

## Effect of Resilience Program on the Optimism Level of Nurses Caring for Patients with Psychiatric Disorders

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### Abstract

**Background:** Psychiatric constituencies are stressful environments. Resilience can help psychiatric nurses manage with their occupational stress. Resilience is positive adaptations to nurses stress management capacity as well as optimistic life orientation, they will become more productive, creative, and supported. **Aim:** The study intended to evaluate the effect of resilience program to enhance optimism level among nurses caring for clients with psychiatric disorders **Subjects and Method:** One- group quasi-experimental design with pre-post evaluation was used. The study sample consisted of twenty nurses working in the psychiatric health and addiction treatment hospital in Port Said City. The data was collected through the two tools include the ego resilience scale and revised life orientation test were assessed before the education program and immediately after finishing the program. **The results** revealed that there was a statistical significant improvement between high level of resilience in pre/ post program. Also found that, optimism and resilience share a positive relation after the intervention with marital status, educational level and experience in psychiatric nursing. A statistically significant positive correlation between nurses levels of resilience with optimisms in the post program. **Conclusion:** The program had “great positive effect” on increasing the level of optimism among nurses accomplished the educational session, who caring for psychiatric patients. **Recommendations:** The findings of the study clearly show that resilience program is effective to boost resilience and optimism.

**Keywords:** Psychiatric nurses, Resilience, Optimism, Caring psychiatric patient.

### Introduction

Mental health nurses work in challenging and potentially stressful environments. Consumer, family, and/or staff relationships, as well as the work environment and organization, can all be sources of stress. Burnout and poor physical and mental wellbeing can result from the cumulative effects of stress and specialized challenges for mental health nurses<sup>(1)</sup>. Patients with psychiatric diseases present to psychiatric facilities with psychological crises or behavioral disorders, needing the skills of a professional nurse who is sensitive, aware, attentive, and prepared to deal with the unpredictability of clinical situations<sup>(2)</sup>. Despite these obstacles, resilience enables nurses to adapt to their work environment while keeping a healthy and stable mental state<sup>(3)</sup>.

Healthcare professionals in fields such as medicine, nursing, psychology, and social work have a higher risk of acquiring burnout symptoms or mental illnesses. Resilience-building training programs may be beneficial to this population<sup>(4)</sup>. A process of positive adaptation to stress and adversity is referred to as resilience<sup>(1)</sup>. Nurses who really are resilient are better equipped to cope

with work stress and its negative consequences. Increasing nurses' resilience in order to live in today's challenging work environment is a critical issue in the twenty-first century<sup>(5)</sup>. Individual strengths linked to resilience and positive life orientation, such as emotional stability, and realistic optimism, which fostered through resilience intervention<sup>(6)</sup>.

Optimism is a generalized belief that a person will achieve favorable outcomes when confronted with a challenge. This expectation practically encompasses every major area of a person's existence. Optimism is associated with a number of psychological traits that can affect one's self-efficacy<sup>(7)</sup>. Optimists think that dreams can be actually realized, while pessimists are worried for the future<sup>(8)</sup>. Optimism appears to be an individual difference variable that represents how optimistic people are really about their expectations in the future<sup>(9)</sup>. Optimism is linked to better resilience among individuals<sup>(10)</sup>.

Resilience is one of the positive characteristics associated with an optimistic explanatory style<sup>(11)</sup>. Resilient nurses are reflective, optimistic and socially competent; they also have high problem-

solving capabilities and a sense of purpose<sup>(12)</sup>. As a result, optimism is thought to predict a higher level of distress tolerance as well as resistance to challenging working situations<sup>(13)</sup>. In other words, in stressful situations, optimism tends to be associated with resilience<sup>(9)</sup>.

#### **Significance of the study:**

Mental nurses are more likely to experience stress because they operate in close proximity to psychiatric patients in a high-stress environment and under difficult working conditions<sup>(14)</sup>. Resilience is a positive adaptation to nurses stress management capacity and optimistic life orientation<sup>(15)</sup>. As a result, being optimistic and proactive can help nurses build a positive outlook on life, enhance overall health, survive better and with less stress, and acquire effective coping skills. So the aim provided in the current study is to evaluate the effect of resilience program to enhance optimism level among nurses considerate for patients with psychiatric conditions, so that they can be helpful to themselves and to their clients in abroad way.

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

This study concerned with evaluating the effect of resilience program to enhance optimism level among nurses caring for patients with psychiatric conditions.

#### **Specific objectives:**

1. Measure the levels of resilience among nurses.
2. Measures levels of optimism among nurses.
3. Construct, implement and evaluate the effect of an of resilience program to enhance optimism level among nurses caring for patients with psychiatric conditions.

#### **Research Hypotheses**

Based on the goals of the research the following hypotheses have been tested.

1. The post-test scores for the level of resilience among nurses who attended resilience program will be higher than their pre-test scores.
2. The post-test scores for the level of optimism among nurses who attended resilience program will be higher than their pre-test scores.

## **Subjects and Method**

### **Study Design**

A quasi-experimental (pre/post-test) design was used to determine the effect of educational program about resilience on optimism for nurses in Port Said Psychiatric Health Hospital.

### **Study Setting**

The present study was implemented in Port Said Psychiatric Health Hospital. This hospital is linked to General Secretariat of Mental Health and Addiction Treatment (GSMHAT), Ministry of Health and provides care to psychiatric and substance abuse patients. That hospital composed of five in-patient psychiatric units including one unit is men's department for substance abuse, two units for male and two units for female's patients. Additionally, one unit for children, and finally the outpatient clinic.

### **Study Subjects**

The study subjects comprised a convenient sample of twenty nurses working in Port Said Mental Health Hospital. The subjects of this consider were chosen agreeing to the taking after criteria; nurses who provide a direct care to patients with psychiatric disorders and who agree to participate in the study. The overall numbers of nurses who work at the hospital were eight nineteen nurses.

### **Sample Size**

Sample size will be determined according to the following equation:

$$N = (Z_{\alpha})^2 \frac{p q}{d^2} \quad (16)$$

Where

N = sample size.

$Z_{\alpha}$  = the value of standard normal distribution for type I error probability for the sided test and equals 1.96.

p = prevalence of resilience = 8.632%<sup>(17)</sup>.

q = 1- p

d<sup>2</sup> = the accuracy of estimate

So, according to the calculations, the sample size = 20 nurses.

### **Tools for Data Collection**

The Ego Resilience Scale and The Revised Life Orientation Test, along with a personal data questionnaire were used to collect data for this study.

### **The Ego Resilience Scale(ER89)**

It was established by Block & Kremen (1996)<sup>(18)</sup> in English language and translated in to Arabic language by Al-Khatib & Al-Helou (2007)<sup>(19)</sup>. This scale measures ego resilience. The Arabic version of ER89 showed validity and worthy internal

consistency, using Cronbach's alpha  $\alpha = 0.968$ . Validity was done by an expert panel who decided that the scale was valid<sup>(19)</sup>.

**For scoring system,** The ER89 consisted of 14 statements. Each statement has four choices and a graduated scale of (1-4) representing the following categories, does not apply at all (1), applies little (2), sometimes applies(3), and applies a lot (4). The score is between 14-56 and with higher scores indicating greater ego resilience. With scores from 14 to 22 denoting low resilience, from 23 to 34 denoting moderate resilience, while from 35 to 56 indicating high level.

#### 1) **The Revised Life Orientation Test (LOT-R)**

It was established by Scheier et al., (1996)<sup>(20)</sup> in English language. The LOT-R measures the level of dispositional optimism of an individual.

**Intended for scoring system,** The LOT-R consisted of 10 items. This five-point Likert-type scale (0, strongly disagree to 4, strongly agree) consists of three positively worded items that assess optimism (1, 4, and 10 Items) and three reversed-scored items (3, 7, and 9 Items) that measure pessimism. In addition, four filler items (2, 5, 6, and 8) were included that disguise the underlying purpose of the test. Scores range from zero to 24. Higher scores indicate greater optimism and lower scores indicate lower optimism, often referred to as pessimism. High scores indicated an optimistic overall outlook on life. With scores from zero to 13 denoting low optimism, from 14 to 18 denoting moderate optimism, while from 19 to 24 indicating high level.

Additionally, Personal Data Questionnaire was utilized, this structured interview questionnaire established by the researchers in Arabic linguistic, which was collected from nurses. It contained personal features as nurse's age, gender, marital status, number of children, level of education, income and number of years in psychiatric nursing.

#### **Tool validity and reliability**

For the current study, the LOT-R scale (**Tool 2**) was transformed into Arabic language. The two chief phases of translation comprising forward and backward were done. Two bilingual specialists did the forward translation, and then the Arabic version of the LOT-R was then translated back into an English language by two other linguistic experts who were uninformed of the original version. Then, the researchers revised these translations and compared them with the original version to assure

the accuracy of translation and eliminate any dissimilarity.

As well, a final Arabic version was confirmed by a panel of experts who decided that the translated tool was valid. A panel encompassed one professor and three assistant professors from Psychiatric Nursing and Mental Health department, one professor from Medical Surgical Nursing department, and two assistant professors from Nursing Administration department, Faculty of Nursing, Port Said University. They were demanded to convey their views concerning construction, lucidity, significance, and inclusiveness of the transformed tool. Grounded on their appraisal, the required modifications were done accordingly. The stage of evidencing validity of the translated tool continued for two months.

Reliability of an Arabic version of the LOT-R scale was proven by Cronbach's alpha coefficient. An Arabic version was proved to be reliable as Cronbach's alpha was satisfactory as  $\alpha = 0.78$ . The period of ascertaining reliability persisted for one week.

#### **Pilot Study**

In preparation for the actual study, a pilot study was implemented on 10 % of the studied nurses. It was done in order to ascertain the significance, clarity and practicability of the used study tools, and to estimate the time required to fill in the study tools. The nurses who encompassed the pilot study were excluded from the chief study sample to assure the stability of the result. Built on the findings of the pilot study, no changes were done to the study tools; the study tools were simple and perfect. The pilot study was implemented in the first of January 2021 for one week.

#### **Field Work**

Preparation, data collection, implementation and evaluation of a program persisted for nine months since the first of February to the end of July 2021. The study moved out through four stages Assessment, Development of the educational program, implementation and evaluation as follow:

##### **I) Phase one: - Assessment phase (pretest)**

Before starting-up the program design and planning, the study tools were constructed, tested and refined then applied to nurses to assess their knowledge and skills about

resilience. Collected data was analyzed to obtain a baseline information about nurses' knowledge and skills in resilience. Filling of the tools ranged from 15 to 20 minutes.

## II) Phase two: - Development of the educational program

Educational program was established by the investigators based on reviewing of the recent related literatures and the result of phase one. The program content was developed, the content stressed mainly on (theoretical knowledge about resilience and several skills that help to promote resilience and optimism of nursing in caring patients with psychiatric conditions.

- Training sessions were held by researchers included lectures, discussions and group participation, and role-playing, at the end of

every session, the participants' questions were answered, and the beginning of the next sessions was complemented by a review of the topics of the previous session. Multimedia facilities such as computers, film, and software players (PowerPoint) were used to provide training and prevent tiredness in the participants.

- The program was tested for its validity after translation by three linguistic experts.
- The program was developed on small group basis. The subjects encompassed six subgroups. Each sub group composed of three-four nurses. Each sub group attended eight sessions; these sessions were scheduled as two sessions per week for duration of four weeks (Wednesday & Thursday). The time for each session was about (60-90 m).

## III) Phase three: - Implementation of education Program.

The researchers divided the implementation phase of the program into eight sessions:

Sessi on	Goals	Educational Program Content
1	The nurse was able to : Acknowledge with the generalities and content of the program	Introducing the members and getting to recognize the workshop facilitators; getting acquainted with the objectives and framework of the Program; expressing the guidelines and regulations of the meetings.
2	Identify the meaning and concepts of resilience (by providing definition, explanation, example).	Definition of resilience; introducing the characteristics of resilient individuals; explaining the aspects related to resilience; familiarity with the ways of creating resilience; presenting group tasks (in groups of three-four Nurses)
3	Enlarge self-awareness of one's abilities	Assessment of homework, awareness of one's abilities and elimination or reduction of irrational beliefs; facilitating the aspects and barriers to self-awareness, expression of the nurses' experiences (answers, and questions; group discussion)
4	Strengthen self-esteem	A clear understanding of self-esteem; explaining the causes and issues influencing self-esteem; understanding the importance and impact of self-esteem in life; identifying strengths and weaknesses
5	Utilize therapeutic communication	Discussion of the nurse's experience (problems) faced throughout work with patients and other professional staff in mental hospital. Scenario to qualified nurses when deal effectively with patients and use effective caring behaviour skills. (group discussion, and role play)
6	Explore different support factors	The concept of optimism and the role of optimistic thinking in resilience; teaching positive thinking social support system; individual responsibility and role acceptance
7	Initiate adaptive coping strategy	Training exercises were done to support nurses to

		manage with stress. It covered the topic "Deep breathing exercise" and "progressive relaxation technique explanation steps of these exercises (practical practice, and role play).
8	Share their feedback about the program	The investigators analysis the topics covered by the group and feedback from the individuals About the program. At the end of the program for all subgroup, printed booklet of the educational program was given to all studied nurses.

#### **During implementation of the program, as a general**

- The investigators were the initiator, provider and reassure of exchange knowledge, problems, stressors between studied nurses and investigators, and encouraged exploration of their issues and responses. They also acted as a group leader who operated as a facilitator, teacher, and trainer.
- The investigators allowed nurses to think critically and give wide range of their own responses to the situations and analyze each one.
- All over the sessions, the investigators were motivating the nurses to share in the discussion, and emotionally reward by positive comments and appreciation.
- Each session the investigators provided the nurses the planned to mention positive changes that acquired from the previous sessions.

#### **IV)Phase four (Evaluation phase)**

- This alarmed with the evaluation of the implemented educational Program. The tool of the study was reapplied twice on all study subjects on an individual basis immediately after implementation of the educational program.
- After completion of post-test, the studied nurses were thanked for the time and effort they generously offered. Also, a printed booklet which included all information delivered in the program to use as reference in the future was presented to each participant.

#### **Ethical Considerations**

The dean of the Faculty of Nursing sent an official letter to the GSMHAT, demanding his permission and cooperation to implement the study, afterwards clarifying the intention of the study. Consequently, official letters directed from GSMHAT to the director of Port Said Psychiatric Health Hospital requesting his permission to conduct the study.

An informed consent was obtained from the studied nurses after complete description of the purpose and nature of the study. Confidentiality of the collected data and anonymity were strictly maintained through a code number affixed to each studied adolescent questionnaire. Voluntary participation of the studied nurses was confirmed as they were well-informed that they have the freedom to withdraw from study at any phase. Finally, the process of data collection and program implementation were not disturbing the harmony of the work of the above-mentioned setting.

#### **Statistical analysis**

Data were fed to the computer and analyzed using IBM SPSS software package version 20.0. (Armonk, NY: IBM Corp). Qualitative data were defined using number and percent. The Shapiro-Wilk test was used to verify the normality of distribution. Quantitative data were described using mean and standard deviation. Significance of the attained results was judged at the 5% level. Chi-square test was used for categorical variables, to compare between different group. Fisher's Exact or Monte Carlo correction was used for chi-square when more than 20% of the cells have expected count less than 5. Marginal Homogeneity Test was used to analyze the significance between the different stages. Paired t-test was used for normally distributed quantitative variables, to compare among two periods.

#### **Limitations of the study**

It was the first time to apply a program in psychiatric hospital and the permission was gained with difficulty. Also it was difficult to collect all the nurses together at the same time to attend the session of the program due to working circumstances. Such limitation was overcome by implementing the program for nurses at appropriate time for the researchers and the nurses. The study

did not reveal data about the amount of patient and nurse interaction and did not provide information about patient's outcomes from the inter-relationships.

## Results

**Figure1**,denotes percentage distribution of the levels of optimism among nurses pre\post program. It indicates the improvement of nurses' optimism. As, the scores in the post program tend to increased compared to preprogram especially in the highest level of nurses' optimism which reached 65% in the immediate post-test. Nonetheless, the optimism levels were significantly higher than the pre-program levels among studied nurses.

**Figure2**, shows percentage distribution of the studied nurses according to levels of resilience. It shows that there was a significant improvement between high level of resilience in pre-program and post- program phase.

**Table 1**, puzzles out the relation between personal characteristics and levels of optimisms among the studied nurses pre\ post program. The study results reveal that, there was a statistically significant relation between optimism levels and personal characteristics of the studied nurses comprising marital status, educational level and experience in psychiatric nursing after the program at  $p \leq 0.05$ .

The table also considers that, Married and the secondary technical school nurses had the highest percent change in the score of highest level of optimisms after the program.

**Table 2**,displays the relation between personal characteristics and levels of resilience of the

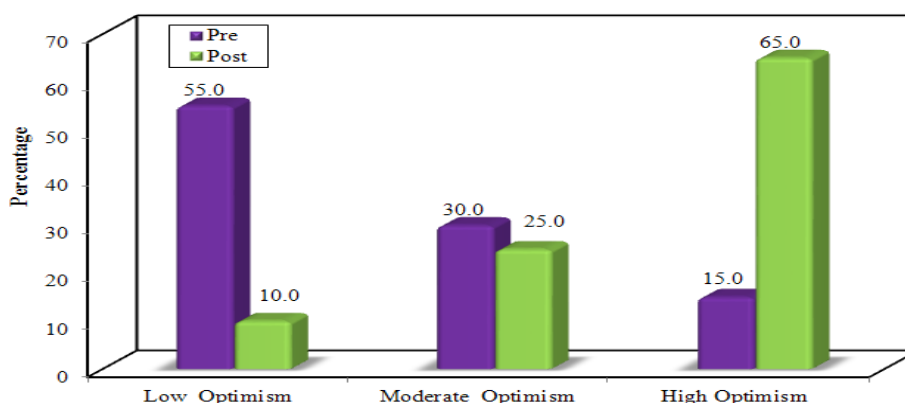
studied nurses before\ after program. It was established that, a statistical significant relations were revealed between nurses' resilience level after the program and marital status, educational level and experience in psychiatric nursing as ( $p=0.031^*$ , $p=0.032^*$ ,  $p=0.005^*$ ) at  $p \leq 0.05$ .

The table additionally illustrates that married and the secondary technical school nurses had the highest percent change in the score of highest level of resilience compared to pre- program.

**Table 3**, submits correlation between total mean scores of resilience and optimism and pessimism among the studied nurses pre\ post program. As described in the table, there was a statistically significant positive correlation between nurses' levels of resilience with optimism at the post program at  $p \leq 0.05$ .

Whereas there was a statistically significant negative correlation between nurses' levels of resilience with pessimism at the post program at  $p \leq 0.05$ .

**Table 4**,revealsmultivariate linear regression for factor affecting optimism among the studied nurses, as remarked, the strong factor affecting optimism among the studied nurses was marital status asp=0.853 followed by resilience intervention, years of experience and educational level at  $p \leq 0.05$ .



**Figure (1): Percentage distribution of the studied nurse's pre and post program according to optimism level (n = 20)**

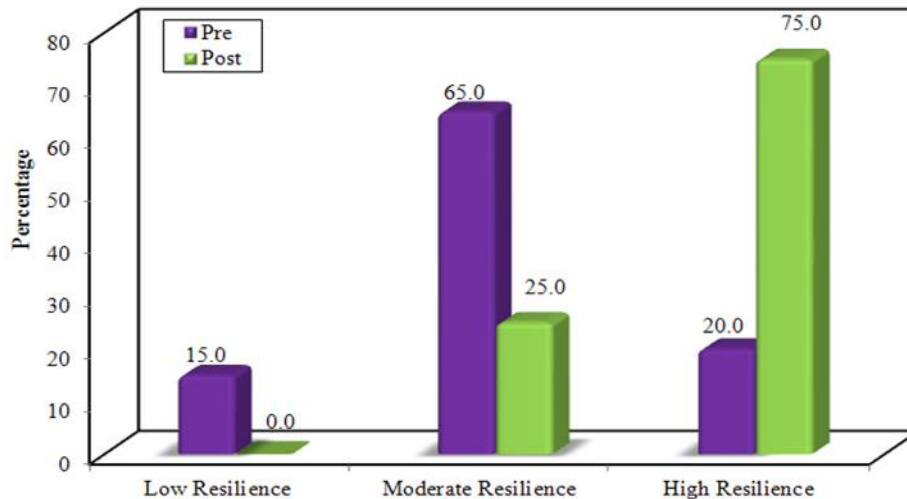


Figure (2):percentage distribution of the studied nurses according to levels of resilience (n = 20)

Table (1): Relation between personal characteristics and levels of optimism of the studied nurses pre\ post program (n = 20)

Personal characteristics	Levels of optimism of the studied nurse's											
	Pre						Post					
	Low optimism (n = 11)		Moderate optimism (n = 6)		High optimism (n = 3)		Low optimism (n = 2)		Moderate optimism (n = 5)		High optimism (n = 13)	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Age (years)</b>												
20 – <40	9	81.8	6	100.0	3	100.0	2	100.0	4	80.0	12	92.3
40 – <60	2	18.2	0	0.0	0	0.0	0	0.0	1	20.0	1	7.7
$\chi^2$ (Mcp)	1.327 (0.660)						1.414 (0.588)					
<b>Gender</b>												
Male	3	27.3	2	33.3	0	0.0	1	50.0	1	20.0	3	23.1
Female	8	72.7	4	66.7	3	100.0	1	50.0	4	80.0	10	76.9
$\chi^2$ (Mcp)	1.049 (0.811)						1.181 (0.774)					
<b>Marital status</b>												
Single	5	45.5	1	16.7	1	33.3	2	100.0	5	100.0	0	0.0
Married	6	54.5	5	83.3	2	66.7	0	0.0	0	0.0	13	100.0
$\chi^2$ (Mcp)	1.458 (0.686)						19.930*(<0.001*)					
<b>Number of children</b>												
Non	4	36.4	2	33.3	1	33.3	2	100.0	2	40.0	3	23.1
1 – 2	6	54.5	2	33.3	1	33.3	0	0.0	2	40.0	7	53.8
3 – 4	1	9.1	2	33.3	1	33.3	0	0.0	1	20.0	3	23.1
$\chi^2$ (Mcp)	2.567 (0.802)						3.792 (0.410)					
<b>Education level</b>												
Secondary technical school	8	72.7	5	83.3	3	100.0	1	50.0	2	40.0	13	100.0
Faculty of nursing	3	27.3	1	16.7	0	0.0	1	50.0	3	60.0	0	0.0
$\chi^2$ (Mcp)	0.873(1.000)						9.098*(0.007*)					
<b>Income /month</b>												
Sufficient	2	18.2	1	16.7	0	0.0	0	0.0	1	20.0	2	15.4
In sufficient	9	81.8	5	83.3	3	100.0	2	100.0	4	80.0	11	84.6
$\chi^2$ (Mcp)	0.630(1.000)						0.717(1.000)					
<b>Years of</b>												

<b>experience in psychiatry department</b>												
1 – <5	1	9.1	3	50.0	2	66.7	0	0.0	0	0.0	6	46.2
5 – <10	6	54.5	2	33.3	1	33.3	1	50.0	2	40.0	6	46.2
≥10	4	36.4	1	16.7	0	0.0	1	50.0	3	60.0	1	7.7
$\chi^2$ (MCp)	5.299 (0.249)						7.238*(0.047*)					

$\chi^2$ : Chi square test MC: Monte Carlo

p: p value for comparing between different categories

\*: Statistically significant at  $p \leq 0.05$

**Table (2): Relation between personal characteristics and levels of resilience of the studied nursespre\ post program (n = 20)**

Personal characteristics	Levels of resilience of the studied nurses									
	Pre						Post			
	Low (n = 3)		Moderate (n = 13)		High (n = 4)		Moderate (n = 5)		High (n = 15)	
	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Age (years)</b>										
20 – <40	3	100.0	11	84.6	4	100.0	4	80.0	14	93.3
40 – <60	0	.0	2	15.4	0	.0	1	20.0	1	6.7
$\chi^2$ (p)	0.867(MCp=1.000)						0.741(FEp=0.447)			
<b>Gender</b>										
Male	0	0.0	5	38.5	0	0.0	2	40.0	3	20.0
Female	3	100.0	8	61.5	4	100.0	3	60.0	12	80.0
$\chi^2$ (p)	2.596 (MCp=0.255)						0.800(FEp=0.560)			
<b>Marital status</b>										
Single	2	66.7	4	30.8	1	25.0	4	80.0	3	20.0
Married	1	33.3	9	69.2	3	75.0	1	20.0	12	80.0
$\chi^2$ (p)	1.634 (MCp=0.632)						5.934* (FEp=0.031*)			
<b>Number of children</b>										
Non	0	0.0	5	38.5	2	50.0	2	40.0	5	33.3
1 – 2	2	66.7	7	53.8	0	.0	3	60.0	6	40.0
3 – 4	1	33.3	1	7.7	2	50.0	0	.0	4	26.7
$\chi^2$ (MCp)	6.857 (0.085)						1.486 (0.654)			
<b>Education level</b>										
Secondary technical school	2	66.7	10	76.9	4	100.0	2	40.0	14	93.3
Faculty of nursing	1	33.3	3	23.1	0	0.0	3	60.0	1	6.7
$\chi^2$ (p)	1.397 (MCp=0.585)						6.667* (FEp=0.032*)			
<b>Income /month</b>										
Sufficient	1	33.3	1	7.7	1	25.0	0	0.0	3	20.0
In sufficient	2	66.7	12	92.3	3	75.0	5	100.0	12	80.0
$\chi^2$ (p)	2.367 (MCp=0.271)						1.176(FEp=0.539)			
<b>Years of experience in psychiatry department</b>										
1 – <5	1	33.3	3	23.1	2	50.0	0	0.0	6	40.0
5 – <10	1	33.3	6	46.2	2	50.0	1	20.0	8	53.3
≥10	1	33.3	4	30.8	0	0.0	4	80.0	1	6.7
$\chi^2$ (MCp)	2.479 (0.836)						8.754*(0.005*)			

$\chi^2$ : Chi square test MC: Monte Carlo FE: Fisher Exact

p: p value for comparing between different categories

\*: Statistically significant at  $p \leq 0.05$



**Table (3): Correlation between total mean scores of resilience and optimism and pessimism among the studied nurses pre\ post program (n = 20)**

		Optimism		Pessimism	
		Pre	Post	Pre	Post
Resilience	R	0.266	0.502*	0.082	-0.567*
	P	0.258	0.024*	0.732	0.009*

r: Pearson coefficient

\*: Statistically significant at  $p \leq 0.05$ **Table (4): Multivariate Linear regression for analyses predicting optimism among the studied nurses**

	B	Beta	t	P	95% C.I	
					L.L	U.L
Resilience	-0.034	-0.045	0.189	0.853	-0.423	0.354
Years of experience in psychiatry department	-2.460	-0.162	0.608	0.552	-11.090	6.169
Marital status	20.203	0.855	3.941*	0.001*	9.277	31.129
Education level	4.828	0.171	0.732	0.475	-9.228	18.884

 $R^2=0.671, F=7.642^*, p=0.001^*$  B: Unstandardized Coefficients

Beta: Standardized Coefficients

CI: Confidence interval

LL: Lower limit

UL: Upper Limit

\*: Statistically significant at  $p \leq 0.05$ 

## Discussion

Nurses employed in psychiatric hospital are in stimulating and a hypothetically high tension. Resilience is a positive adaptation to a nurse's capacity to manage stress and maintain mental health<sup>(17)</sup>. So, being optimistic can help nurses establish a positive attitude on life, enhance overall health, live longer and with less stress, and learn effective coping skills<sup>(21)</sup>. Given the importance of this issue, and the belief that improvement in this area could be achieved, the present study was conducted to evaluate the effect of resilience intervention to enhance optimism level in the midst of nurses helpful for patients with psychiatric conditions.

The results indicated that the distribution of optimism levels before the program is less than one-quarter of the studied nurses had a high level of optimism and improved before/after program to two-thirds of nurses had high levels of optimism. This means that the program had the greatest positive effect on increasing optimism levels in the studied nurses. These results

supported our hypothesis. The interpretation might be that the method and type of educational content delivered, including familiarity with internal and external support aspects, enhancement of self-esteem, awareness of one's abilities, improvement of coping skills with worry, and stress, as well as the exercises provided, were very effective. This interpretation is supported by Souri & Hasanirad (2011)<sup>(22)</sup> where clarified that optimism and resilience seems to go together with each other in adverse events. It means that there is an interactive relationship between these two variables; resilience results in optimism and optimism leads to resilience. In this line of reasoning, it is important to enhance nurses' resilience in order to have good expectations about their future.

This result went on the same line with the study approved by Bhatti et al., (2020)<sup>(6)</sup> who revealed that, the resilience intervention successfully increased their levels of optimism in their life-orientation by widening their vision to perceive possibilities and alternative explanations for the

challenges they face on a daily basis. The current results were in agreement with a study in Egypt which demonstrated that before the training, less than one-third of the studied nurses had a high level of optimism, which improved to two-thirds of nurses with high levels of optimism in the post program<sup>(23)</sup>. Psychological care for front-line nurses, in particular, is considered as a key public mental health issue<sup>(24)</sup>.

People learn how to control work-related stress during the resilience training process, and resilient strategies can be accessed by changing thought processes. As a result, they serve as a protective buffer against stressful life situations<sup>(25)</sup>.

In this study, the resilience among nurses earlier and later the program was also measured, which point to the positive effect of resilience training on the high level of resilience in these nurses. The boost in resilience abilities could be linked to the studied nurses' ability to improve self-esteem, therapeutic communication, and optimism. As a result, the studied nurses were willing to improve their resilience in helpful for psychiatric patients and to respond effectively to the resilience program. This is in congruence with the previous Systematic review findings of workplace resilience programs in which education was shown to improve people's resilience, mental health and well-being, as well as their work performance<sup>(26)</sup>.

Similar to the foregoing current study results, a study in Egypt performed 8 sessions resilience educational program aiming to promote the resilience among nurses caring for patients with psychiatric disorders and showed that the studied psychiatric nurses had a moderate resilience mean score before the intervention, but a high resilience mean score had achieved after the program<sup>(17)</sup>. Also, Janzarik et al., (2022)<sup>(27)</sup> determine the effects of a group intervention to promote resilience in nursing professionals and stated that resilience and other resilience-related outcome measures showed considerable improvements. Additionally, Boardman (2016)<sup>(28)</sup>; in his study with nursing students revealed after participating in a resilience training program, overall resiliency score improved. The authors conclude that there is a clear need and practical relevance for mental health promotion interventions for psychiatric nurses. In disagreement with this, a study carried out in the

Continental United States which examining the impact of care provider support program on resiliency, coping, and compassion fatigue in military health care providers and found that care provider support program (CPSP) training had no effect on resiliency or coping skills<sup>(29)</sup>. The variation appears to be due to changes in the study population, the length and number of training sessions employed, measuring tools, sample size, and different training methods used. Nurse case management requires optimism and resilience in order to achieve successful work-related adjustments<sup>(30)</sup>. The existing study findings revealed a statistically significant positive correlation between nurse's total mean scores of resilience and optimism at the post program. This result may be due to that, more stress resiliency and coping techniques have been reported to be associated with optimism<sup>(31)</sup>. This interpretation is supported by Bhatti et al., (2020)<sup>(6)</sup> who illustrated that internal strength that promotes positive changes through and after distress and actively seeks meaning and purpose in life is referred to as resilience. This supports the premise that a human's ability to respond positively to adversity is known as resilience<sup>(32)</sup>. In this light, it is critical to promote nurses' optimism in order to improve their chances of dealing with obstacles in a more adaptable manner.

Similar finding have been previously interpreted in Iran by Falavarjani & Yeh (2019) (13) who studied optimism and misery tolerance in the social modification of nurses: examining resilience as a mediator and gender as a moderator and reported that nurses who are optimistic and have a high level of distress tolerance are substantially more likely to report more resilience. This is congruent with Maheshwari & Jutta (2020) (11) who signified that during the challenging time of the epidemic, there was a large positive correlation between optimism and resilience among university students. Also He et al., (2013) (33) revealed that in burn patients, there is a significant relation between dispositional optimism and psychological resilience and subjective well-being.

Close to those in the present study were reported in an Indian study among nurses performed during COVID- 19 pandemic indicated that

nursing teachers and administrators had better levels of psychological preparedness, self-efficacy, resilience, and optimism than students<sup>(34)</sup>. Additionally, Malik (2013)<sup>(35)</sup> concluded in his study of hope, optimism, and workplace resilience, he discovered that an optimistic explanatory style is linked to a variety of positive traits, including resilience. Meanwhile, Khodabakhshi-Koolae et al., (2019)<sup>(36)</sup> who did a study to assess the relationship among optimism and humor with resilience in female nurses of hospitals in Isfahan, Iran and stated that between optimism and resilience, there was a significant negative association.

The present study has also revealed that statistical significant relations were revealed between nurses' resilience level after the program and marital status, educational level and experience in psychiatric nursing. As married and the secondary technical school nurses had the highest percent change in the score of highest level of resilience compared to pre- program. The interpretation might be that higher education linked with greater autonomy and critical reflective practices, characteristics that may aid nurses in dealing with professional challenges<sup>(37)</sup>. These results are in agreement with Gandhi et al., (2021)<sup>(34)</sup> who emphasized that, the resilience of young, single nurses with a lower degree of education was significantly lower. Additionally, Manomenidis et al., (2019)<sup>(38)</sup> illustrated that the strongest predictors of nurse resilience were educational level, anxiety, and overall usage of mental preparation techniques, particularly resilient nurses having a higher educational level. The situation is similar to a study in Iran, where Dehvan et al., (2018)<sup>(39)</sup> investigate the relationship of mental health with resilience among psychiatric nurses and reported that the mean resilience score was associated with marital status in a substantial way. The years of operating room experience and nurse resilience have statistically significant correlations as emphasized by Gillespie et al., (2009)<sup>(40)</sup>. In disagreement with this Ni et al., (2015)<sup>(41)</sup> found there was no significant association between education levels and resilience among participant.

Marital status was associated with optimism and optimism was related to well-being<sup>(42)</sup>. Lastly, the strong factor affecting optimism among the studied nurses was marital status followed by resilience

intervention, years of experience and educational level. These results may be related to the experienced and married nurses were able to recognize the ability to bounce back or recover quickly from change, misfortune, and unmet expectations. It has further increased their understanding on the subject of how to identify pessimistic and terrible thinking styles that runs in the mind without any definite proof. On the same line, a study in Bulgaria found that marital status as a predictor of optimism and time perspective in individuals<sup>(43)</sup>. Also, another study results illustrated that there was a relation between marital status and feelings of optimism<sup>(44)</sup>.

The results of the study also indicated that resilience significantly predict optimism level among psychiatric nurses. This means that nurses who face adversity in a more adaptive way will have good expectations about their future. In this respect, Bhatti et al., (2020)<sup>(6)</sup> indicated that, resilience training that focuses on emotional and social competencies might help people feel more optimistic. Moreover, Maheshwari & Jutta. (2020)<sup>(11)</sup> mentioned that, to improve resilience, one must think more positively and optimistically. Therefore, Ching & Cheung (2021)<sup>(45)</sup> recommended that, Universities and clinical mentors should work together to create resilience in their health-care students and assist them in their personal and professional development throughout their careers.

### **Conclusion**

In deduction, grounded on the present study results, it can be decided that it is of great importance to conduct continuous and regular in-service training program for nurses in order to improve resilience. The outcomes suggest the marital status, resilience intervention, educational level and years of experience as a predictive dimension of the optimism among nurses. The program had “great positive effect” on increasing the level of optimism among nurses accomplished the educational session, who caring for psychiatric patients.

### **Recommendations**

**Built on the discoveries of the contemporary study, the subsequent recommendations are proposed:**

- Responsible health authorities in the mental health field should encourage nurses to attend

continuing education in the form of workshops, discussions and updated review about resilience.

- Provide nurses with educational materials such as recent psychological books and periodicals in an Arabic language.
- Provide adequate budget allocation every year for establishing training programs concerned with promoting nurse's professional resilience.
- Future research should also take patients' contributions into consideration and focus on patient outcomes in the light of improving nurse's resilience and optimism.

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