards facing them in the workplace. Unpublished Master Degree in Nursing Administration. Faculty of Nursing. Zagazig University. 2018.
- 19-Abd-Elkawey, H.A & Sleem, W.F. Factors Affecting Nurses Readiness for Change in Health Care Organizations. *International Journal of Advanced Research*. 2015; 3(11).1330-1343..
- 20-Ghanlyoun , A. ; Shakeri, K. & Heidari, M. The Association of psychological empowerment and job burnout in operational staff of Tehran Emergency Center .2017 .IP: 202, 177,173,189. Downloaded Free From [http:// www.CCM.org](http://www.CCM.org).
- 21-Hussona, F.M. Relationship between Structural Empowerment, Work Engagement, and Job Satisfaction among Nursing Staff at Zagazig University Hospitals. *Zagazig Nursing Journal*. 2013,,9 (1), 15-24.
- 22-Abd El-Gaid, M. Assess intraoperative nurses role regarding patient safety and health hazards in Zagazig University. Unpublished Master Degree in Nursing Administration. Faculty of Nursing. Zagazig University. 2017 .
- 23-Wittenstein, R. Factors Influencing Individuals Readiness for Change in a Health Care Environment. Published Doctorate Dissertation, Faculty of the Graduate School of Education and Human Development, George Washington University. .2010.
- 24-Hauck A, Griffin MQ, Fitzpatrick J .Structural empowerment and anticipated turnover among critical care nurses. *J Nurs Manag*.2011; 19:269–276.
- 25-Raquel MP .Professional nursing practice: environment and emotional exhaustion among intensive care nurses. *Rev Lat Am Enfermagem*.2013; 21:765–772
- 26-Duva I .Factors impacting staff nurse care coordination. Published Doctoral [dissertation]. Faculty of the James T. Laney School of Graduate Studies of Emory University.2010.
- 27-Lambrou P, Merkouris A, Middleton N, Papastavrou E .Nurses' perceptions of their professional practice environment in relation to job satisfaction: a review of quantitative studies. *Health Sci J*.2014. 8:3354–3365.
- 28-Flynn, L. ; Liang, Y.; Dickson, G.&Aiken, L.A. Effects of Nursing Practice Environment on Quality Outcomes in Nursing Homes. *J Am Geriatr Soc*; 2010: 58(12):2401-2406. doi: 10.1111/j.1532-5415.2010.03162.PMCID:PMC3392023. [ PMC free article]
- 29-Hessels, A.J.; Flynn,L. ; Cimiotti, J.P.; Cadmus, E.& Gershon, R.R.M. The Impact of the Nursing Practice Environment on Missed Nursing Care. *Clin Nurs Stud*;2016; 3(4);60-65. doi: 10.5430/cns.v3n4p60. .[ PMC free article] [ PubMed].
- 30-Olds, D.M.; Aiken , L.H.; Cimiotti, J. P.& Lake, E.T. Association of Nurse Work Environment and Safety Climate on Patient Mortality :A Cross –sectional study . *Int J Nurs Stud*. 2018: 74:155-161. doi:10.1016/j. ijnursstu.06.004. PMID: PMC5695880. [ PMC free article] .
- 31-Yan, P. ; Yang, Y.; Zhang, L.; Li, F. ; Huang, A.; Wang, Y. ; Dai, Y. & Yao, H. Correlation analysis between work-related musculoskeletal disorders and the nursing practice environment , quality of life and social support in the nursing professionals. *Medicine (Baltimore)*. 2018: 97(9):e0026. doi 10.1097/MD.00000000000010026. PMID:PMC5851758. [ PMC free article]
- 32-Collins, M.L. Nursing Professional Practice Models: Impact on Medical Nurse Empowerment and Job Satisfaction. Published of doctoral dissertation in nursing practice . Wilmington University. College of Health Professions. 2018: Pp.34-55.
- 33-Ibrahim, H.M. Effect of a Nursing Care Training Program on Staff Nurses Performance and empowerment. Unpublished Doctorate Dissertation. Faculty of Nursing. Zagazig University. .2013.

- 34- Hossny E.K., Qayed,M.H.,&Yoyssef,H.R. Effect of workplace civility climate, structural and psychological empowerment on organizational commitment of newly graduated nurses at Hospitals in Assiut City. IOSR Journal of Nursing and Health Science. (IOSR-JNHS) .2015, 4(6), Pp 87-95. www.iosrjournals. Org. .
- 35-Ibrahim, M.M., El-Magd, M.H.& Sayed,H.Y. Nurse's psychological empowerment and Perceived autonomy in university and teaching hospitals at Menofia Governorate . Journal of Nursing and Practice, 2014: 4(.9),59. www.sciedu.ca/jnep.
- 36-Ambad, S.N. Psychological Empowerment: the Influence on Organizational Commitment among Employees in the Construction Sector. Faculty of Business Management, Universiti Malaysia Sabah. Journal of Global Business Management. 2012: 8, (2)
- 37-Shah, N. The Role of Employees Trust in management and Supervisors on Developing attitudes and behaviours for Organizational Change. International Journal of Management Sciences. 2014; 4, (.8),.333-342.