Demographic Determinants of Intern nurses' Resilience during The COVID – 19 Pandemic

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Abstract

Background: *The COVID-19 pandemic has placed considerable strain on healthcare providers and showing high rates of stress and psychological health problems. Resilience is a critical skill for intern nurses and other healthcare professionals, especially during COVID-19 pandemic to help them to better cope during crisis and function more effectively in the workplace.* ***Aim of study****: Investigate the relationship between demographic determinants of intern nurses and resilience at work at Alexandria Main University Hospital.* ***Research question:*** *what is the relationship between demographic determinants of intern nurses and their resilience at work at Alexandria Main University Hospital? Descriptive-Correlational Research Design was used.* ***Setting****: Intensive Care Units and Critical care units and its specialties at Alexandria Main University Hospital.* ***Sampling:*** *Probability, systematic random sampling technique (n=56) of intern nurses were included in this study. Two tools were used in this study demographic data of intern nurses and Resilience at Work Scale (RAW-S).* ***Results****: Intern nurses reported moderate levels of resilience at work with a mean percent score of 49.06%. This study implies there were statistically significant differences between overall mean percent score of resilience at work and all demographic data and work -related characteristics except gender and marital status where (p value = 0.397, 0.632), respectively.* ***Conclusions:*** *the present study revealed that demographic and work-related characteristics affected on the resilience level positively.* ***Recommendations****: Intern nurses need to acquire the skills of resilience through provide training programs for intern nurses and develop strategies and guidelines to create resilient nurse.*

Keywords: COVID –19 pandemic, Demographic determinants**,** Intern nurses, Resilience

Introduction

The COVID-19 pandemic has exerted unprecedented pressure on the entire healthcare system and presented significant challenges to the nursing workforce. All nurses, including intern nurses, directly involved in frontline care of COVID-19 patients, often witness patients suffering, which could further amplify their stress and anxiety (Labrague & Santos, 2021). Egypt announced its first COVID-19 instance on 14 February 2020, (Mansour et al., 2021).

During a pandemic, intern nurses are also exposed to additional stressful components, such as the fear of contracting the disease, high levels of worry, stress, and despair (Wang et al., 2020). Furthermore, fear of contagion, workplace stress, social isolation, the stress of making ethical and moral decisions relating to prioritization of care, and prejudice may disproportionately affect health care professionals (HCPs) (Zhang & Ma, 2020). Dealing with the current COVID-19 outbreak is proving to be a huge challenge for health professionals from all walks of life. It's challenging to deal with a crisis, especially because nurses, especially intern nurses, have different coping methods will vary in such a situation. In such difficult circumstances, personal resilience is a vital requirement for intern nurses' endurance. It also one of the skills that help intern nurses show their best performance and ability to

maintain healthy and sustained psychological function despite exposure to severe stressors (Alameddine et al., 2021).

Resilience, defined as the ability to overcome difficulties and cope successfully with stressful events, is receiving research attention due to its role in mitigating the effects of workplace stressors (Hart et al.,2014). Therefore, nurse resilience has been described as a tool or skill that enables nurses to overcome workplace adversity, focus on building or enhancing capacity, modify, balance, and control themselves in unfavorable environments (Delgado et al., 2017). In the intensive care specialty, it has been defined as cognitive flexibility, coping ability, and adaptability. Overall, resilience is a multifactorial and adaptive evolutionary process combining individual personal traits with experience (Robertson et al., 2016). Moreover, resilience is learnable and, according to psychologists, factors such as individual and personality traits, family ties, and support systems reinforce it (Grimes et al.,2020).

As such, building resilience in risk-elevated and demanding settings has been proposed as an effective way to enhance nurses' well-being. High resilience has been closely linked to reduced burnout, lower nurse turnover, improved the quality of care, and enhanced patient satisfaction (Heritage et al.,2019). Therefore, there have been several recommendations to create resilience during nursing programmes (Cross, 2015).There are several factors contributing to resilience, including physiological factors (e.g., sympathetic nervous system), internal factors (e.g., self-efficacy, inner wisdom), external factors (e.g., clinical settings, social network), and demographic variables (e.g., age, gender, years of experience) (Manomenidis et al.,2019). More research and development are needed to determine the specific characteristics of the COVID-19 pandemic. While, many different research approaches were used to analyze the pandemic's phenomenon, but no specific information is available about the level of resilience and the demographic determinants influenced interns' perspectives of resilience, particularly their willingness to treat COVID-19-infected patients (Chi Chen et al., 2020).

Significance of the study:

Intern nurses in their final year of education have their clinical skills and knowledge strengthened and integrated. This is an intensive hands-on training experience that will enable the nurse intern to better handle a wide range of patient conditions by applying critical thinking, nursing process, problem solving, decision making, professional and management responsibilities in the delivery of nursing care. COVID-19 is a substantial threat to lifetime, quality of life, and health, as well as having a significant impact on the mental health and coping mechanisms of nurses and intern nurses, due to its rapid spread, powerful transmission, death in severe cases, and lack of particular treatments, creating a variety of psychological and emotional reactions, including tension, worry, fear, stress disorder, as well as post-traumatic stress disorder, despair, and suicide. Healthcare workers including intern nurses, are at a higher risk of contracting COVID-19, especially if they come into contact with patients who have the virus (Algaissi et al., 2020; Shereen et al., 2020). Hence, it is hoped that such a study will give valuable insights to nurse leaders about the level of resilience and the demographic factors predicting resilience in critical conditions among intern nurses.

Aims of the Study

This study aims to:

1. Determine level of resilience at work among intern nurses at Alexandria Main University Hospital during COVID-19 pandemic.
2. Investigate the relationship between demographic determinants of intern nurses and resilience at work at Alexandria Main University Hospital during COVID-19 pandemic.

Research Question

What is the relationship between demographic determinants of intern nurses and their resilience at work at Alexandria Main

University Hospital during COVID-19 pandemic?

Materials and Method

Materials

Design: A descriptive correlational design was used to conduct this study

Settings: This study was conducted in Critical Care Units **(**N=5) and Intensive Care Units **(**N=8) at Alexandria Main University Hospital with bed capacity of hospital is 1633 beds, Critical Care Units include First unit, Second unit, Third unit, Fourth unit, and Medical Care Unit while Intensive Care Units include Anesthesia Care Unit, Neurosurgery Care Unit, Cardiac Care Unit, Urology Care Unit, Burn Care Unit, Chest Care Unit, Hematemesis Care Unit, and Maxillofacial Care Unit.

Subjects: Probability, systematic random sampling technique of intern nurses were included in this study (n=56) who are working in the previously selected setting. Total number of intern nurses who were working in critical care units and Intensive Care Units (N=248) and using G power in calculating sample size as following:

1. Total population of intern nurses = 248
2. G Power =0.9
3. Acceptable α error = 0.05
4. Effect size = 0.5
5. Minimum sample size = 56

Systematic random sampling technique of intern nurses was done by these steps:

1. List of intern nurses received of nurses' internship committee.
2. Selected a beginning number.
3. Selected an interval by calculation: k =N/n
   k = Total number of intern nurses who were working in critical care units and Intensive Care Units (N=248) / number of intern nurses was included in this study (n=56).
   Sampling interval: 248/56 = 4.43 ~ 5
4. Gather list of intern nurses based on the interval number.

Tools: Two tools were used to collect data of the study:

First tool: ***Demographic data and work-related characteristic of intern nurses:*** This tool was developed by the researchers to identify important and relevant information about intern nurses' demographic data and work-related characteristic that included age, gender, marital status, duration spent of internship year, working Shift, working units, previous knowledge about resilience at work, region and working experience in ICU.

Second tool: Resilience at Work Scale (RAW-S): It was developed by Winwood et al., (2013). It was adopted to assess resilience level at work for intern nurses. It is composed of 20-items classified into seven dimensions, namely; Living authentically (3 items), Finding one's calling (4 items), Maintaining perspective (3 items), Managing stress (4 items), Interacting cooperatively (2 items), Staying healthy (2 items), and Building networks (2 items). The responses were measured on 5-point Likert scale ranges from (1) strongly disagree to (5) strongly agree. **Scoring system:** the overall score was ranged from 20 to 100 and mean percent score of low perception of intern nurses about resilience at work less than 33.3%, moderate perception from 33.3% to 66.6% and high perception more than 66.6% which indicating higher level of resilience at work of intern nurses.

Method

- An approval for conducting the study was obtained from the Ethical Research Committee of the Faculty of Nursing, Alexandria University prior to the starting of the study.
- An official permission was obtained from Vice Dean for community Service and Environment Development, Faculty of Nursing, Alexandria University to collect the necessary data from intern nurses.
- An official letter from the Faculty of Nursing was sent to the hospital administrators to collect the necessary data.
- All tools were translated into Arabic and were tested for their face validity by five

experts in the field of the study and accordingly the necessary modifications were done.

- Tool two was tested for their reliability, using the appropriate statistical tests to measure the internal consistency using Cronbach's alpha Correlation Coefficient test. The result of the tool revealed that was reliable with value of r = 0.926, for Resilience at Work Scale (RAW-S)
- A pilot study was carried out on 10 % of intern nurses (n= 6), who was not included in the study subjects in order to check and ensure the clarity of tools, applicability, feasibility, identify obstacles and problems that was encountered during data collection and estimated time needed to fill each questioner and the necessary modifications were done.
- Data were collected for this study by the researchers after meeting with each intern nurse in each unit to explain the aim of the study and the needed instructions were given before the distribution of questionnaires. Each intern nurse took about 10-15 minute to fill these tools. The data collected over morning and evening shifts. Data collection took a period of one month starting from 10/7/2021 to 10/8/2021.

Ethical considerations:

- A written informed consent of the study subjects was obtained after explaining the aim of the study.
- The intern nurses were participated in the study on voluntary bases.
- Confidentiality of data of study subjects was maintained.
- Subjects had a right to withdraw during research at any time was assured.

Statistical Analysis

Data were fed to the computer and analyzed using IBM SPSS software package version 25.0. Qualitative data were described using number and percent. The Kolmogorov-Smirnov test was used to verify the normality of distribution Quantitative data were described using range (minimum and maximum), mean, standard deviation. Significance of the obtained results was judged at the 5% level. The tests used in this study include student t-test for normally distributed quantitative variables, to compare between two studied groups, F-test (ANOVA) for normally distributed quantitative variables, to compare between more than two groups and Pearson coefficient to correlate between two normally distributed quantitative variables.

Results

I. Distribution of intern nurses according to their demographic data and work-related characteristics:

Table (1) showed that the mean score of intern nurses' age was (22.34 ± 1.04). About two third of intern nurses (62.5 %) were female and according to marital status (85.7 %) of intern nurses were single. Slightly more than half of intern nurses (55.4 %) were spent 10-12 months of internship years, while 17.9 % of intern nurses were spent 3-6 months. Moreover, 62.5 % of intern nurses were worked long shift and 3.6 % were worked evening shift only. 66.1% of intern nurses were worked in Critical Care Units and 33.9% were worked in Intensive Care Units. The highest percentage of intern nurses (60.7 %) came from urban areas. The majority of intern nurses (76.8%) didn't had knowledge of resilience skills, while the lowest percentage (23.2%) of intern nurses had knowledge related to resilience from different resources such as self-study (84.6%), lectures (23.1%), and training program / workshops (7.7%), respectively. Moreover, more than half of intern nurses (62.5 %) had working experience in ICU.

II. Mean score percentage of intern nurses' perception of Resilience at work (RAW):

Table 2 clarified that intern nurses' perceived moderate mean percent score of overall resilience at work (49.06 ± 21.69) represented in its all dimensions in the following order; living authentically, finding one's calling, interacting cooperatively, managing stress, maintaining perspective, building networks, and staying healthy

where,(65.63±24.10,50.22±26.25,49.55±28.90,4

4.98±27.71, 44.94±20.14, 43.53±33.11, 41.29±30.33), respectively.

III: Mean score of intern nurse's perception of Resilience at Work (RAW) dimensions in relation to their demographic data and work -related characteristics (n=56)

This table (3a, b) clarified that, there were statistically significant differences between overall mean percent score of resilience at work and all demographic data and work -related characteristics except gender and marital status where (p value = 0.397, 0.632), respectively.

Discussion

Prevention of communication errors in Rapid COVID-19 spread poses a serious threat to human health and is having a significant influence on public health, global communications, and economic systems around the world. Nurses play an important role in healthcare teams that are tasked with controlling and preventing the spread of infectious diseases. Nurses also work on the front lines, providing direct care to COVID-19 affected people **(Shu-Ching et al., 2020)**. So, the current study aimed to investigate the relationship between demographic determinants of intern nurses and resilience at work.

The present study decelerated that intern nurses' perceived moderate level of perception of resilience at work**.** This result could be related to that they have many stressors in their work environment, such as work exhaustion, task disputes, poor time management, poor job-related interpersonal relationships, feeling powerless to provide quality care and struggling with competing demands. It could also be due to intern nurses were younger age, less experiences and work with patients during COVID 19 pandemic that triggering to sever stress.

This study congruent with Kannappan &Veigas (2021), Chow et al. (2020), Ozsaban et al. (2019) and Delgado et al. (2017), who clarified that moderate levels of nurses' resilience due to many nurses were emotionally burdened, which resulted in stress, fatigue, frustration, irritation, and lack of job satisfaction, recommended that resilience interventions to build nurses' resources significantly and have effects on nursing work emotional dissonance. On the other hand, Sam &Lee (2020) and Oliveira de Souza et al. (2020) revealed low levels of resilience among nursing students due to the rapid spread of the Covid 19 pandemic around the world. However, Chow et al. (2018) and Chamberlain et al. (2016) found high resilience scores among ICU nurses. Afshari et al., (2021) clarified that there were demographic determinants that could help to better understand effective and predictive factors to achieve higher resilience in stressful situations.

The results of the present study represented the availability of a significant difference in terms of resilience between intern nurses with different levels of work experience, age, region (who live in urban or rural areas), working units, working shifts and knowledge about resilience, where an increase in each of these factors would lead to an increased level of resilience. It can be pointed out that the increase in intern nurses' age, work experience, and having knowledge about resilience, their exposure to stress, as well as their personal abilities and skills to cope with critical and stressful situations develop. The development of such skills helps with the creation of various coping strategies, which can facilitate their adaptation and provide them with the possibility to act effectively and be more resiliently in such situations.

Furthermore, Afshari et al. (2021) carried out a study on nurses' resilience and reported that their resilience increased with the increase in age, experience, and education of nurses. In this line, Kakemam et al. (2019) also argued that the resilience score rises with an increase in the level of education and showed that the older medical staff, including nurses as well as intern nurses, had better mental health, and education level was a predictor of physical and mental health. Zhang et al. (2020) conducted a study on nurses working in critical care units during the COVID-19 pandemic. They revealed that there were highly statistically significant differences between resilience and

working units and shifts. It is highly necessary to provide them with the pertinent training that can increase their knowledge and skills in COVID-19 disaster management and coping. In contrast, the study done by Pannell et al. (2017), they found that age and nursing experience were not statistically significant in relation to their resilience at work.

Concerning, gender and marital status, the current study revealed that no statistically significant difference between intern nurses' gender, marital status and resilience at work, however female intern nurses exhibit higher level of resilience than males, which could be due to that 62.5% of intern nurses who participated in this study were female. The results of the study go in the same line with Dai et al. (2020) they stated that during the COVID19 pandemic that there was no significant difference between males and females and marital status among medical staff in terms of the level of resilience. Indeed, the female staff had higher levels of concern. While, Yu et al. (2019) found statistically significant link between gender, marital status, and resilience among nurses.

Conclusion

Based upon the findings of the current study, it could be concluded that the level of intern nurses' resilience was moderate. Demographic and work-related characteristics such as work experience, age, region who live urban or rural, working units, working shift and having knowledge about resilience had statistically significant affected on the resilience level and considered as the contributing determinants for resilience.

Recommendations

In line with the findings of the study, the following recommendations are made:

- Introducing resilience training in the nursing curricula to empower student nurses and equip them to handle the adverse working conditions they will experience in the nursing profession.
- Building resilience skills through attending workshops and in-service training by internship preceptors to strength resilience to be able to handle adverse working conditions in the critical care units.
- Encourage intern nurses to return to their usual work and rest schedule as much as possible to mitigate anguish and fear.
- Provide opportunities for intern nurses to participate in decision making and problem solving through attending units meeting and listen to their ideas and concern in order to promote positive team work, enhance feeling of responsibility, open communication, and establishing a positive work environment to improve resilience skills.
- Build trust in their intern nurses and treat them with fairness through developing assignment, time scheduling without bias and clarifying their responsibilities, expectations and priorities and provide them with needed support so they may be more resilient.

L*imitations* of study

The main limitation of this study is the possibility of generalizing the results is limited. Also, the hindering factor in this study could be, for example, the size and representativeness of the sample, the fact that the research was conducted during the COVID-19 epidemic. Therefore, it is recommended to repeat the study on an even larger sample.

Table (1): Distribution of Socio demographic data and work-related characteristics of intern nurses (n = 56)

Socio demographic data	No.	%
Age (years)		
<23 years	18	32.1
≤23 years	38	67.9
Mean ± SD	22.34 ± 1.04	
Gender		
Male	21	37.5
Female	35	62.5
Marital status		
Single	48	85.7
Married	8	14.3
Duration spent of internship year		
3-6 months	10	17.9
7-9 months	15	26.8
10-12 months	31	55.4
Working Shift #		
Morning	22	39.3
Evening	2	3.6
Long shift	35	62.5
Night shift	21	37.5
Working units		
Intensive Care Units	19	33.9
Critical Care Units	37	66.1
Do you have knowledge about Resilience at work?		
Yes	13	23.2
No	43	76.8
If yes select resources? # (n=13)		
Training program/ workshops	1	7.7
Self-study	11	84.6
Lectures	3	23.1
Region		
Urban areas	34	60.7
Rural areas	22	39.3
Do you have working experience in ICU?		
Yes	35	62.5
No	21	37.5

#: More than answer

Table (2): Mean score percentage of intern nurses' perception of Resilience at Work (n = 56)

Resilience at Work	Total mean score	Mean percent score %
Living authentically		
Min. – Max.	3.0 – 15.0	0.0 – 100.0
Mean ± SD.	10.89±2.89	65.63±24.10
Finding one's calling		
Min. – Max.	4.0 – 20.0	0.0 – 100.0
Mean ± SD.	12.04 ± 4.20	50.22±26.25
Maintaining perspective		
Min. – Max.	3.0 – 12.0	0.0 – 75.0
Mean ± SD.	8.39 ± 2.42	44.94±20.14
Managing stress		
Min. – Max.	4.0 – 20.0	0.0 – 100.0
Mean ± SD.	11.20 ± 4.43	44.98±27.71
Interacting cooperatively		
Min. – Max.	2.0 – 10.0	0.0 – 100.0
Mean ± SD.	5.96 ± 2.31	49.55±28.90
Staying healthy		
Min. – Max.	2.0 – 10.0	0.0 – 100.0
Mean ± SD.	5.30 ± 2.43	41.29±30.33
Building networks		
Min. – Max.	2.0 – 10.0	0.0 – 100.0
Mean ± SD.	5.48 ± 2.65	43.53±33.11
Overall Resilience at work		
Min. – Max.	20.0 – 91.0	0.0 - 88.75
Mean ± SD.	59.25±7.35	49.06 ± 21.69

Interpretation of mean: Low mean percent (0-33.2%), moderate mean percent (33.3%-66.6 %) and high mean percent (66.7 -100%).

Table (3 a): Mean score of intern nurse's perception of Resilience at Work (RAW) dimensions in relation to their demographic data and work -related characteristics (n=56)

	N	Resilience at Work							
		Living authentically	Finding one's calling	Maintaining perspective	Managing stress	Interacting cooperatively	Staying healthy	Building networks	Overall Resilience at Work
		Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.
Age									
Less than 23	**18**	9.22 ± 3.04	10.44 ± 4.23	7.83 ± 2.75	9.39 ± 3.87	4.72 ± 1.90	4.33 ± 2.00	4.17 ± 2.12	50.11 ± 16.27
More than 23	**38**	12.92 ± 8.69	12.79 ± 4.02	8.66 ± 2.23	12.05 ± 4.47	6.55 ± 2.27	5.76 ± 2.50	6.11 ± 2.67	64.84 ± 19.42
t (p)		**2.339*(0.023*)**	**2.004* (0.050*)**	**1.197(0.237)**	**2.170* (0.034*)**	**2.955* (0.005*)**	**2.124* (0.038*)**	**2.700* (0.009*)**	**2.785* (0.007*)**
Gender									
Male	**21**	10.20 ± 2.89	12.40 ± 4.52	8.20 ± 2.40	10.55 ± 4.82	5.85 ± 2.48	4.85 ± 2.56	5.05 ± 2.63	57.10 ± 18.56
Female	**35**	12.58 ± 9.08	11.83 ± 4.06	8.50 ± 2.46	11.56 ± 4.23	6.03 ± 2.25	5.56 ± 2.35	5.72 ± 2.67	61.78 ± 20.19
t (p)		**1.138(0.260)**	**0.480(0.633)**	**0.442(0.660)**	**0.811(0.421)**	**0.273(0.786)**	**1.043(0.301)**	**0.908(0.368)**	**0.854(0.397)**
Marital status									
Single	**48**	12.02 ± 8.01	12.08 ± 4.26	8.48 ± 2.50	11.19 ± 4.59	6.00 ± 2.39	5.27 ± 2.40	5.58 ± 2.69	60.63 ± 20.03
Married	**8**	10.00 ± 3.30	11.75 ± 4.06	7.88 ± 1.89	11.25 ± 3.58	5.75 ± 1.91	5.50 ± 2.73	4.88 ± 2.47	57.00 ± 17.53
t (p)		**0.699(0.487)**	**0.206(0.838)**	**0.651(0.518)**	**0.037(0.971)**	**0.281(0.780)**	**0.245(0.807)**	**0.697(0.489)**	**0.481(0.632)**
Duration spent of internship year									
3-6 months	**10**	9.00 ± 3.39	10.78 ± 4.87	7.44 ± 2.74	9.33 ± 2.45	4.89 ± 1.45	4.44 ± 1.74	4.56 ± 2.24	50.44 ± 14.10
7-9 months	**15**	10.40 ± 2.03	11.93 ± 2.81	8.47 ± 1.77	8.53 ± 3.31	4.87 ± 1.77	3.73 ± 2.12	3.80 ± 1.70	51.73 ± 11.26
10-12 months	**31**	13.13 ± 9.53	12.44 ± 4.58	8.63 ± 2.59	12.97 ± 4.55	6.78 ± 2.43	6.28 ± 2.29	6.53 ± 2.66	66.75 ± 21.58
F (p)		**1.394(0.257)**	**0.546(0.583)**	**0.842(0.436)**	**7.489*(0.001*)**	**5.411* (0.007*)**	**7.879* (0.001*)**	**7.528* (0.001*)**	**4.921* (0.011*)**
Shift who working									
Morning	**22**	9.77 ± 2.27	11.08 ± 3.75	7.92 ± 2.04	8.96 ± 3.48	4.58 ± 1.77	4.08 ± 1.87	3.88 ± 2.01	50.27 ± 12.12
Evening	**2**	6.25 ± 3.58	6.03 ± 2.25	4.11 ± 2.67	3.50 ± 2.73	5.66 ± 2.23	7.83 ± 4.06	4.88 ± 2.47	42.46 ± 5.01
Long shift	**35**	13.43 ± 9.83	12.87 ± 4.45	8.80 ± 2.67	13.13 ± 4.30	7.17 ± 2.05	6.37 ± 2.37	6.87 ± 2.36	68.63 ± 20.95
Night shift	**21**	9.08 ± 2.10	10.00 ± 3.00	6.85 ± 1.14	3.08 ± 0.76	3.00 ± 0.91	3.62 ± 0.65	6.85 ± 1.57	42.46 ± 5.01
t (p)		**1.856(0.069)**	**1.614(0.112)**	**1.365(0.178)**	**3.951*(<0.001*)**	**5.016*(<0.001*)**	**3.965*(<0.001*)**	**5.051*(<0.001*)**	**3.933*(<0.001*)**
Working units									
Critical Care Units	**37**	13.39 ± 9.67	12.58 ± 4.65	8.68 ± 2.71	13.29 ± 4.31	7.23 ± 2.04	6.35 ± 2.33	6.97 ± 2.39	68.48 ± 20.62
Intensive Care Units	**19**	10.33 ± 2.35	12.83 ± 3.59	9.33 ± 1.92	10.50 ± 3.09	5.25 ± 1.82	5.08 ± 2.07	4.25 ± 2.05	57.58 ± 12.60
F (p)		**1.816(0.173)**	**2.084(0.135)**	**4.229*(0.020*)**	**14.826*(<0.001*)**	**20.212*(<0.001*)**	**12.506*(<0.001*)**	**19.134*(<0.001*)**	**11.280*(<0.001*)**

t: Student t-test **F: F for ANOVA test** *: Statistically significant at $p \leq 0.05$

Table (3 b): Mean score of intern nurse's perception of Resilience at Work (RAW) dimensions in relation to their demographic data and work -related characteristics (n=56) "continue"

	N	Resilience at Work							
		Living authentically	Finding one's calling	Maintaining perspective	Managing stress	Interacting cooperatively	Staying healthy	Building networks	Overall Resilience at Work
		Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.	Mean ± SD.
Do you have knowledge about Resilience at Work									
Yes	**13**	12.69 ± 1.55	14.85 ± 3.21	9.46 ± 1.85	10.85 ± 5.49	6.69 ± 2.39	5.77 ± 2.86	5.46 ± 3.10	65.77 ± 16.65
No	**43**	11.44 ± 8.56	11.19 ± 4.12	8.07 ± 2.49	11.30 ± 4.13	5.74 ± 2.27	5.16 ± 2.30	5.49 ± 2.54	58.40 ± 20.25
t (p)		**2.170* (0.034*)**	**2.939*(0.005*)**	**1.859(0.068)**	**7.489*(0.001*)**	**1.304(0.198)**	**2.124* (0.038*)**	**0.032(0.975)**	**4.921* (0.011*)**
Region who live									
Urban area	**34**	13.30 ± 9.26	13.00 ± 3.77	8.79 ± 2.52	12.58 ± 4.79	6.64 ± 2.25	5.91 ± 2.55	6.39 ± 2.66	66.61 ± 20.18
Rural area	**22**	9.48 ± 2.83	10.65 ± 4.48	7.83 ± 2.19	9.22 ± 2.97	5.00 ± 2.09	4.43 ± 1.97	4.17 ± 2.06	50.78 ± 14.57
t (p)		**2.228*(0.032*)**	**2.123* (0.038*)**	**1.481(0.145)**	**3.234* (0.002*)**	**2.758* (0.008*)**	**2.325* (0.024*)**	**3.518* (0.001*)**	**3.217* (0.002*)**
Do you have working experience in ICU									
Yes	**35**	12.41 ± 8.83	12.90 ± 4.22	8.67 ± 2.42	11.82 ± 4.39	6.15 ± 2.42	5.54 ± 2.47	5.77 ± 2.65	63.26 ± 20.46
No	**21**	10.18 ± 2.48	10.06 ± 3.51	7.76 ± 2.36	9.76 ± 4.32	5.53 ± 2.03	4.76 ± 2.31	4.82 ± 2.60	52.88 ± 15.66
t (p)		**1.021(0.312)**	**2.427* (0.019*)**	**1.292(0.202)**	**1.619(0.111)**	**0.928(0.357)**	**1.099(0.277)**	**1.234(0.222)**	**2.069* (0.045*)**

t: Student t-test **F**: **F for ANOVA test** *: Statisti

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