

Career Maturity and its Effect on Psychological Resilience among Head Nurses

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Abstract

Background: Career maturity is one of the most crucial components of supporting one's future career growth; Resilience in nursing has been highlighted as a human characteristic that assists nurses in dealing with professional difficulties and responsibilities. Define psychological resilience as the ability to mentally cope with or adapt to uncertainty, challenges, and adversity. It is sometimes referred to as "mental fortitude." **Aim:** The current study aimed to assess career maturity and its effect on psychological resilience among head nurses. **Research design:** A descriptive correlational design was used to carry out this study. **Setting:** This study was conducted at Ain Shams University Hospital. **Subjects:** This study included (80) head nurses from the aforementioned setting, and used a simple random sampling technique. **Tools of data collection:** The current study used two tools namely; Career maturity Questionnaire and Connor-Davidson Resilience scale. **Results:** Approximately two thirds (64%) of studied head nurses had high Psychological Resilience, and the majority of them (87.5%) had high career maturity. **Conclusion:** There were statistically significant relations between head nurses' psychological resilience and all dimensions of career maturity and overall resilience. **Recommendations:** The present study provide suggestions for the development of future research and strategies aimed at improving the career maturity of nurses and improving Psychological Resilience.

Keywords: Career Maturity, Psychological Resilience, Head nurses.

Introduction

Career maturity is an important aspect of individuals' career development, decision-making, job and career satisfaction, and retention in the contemporary world of work. The concept of career maturity is defined as the personal ability to make age appropriate informed career decisions and accomplish developmental task. Choosing an appropriate occupation by oneself is considered as one of the hallmarks of career maturity as it is required process of career decision making. Career maturity refers to the individual's degree of readiness to choose, to plan and to prepare for future vocation. (Shweta T, Aglawe (2020).

The construct of career maturity or vocational maturity, was introduced by Super (1957), who claimed that career maturity is represented as "the reached place during the

continuum of vocational development from exploration to decline .This short synopsis about the existing measures of career maturity reveals a rather bewildering array of dimensions that might hinder or promote successful career decision making. Several attempts had been made to reduce this diversity of dimensions, primarily through exploratory factor analysis of the existing measures (Thomas & Asselin,2017).

Nursing resilience has been studied in different clinical settings, such as pediatric oncology, geriatric care, psychiatric fields , surgery and intensive care units . some nurses have developed highly adaptive mechanisms, or resilient characteristics that allow them to continue to deliver high quality care and stay intact for many years despite of adverse situations in the hospital context (Cheng,2020).

Studies on the factors contributing to resilience, have explored the influence of physiological factors (procedures that protect the body from stress responses e.g. sympathetic nervous system, as well as external factors (e.g. social networks or clinical settings, internal factors (positive emotions, self-efficacy), and demographic variables (e.g. years of experience). Studies have also examined the protective role of different coping strategies employed mainly during work hours, as well as the protective role of leisure activities (Department of State Health Services. (2021).

Significance of the study:

Research on resilience among nurses highlighted its protective role against nursing turnover after traumatic stress disorder, emotional exhaustion, and burnout. Resilience has also been linked to enhanced patient satisfaction, a perceived better quality of care and better attitudes toward patients. (Henshall, 2020).

Resilience is a worldwide need for nurses, due to the constantly changing, increasingly specialized healthcare system, the presence of more knowledgeable patients and the tension between demands and resources which means that both nurses and students struggle to maintain a professional standard with which they can be identified (Kunzler, et al,2020).

A previous study related to career maturity indicated a positive relationship between the ability to improve career adaptability and vice versa. The curiosity and self-confidence dimensions of career adaptation have been found in previous studies to be positively associated with career maturity. Savickas (2018) pointed out from his career construction theory the attitude and competency of the career maturity model are the basic dimensions of career adaptability. Attitudes refer to the emotions or feelings of individuals when making career choices and venturing into the world of work.

Competence, on the other hand, looks at the information and competencies possessed by an individual in relation to a career and how

much planning skills are needed to make career decisions. As a consequence, career maturity significantly affects on career development theory because career development could occur concurrently with chronological age progression. (NCSBN,2021). So, the researchers were conduct the study to assess career maturity and its effect on psychological resilience among head nurses

Aim of the study:

This study aimed to assess career maturity and its effect on psychological resilience among head nurses.

Research question

Is there an effect of career maturity on psychological resilience among head nurses?

The methodology of this study was presented under four main designs as follows:

- I- Technical design.
- II- Operational design.
- III-Administrative design.
- IV-Statistical design.

I. Technical design

The technical design involved a description of the research design, setting, subjects of the study, and tools of data collection.

Study design

A descriptive correlational design was used to carry out this study.

Study Setting

The study was conducted at Ain Shams University hospitals, namely; Shams University hospital 27, obstetric & gynecological 15, Ain-Shams Pediatric hospital 27, New & Old buildings, and Cardiovascular surgery Hospital 14 : This hospital provides care for patients in different medical and surgical specialties .

Subjects of the study

the participants of the study were (80) all head nurses working in aforementioned settings.

Sample technique:

Head nurses were selected by simple random sampling technique.

Tools of data collection:

The data for this study were collected by two tools namely; Career maturity questionnaire and Connor-Davidson Resilience scale.

Tool I: Career maturity Questionnaire:

This tool consists of two parts:

Part 1:

Data related to the personal and job characteristics of head nurses including: age, gender, marital status, previous work training and year of experience in nursing were collected.

Part 2:

This part consisted of Career maturity questionnaire; was adopted from (Ismail, 2022). To assess career maturity level among head nurses. It included 20 items that assess career maturity level among head nurses. it consisted of 4 dimensions (5 items for career exploration, 5 items for vocational self-concept, and 5 items career decision making).

Scoring system

Head nurses' responses were measured on 5-point Likert scale (1= strongly disagree 5= strongly agree).

The total score was calculated by cutoff point and summing the scores of all categories. The total scores represented varying levels as: high level of head nurses' career maturity >60%, and low level of nurse's job crafting < 60%.

Tool II: Connor-Davidson Resilience scale:

This tool was used to assess psychological resilience level among head nurses. It was adopted. by Hashemi (2017) based on (Connor and Davidson 2003). It included 25 items.

Scoring system

Head nurses' responses were measured on a 5-point Likert scale (1= completely incorrect, to 5= always correct).

The total score was calculated by cutoff point and summing scores of all categories. the total score represents varying levels of head nurses' psychological resilience as: high level of head nurses' psychological resilience < 75%, moderate level of head nurses' psychological resilience 60-75% and low level of head nurses' psychological resilience <60%.

Validity:

The two tools were tested for Validity by original authors.

Reliability:

The reliability of the tools was assessed through measuring their internal consistency by determining Cronbach's alpha coefficient ,which proved to be high as indicated in the following table:

Table (I): Description of tool reliability:

Tools	Cronbach Alpha Coefficient	
	No of items	Cronbach alpha
Psychological Resilience scale	21	0.821
Career maturity Questionnaire	37	0.79

This table shows the reliability in Resilience scale, and Career maturity questionnaire when Cronbach's alpha was >0.5 . The reliability for this scale was 0.82. The reliability for this questionnaire was 0.79.

II. Operational Design:

The operational design of this study included three phases: a preparatory phase, pilot study and field work.

Preparatory phase:

This phase started from the January 2024 till May 2024. the researcher reviewed the related national and international literature, the material in textbooks and scientific journals was used in the study to be acquainted with the study subject.

Pilot study:

The pilot study was carried out on (8) studied head nurses who represented 10% of (80) of the total study sample. The aim of the pilot study was to examine the applicability of the tool, and clarity of language, and to test the feasibility and suitability of the designated tools. It also served to estimate the time needed to fill the forms for each study subject and identify potential obstacles and problems that may be encountered during data collection. The pilot study took two weeks from half of February 2024 to the end of February 2024. The head nurses took 35-45 minutes to complete the questionnaire. The data obtained from the pilot study were analyzed, and no modifications were done. Therefore the study subjects who participated in the pilot were included in the main study sample.

Field work:

The field work started after official permission was obtained to conduct the study. It took three months to start in the beginning of January 2024 and the survey was completed at the end of May 2024. The researchers visited the study settings, met with medical and nursing directors of the hospital to explain the aim of the study, and obtained their approval and cooperation. The researchers introduced themselves to head nurses in the workplace to explain the aim and component of the tools and invited them to participate in data collection and were instructed in how to fill them in.

The researchers were presented during the data collection period to explain how to complete the tools, clarify any ambiguity and answer any questions. The data were collected through two days per week during the morning and afternoon shifts. The researchers collected approximately 13 to 15 questionnaires every week. The filled tools were handed back to the researchers to check each one to ensure its completion.

III. Administrative Design:

To carry out the study, the necessary approval was obtained. An official letter was issued from the Dean of the Faculty of Nursing, Ain Shams University, to obtain permission from the hospital directors about conducting the study. The researcher met both medical and nursing to explain aim of the study and obtained their approval to collect the data and seek their support.

Ethical consideration:

Prior to the study ethical approval was obtained from the Scientific Research Ethical Committee of the Faculty of Nursing at Ain Shams University. The subjects were informed

about their right outcomes for the to withdraw at any time without giving any reason and the collected data kept confidential and used for scientific work only. Informal consent was obtained from each participant in the study.

IV. Statistical Design:

The data collected from the studied sample was revised, coded and entered into a computer software PC. Data entry and statistical analysis were performed using the statistical package for social sciences (IBM SPSS 20.0). Data were presented using descriptive statistics in the form of frequencies, percentages for non-numerical data and mean, standard deviation (+ SD) for parametric numerical data. Also, using analytical statistics in the form of chi square test to examine the relationship between two qualitative variables. Using student t-test to assess the statistical significance of the difference of a parametric variable between

Figure (2): It shows that majority of them (87.5%) had high career maturity level while only (12.5%) of them had low career maturity level.

Figure (3): presents a variation in head nurse career maturity among its different dimensions. The percentages of head nurse reporting high career maturity level ranged between 85.0% for dimension of career planning to 90% for dimension of vocational self-concept & career decision making.

Table (2) points to Statistically significant relations between head nurses' psychological resilience and all dimensions of career maturity & its total . Although, the percentage of head nurses having high Psychological resilience were higher among those having high career maturity related to the

means of two study groups (two independent group means). statistically significant was considered at $P < 0.05$.

Results

Table (1): The study sample consisted of 80 head nurses. According to their Personal and job characteristics, slightly less than half of them (45%) were more than 40 years old with Mean \pm SD 35.74 \pm 8.87), and (56.3%) of them were married. While, about two thirds (67.5%) of them were female. So, 62.5% of them had experience years less than 5 years with mean \pm SD (6.18 \pm 4.25).

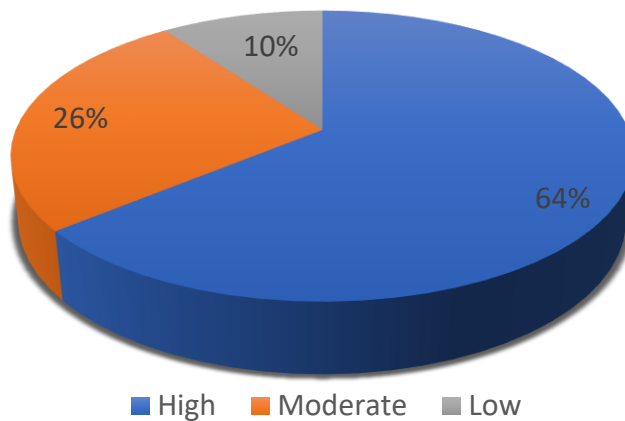
Figure (1): It shows that, two thirds (64%) of studied head nurses had high level Psychological Resilience, (26%) of them had moderate Psychological Resilience level, meanwhile only (10%) of them had low level of Psychological Resilience.

dimensions of Career planning and Career exploration, the differences were of high statistical significance ($P = 0.001$ respectively).

The regression analysis (**Table 3**), identified head nurses' age as a statistically significant independent positive predictor of their career maturity score. Conversely, their gender were negative predictors & gender shows no significant effect on resilience ($\beta = -0.083$, $p = 0.392$). The model explains 74% of the variation in the career maturity score. Notably, total career engagement emerges as a robust positive predictor of resilience ($f = 31.441$, $p < 0.001$).

Table (1): Personal and job characteristics of studied head nurses (N=80)

Characteristics	No.	Percent
Age:		
<30	20	25
30≥40	24	30
40 or more	36	45
Mean ± SD 35.74±8.87		
Gender:		
Female	54	67.5
Male	26	32.5
Marital Status:		
Married	45	56.3
Un married	35	43.8
Previous work training		
Yes	30	37.5
No	50	62.5
Experience years in nursing:		
≤5	50	62.5
5≥10	22	27.5
10 or more	8	10.0
Mean ± SD 6.18 ±4.25		

**Figure (1): Total Psychological Resilience levels of studied head nurses (N=80).**

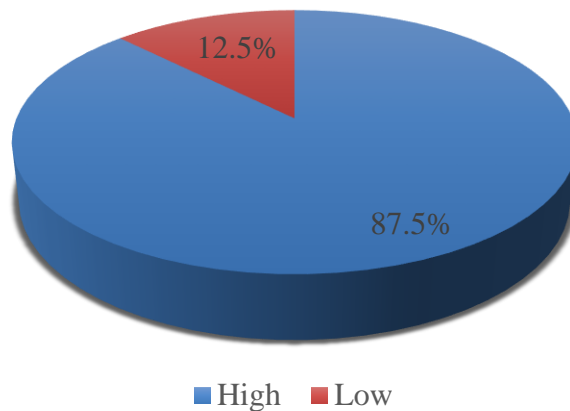


Figure (2): Total career maturity levels of studied head nurses (N=80)

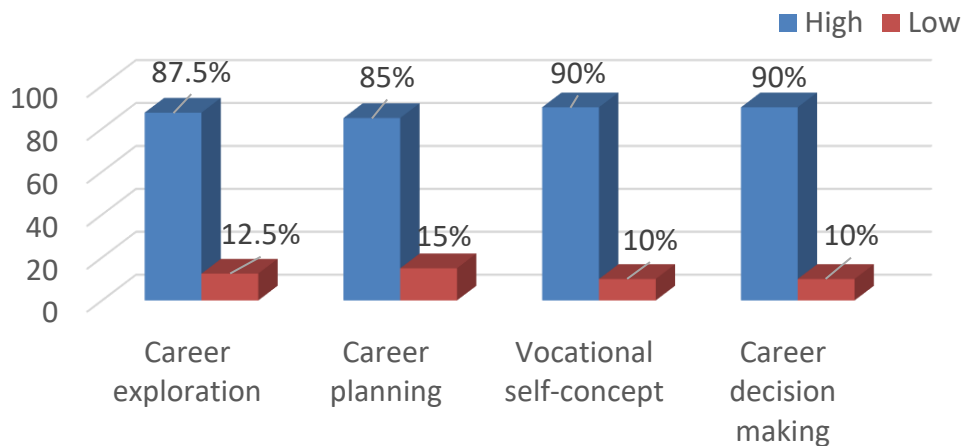


Figure (3): Career maturity among head nurses in the study sample (N=80)

Table 2: Relations between head nurses' psychological Resilience and their Career maturity

Career maturity Dimensions	Total psychological Resilience							
	High		Moderate		Low		X ²	P-value
	N	%	N	%	N	%		
Career exploration								
High	51	72.9	16	22.9	3	4.3	28.027	<0.001*
Low	0	0.0	5	50.0	5	50.0		
Career planning								
High	51	75.0	15	22.1	2	2.9	34.622	<0.001*
Low	0	0.0	6	50.0	6	50.0		
Vocational self-concept								
High	51	70.8	18	25.0	3	4.2	30.595	<0.001*
Low	0	0.0	3	37.5	5	62.5		
Career decision making								
High	51	70.8	18	25.0	3	4.2	30.595	<0.001*
Low	0	0.0	3	37.5	5	62.5		

* Statistically significant at $p < 0.001$

Table 3: best fitting multiple linear regression models for psychological Resilience in Career maturity score:

	Unstandardized Coefficients		Standardized Coefficients	t- test	P-value	95% Confidence Interval B	
	B	Std. Error				Lower	Upper
Constant	1.594	0.339		4.705	<0.001*	0.919	2.269
Age	-0.292	0.091	-0.355	-3.218	0.002*	-0.474	-0.111
Gender	-0.119	0.138	-0.083	-0.861	0.392	-0.393	0.156
Total career	0.470	0.121	0.493	3.885	<0.001*	0.229	0.710
Dependent Variable: Total resilience							

$r\text{-square} = 0.744$ $f = 31.441$ $P\text{-value} < 0.001*$

Discussion

Career maturity is described as an individual's ability to adjust to developmental tasks at a specific stage in his or her life; this ability includes both affective and cognitive elements. The psychological resilience of nurses refers to the protective resources developed by nurses in their professional experience to safeguard the psychological dynamic balance, and it is a comprehensive psychological process of cognitive, emotional and behavioral tendencies. (Sapta, 2021).

This study aimed to assess career maturity and its effect on psychological resilience among head nurses.

A previous study related to career maturity has indicated, that professional self-concept has a direct effect on psychological resilience, which in turn has a direct effect on psychological resilience, which in turn has a direct effect on career maturity (Tolentino., 2014).

Regarding the studied head nurses. According to their personal and job characteristics, slightly less than half of them

were more than 40 years old. Therefore, 62.5% of them had more than 5 years of experience (mean \pm SD, 6.18 \pm 4.25). Moreover, more than two-thirds of the participants were females.

However, head nurses' age was a statistically significant independent positive predictor of their career maturity score. Conversely, gender was a negative predictor, and gender had no significant effect on psychological resilience.

Total career maturity levels of the studied head nurses. The majority of them had high career maturity levels, while only one tenth of them had low career maturity levels.

From the researcher's point of view, this may have returned to head nurses, who were found to have a greater identity with the nursing profession and a clear understanding of the nursing career, which in turn positively impacted their career maturity (Ding, , 2021). Similarly, a nationwide cross-sectional study conducted in China by Ying Wang et al. (2021), who studied the "career maturity, psychological resilience, and professional self-concept of nurses in China", revealed that participants' career maturity, professional self-concept, and psychological resilience were at moderate levels.

Based on previous evidence, it was noted that nursing students with high career maturity levels were more likely to have a stronger desire to remain in the workforce (Kawai & Yamazaki, 2006).

Another study in agreement with these present findings was a study conducted in the united states by Huijing et al. (2016), who studied "attributions, future time perspective and career maturity in nursing undergraduates: correlational study design", which revealed that, the degree of career maturity was moderate among nursing undergraduates.

Career maturity, as a construct of career psychology, principally reflects an individual's degree of mental maturity. According to the career maturity model. Future time perspective, as a psychological factor, can predict an individual's motivational goal-setting process

for future career development. Future time perspective, in particular, has been defined as an acquired mental characteristic that arises from future development goals. (Lens. et al, 2012).

Concerning the total psychological resilience levels of the studied head nurses, the results of the current study showed that two thirds of the studied head nurses had a high level of psychological resilience, while only one-tenth of them had a low level of psychological resilience.

From the researcher's point of view, this finding can serve as a protective factor against negative outcomes related to the job, including burnout, anxiety, and depression, and can improve patient outcomes.

Additionally, the findings of the present study revealed statistically significant relationships between head nurses' psychological resilience and all dimensions of career maturity and total career maturity. This finding is in line with that of a study carried out by Ying Wang et al. (2021), who found that Pearson's correlation analysis revealed that career maturity was closely related to professional self-concept and psychological resilience.

Regarding the regression analysis between career maturity and psychological resilience, although the percentage of head nurses with high psychological resilience was greater among those with high career maturity related to the career planning and career exploration dimensions, the differences were highly statistically significant ($P=0.001$). These results are supported by a 2021 study conducted in China that reported that nurses with positive professional self-concepts demonstrated greater psychological resilience, which in turn influenced their career maturity. Moreover, career maturity is closely related to professional self-concept and psychological resilience.

From the researcher's point of view, the present findings are that resilience requires self-reflection and self-care abilities, both of which help leaders make decisions in difficult situations (Duncan, 2020). Moreover, resilience in nurses' leaders and other healthcare workers is defined as the ability to positively adapt to difficult and trying situations. Kester & Wei

(2018) A positive professional self-concept and psychological resilience has the potential to improve the career maturity of nursing students.

CONCLUSION

In light of the findings of the present study, it can be concluded that there were statistically significant relationships between head nurses' psychological resilience and all dimensions of career maturity and total career maturity. Head nurses' age was a statistically significant independent positive predictor of their career maturity score. Conversely, gender was a negative predictor, and gender had no significant effect on resilience.

RECOMMENDATIONS

Based on the present study findings the following recommendations are suggested:

- Suggesting that a healthy work environment benefits head nurses psychological resilience.
- Head nurses need sufficient preparation and training career maturity in acute situations of the work.
- Impact of career maturity training program among head nurses and its influence on their performance
- Assessment of psychological resilience among staff , head nurses and its relation to their performance

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