

## Self- Reported of Professional Nurses Regarding Factors Affecting Their Performance at Minia Selected District Hospitals

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### Abstract

**Background:** The performance of professional nurses is crucial for ensuring quality healthcare delivery. Understanding the factors that influence nurses' performance is essential for healthcare organizations to optimize their workforce and improve patient outcomes. **Aim of the study:** The current study aimed to assess factor's affecting the performance of professional nurses at Minia Selected District Hospital. **Research design:** A descriptive comparative research design was used to achieve the aim of the study. **Setting:** The study was conducted at Samalout Hospital and Al –Fekria Hospital, in Minia City, Egypt. **Subjects:** All staff nurses who working in Samalout Hospital their total numbers 220 nurses& staff nurses in Al –Fekria Hospital their total numbers180 nurses. **Tools of data collection:** **Part (I):** questions to gather participant socio-demographic data, as age, sex, marital status, qualification, work experience& residence **Part II:** Factors affecting performance self-rating scale. **Part (III):** work engagement scale as a factor affecting performance. **Results:** The study revealed that 1st ranking factor affecting performance in both two hospitals are knowledge and skills followed by work space and environment, staff development is the third factor and ended by organizational mission and goals , the highest percentage of staff nurses had moderate effect regarding total work engagement factor .**Conclusion:** The present study findings concluded that there were factors negatively affect nurses performance as organizational mission and goals, remuneration ,benefits and recognition ,commitment and satisfaction, staffing and work schedule and leadership styles .**Recommendations:** The nurse managers make periodic orientation program for new nurses to know the goals ,policies ,objectives ,mission effective leadership styles, and regulation of the organization and provide equal distribution of work schedules .

**Key Words:** Professional nurses, Factors affecting nurses performance, Nurses performance.

### Introduction:

Nurses are the largest group of health team employees in the health care delivery system, the quality of health care is largely depended on the service provided by nurses (Farid et al., 2020). The nursing profession endures a great deal of job stress due to the need for high skills, concentration on work, strong team work and 24-hour care (Oh et al., 2017).

Professionalism in nursing plays an important role in meeting the goals of health systems. Nursing professionalism encompasses specialized and systematic body of knowledge, as well as guidelines and standards for behavioral conduct in the profession (Jang et al., 2020; Kim et al., 2020). The nursing profession is a commitment to compassion, caring and strong ethical values; continuous development of self and others; accountability and responsibility for insightful practice; demonstrating a spirit of collaboration and flexibility. Although nurses are encouraged to gain higher education and certification in a specialized area so as to give their nursing careers a proper dimension (Farhana et al., 2023).

The performance of a health organization plays a significant role not only in growth of the hospital but growth of an individual and in achieving hospital utmost goals and it depends on the knowledge, skills, and motivation of individuals (Awadh&Alyahya, 2020). Thus, it is important for managers to provide suitable working conditions to ensure that the performance of nurses meets the desired standards and improve the level of performance for first-line health workers

or those who are continuously in contact with the clients, community and patients at all levels of health care (Soilkki et al., 2020).

Moreover, competent, motivated and skilled health care providers are the cornerstone for better performance of health care organizations, played a vital role in achieving hospital utmost goals. Accordingly, nurses always perform better where positive work environment that marked by good moral and motivation results in high commitment, involvement, and adaptation of all factors that may affect nurses performance . (Sleem & Seada, 2017).

Furthermore, several factors affect the nurses' performance level. Job satisfaction, organizational commitment, level of education, experience, nurses' morale, work related stress & burnout, support from co-workers, supportive supervision & feedback, training on clinical tools, recognition, job expectations, work environment, motivation, incentives, knowledge, skills, promotion, remuneration and competency level are among the numerous factors affecting nurses' performance level. So that it is important to identify factors influencing the performance of professional nurses if the quality of health care delivery was to improved (Borda & Norman, 2019).

### Significance of the study

Nurses constitute the largest human resource element in healthcare organizations and their performances have a direct effect on health care productivity. Professional nurses play a vital role in the provision of health care globally. The

performance of professional nurses' links closely to the quality of care provision within the health care organizations. It was important to identify factors influencing the performance of professional nurses if the quality of health care was to improved (Girma et al., 2017; Abu Auf et al., 2019).

There were previous studies which study the factors that affect nurses' performance such (Awases et al., 2013) that conducted in Namibia that found deficiencies in managing human resources, implementing a performance appraisal system, staff and skills development and maintain a conducive work environment. Another study on "Nursing Staff Perception Regarding Factor's Influencing Their Performance in Minia General Hospital" by Atta et al., (2019) which found the majority of nursing staff at Minia general hospital had moderate level of perception about the whole factors influence their performance. More than half of nursing staff perceived that wages, job design, training and development opportunities have highly influence on their performance. The majority of nurses perceived that management styles had low level of influence on their performance.

Through the researcher work in Deirmwas Specialized Hospital the researcher noted that nurses feel exhausted from the increased work load, work related stress, low support from supervisor and feedback, low recognition comparing to their work, no motivation even verbal motivation, low remuneration comparing to other organizations, low work engagement.

#### Aim of the study:

The current study aimed to assess factor's affecting the performance of professional nurses at Minia Selected District Hospital.

#### Research questions:

- What are the factors that affect the performance of professional nurses?
- Is there a relation between factors that affect performance of professional nurses and socio – demographic characteristics?

#### Subjects and methods:

**Research Design:** A descriptive comparative research design was used to achieve the aim of the current study.

**Research Setting:** The study conducted at Samalout Specialized Hospitals and Al –fekria Central Hospital, in Minia City, Egypt.

**Subjects:** All staff nurses who working in Samalout Specialized Hospital their total numbers 220 nurses& Staff nurses who work in Al –Fekria Central Hospital their total numbers 180 nurses.

#### Data collection tool:

Data collected through the utilization of self-rating scale; **The tool consist of three parts:**

- **Part (1)** questions to gather participant socio-demographic characteristics, as age, gender, marital status, qualification, work experience& residence.
- **Part (2) Factors affecting performance self-rating scale:** to assess the factors that affecting

the performance of the professional nurses, and were adapted and modified from validated questionnaires used in a study conducted by (Tefaye et al., 2015). **It consists of nine subscale** included 67 items divided as follow: 1<sup>st</sup> namely knowledge and skills (14 items), 2<sup>nd</sup> performance appraisals and utilization (7 items), 3<sup>rd</sup> remuneration, benefit and recognition (6 items), 4<sup>th</sup> staffing and work schedule (7 items), 5<sup>th</sup> staff development (8 items), 6<sup>th</sup> work space and environment (8 items), 7<sup>th</sup> organizational mission and goal( 4 items), 8<sup>th</sup> commitment and satisfaction ( 6 items), 9<sup>th</sup> leadership and management style (7 items ) which are self- rating five point likert scale( 1=very poor ,2= poor ,3=good ,4=very good , 5= excellent ). The high score means that factor positively affect nurses' performance, but low score means that factor negatively affect performance.

**The scoring system** will range from (67 to 335), and it divided into two levels as follow: negative effect (from 67 to 201), and positive effect (202 to 335).

- **Part (3) :** Work Engagement factor Scale: It was developed by (Schaufeli et al., 2013) to assess nurse work engagement. It contained 17 items were classified into three subscales as following: vigor (6 items), dedication (5 items), and absorption (6 items). The Likert scale ranged as (never=0, few times per month =1, and every day =2). According to how often the participants experienced the feeling described. The scoring system will range from (0 to 34), and it divided into three levels as follow: low work engagement (from 0 to 11), moderate work engagement (from 12 to 23), and high work engagement (from 24 to 34).

Validity and Reliability of Tools:

**Validity:** The tools were submitted to a jury committee of five experts in the field of Nursing Administration and Education (the jury was composed of one professor from Faculty of Nursing at Minia University , three assistant professors from Faculty of Nursing at Minia University and one professor from Faculty of Nursing at Assuit University ); each of the expert panel was asked to examine the instruments for its content validity, coverage, clarity, wording, length, format, applicability, and overall appearance. Modification was done.

#### Reliability:

Reliability of the tool was performed to confirm the consistency of tools. The internal consistency was measured to identify the extent to which the items of the tool measured, what it was intended to measure. Cronbach alpha test for Factors affecting performance 0.95 and Work engagement 0.92.

**Pilot Study:**

The pilot study was carried out before starting data collection on 10% of nurses (22 nurses) from Samalout Specialized Hospital & (18 nurses) from Al -fekria Central Hospital. The pilot study was included in the total number of the study subjects. The pilot study were conducted to test the clarity, comprehensiveness, accessibility, and applicability of the tool. In addition the pilot study helped the researcher to estimate time required for filling the tool and it was about 15-20 minutes.

**Data Collection Procedure:**

An official letter was granted from the administrative authorities, permission to conduct the study was obtained from director of the Samalout Specialized Hospital & Al – Fekria Central Hospital and head of each department, written

informed consent taken from each participant after explained the aim of this study. The tools were distributed to all the staff nurses after explaining the process of data collection and the sheets were given individually to all nurses and they were given a period of (15-20) Minutes time to respond to it. The data was collected over a period of (5) months starting from the beginning of October 2022 to the end of February 2023.

**Ethical Consideration:**

An official letter was granted from the Research Ethics Committee of the Faculty of Nursing, Minia University. Before collecting of the study data explaining the nature and purpose of the study. Study subject has the right to refuse to participate or withdraw from the study without any rational at any time, confidentiality anonymity and privacy were assured.

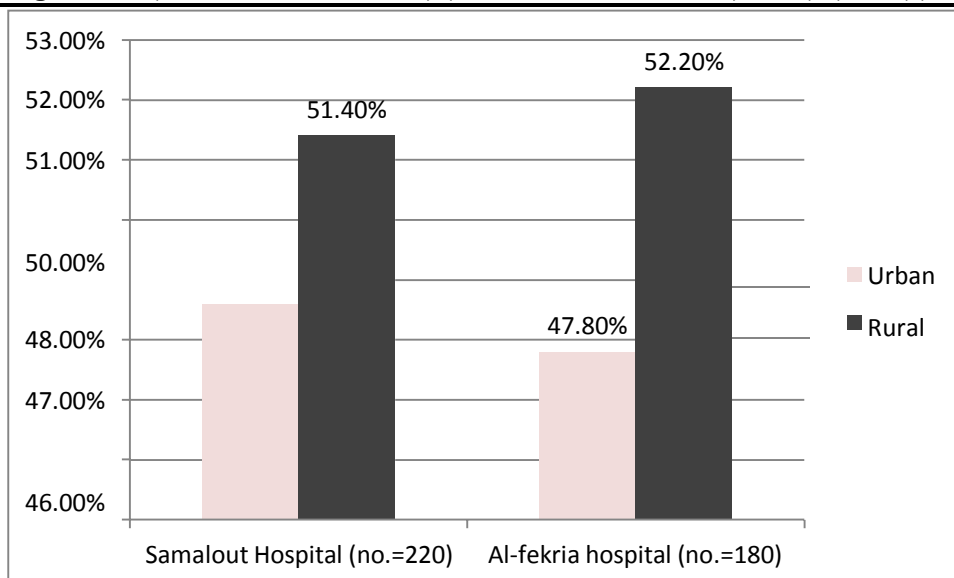
**Results:**

**Table (1): Percentage distribution of the nurse's socio-demographic data at Samalout Specialized Hospital (no. = 220) and Al – fekria Central Hospital (no. = 180).**

Socio-demographic data	Samalout Specialized Hospital (no.=220)		Al –fekria CentralHospital (no.= 180 ).	
	no.	%	no.	%
<b>Age</b>				
● ≤ 21-30yrs	140	63.6	128	71.1
● 31-40yrs	59	26.8	42	23.3
● 41-50yrs	20	9.1	10	5.6
● >50	1	0.5	0	0
<b>Mean ± SD</b>	29.57±2.67		30.48±4.54	
<b>Gender</b>				
● Male	38	17.3	40	22.2
● Female	182	82.7	140	77.8
<b>Marital status</b>				
● Single	52	23.6	52	28.9
● Married	159	72.3	119	66.1
● Divorced	6	2.7	4	2.2
● Widow	3	1.4	5	2.8
<b>Qualification</b>				
●Secondary school nursing diploma	68	30.9	37	20.6
●Technical institute ofnursing	106	48.2	108	60
●Bachelor of nursing science	46	20.9	35	19.4
<b>work experience</b>				
●≤ 2-5 yrs.	94	42.7	99	55
●6-10yrs.	51	23.2	36	20
●11-15 yrs.	28	12.7	26	14.4
●16-20 yrs.	45	20.5	19	10.6
●>20 yrs.	2	0.9	0	0
<b>Mean ± SD</b>	2.14±1.20		1.81±1.04	

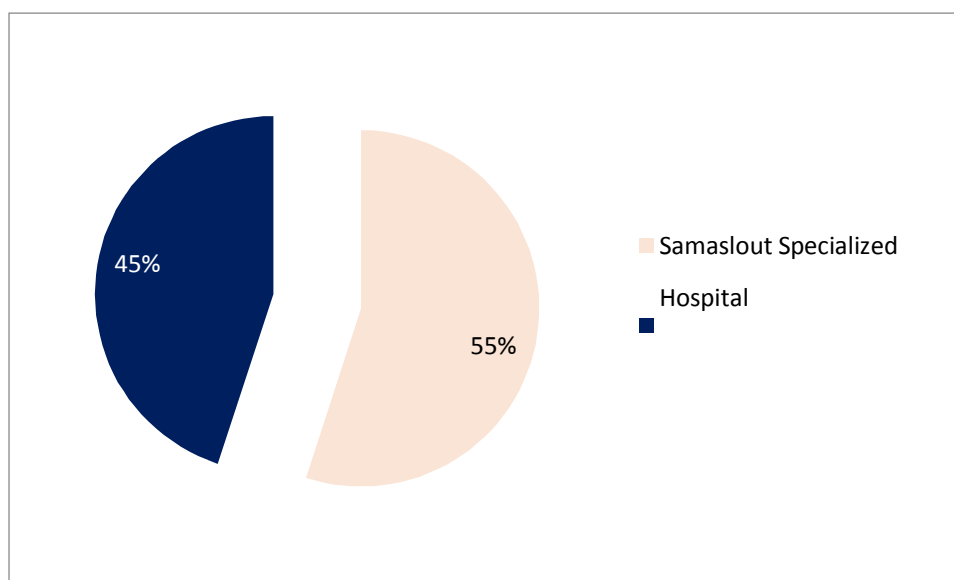
**Table (1): -** - Illustrates that less than two thirds of nurses in Samalout Specialized Hospital with percentage (63.6%) age group ranged from (≤ 21-30) years old with Mean ± SD score (29.57±2.67). It also clarifies that the majority of them are females with percentage (82.7 %), in addition to less than three quarters of them are married with percentage 72.3% and less than half of them their qualification is technical institute with percentage 48.2%. Also, it demonstrates that less than half of them have( ≤ 2-5 )years of experience with percentage 42.7 % with **Mean ± SD** score (2.14±1.20).

Also illustrates that less than three quarters of nurses in Al-fekria Central Hospital age group ranged from (≤ 21-30) years old with percentage (71.1%) with Mean ± SD score (30.48±4.54). It indicates that more than three quarters of them are females with percentage (77.8 %), in addition to nearly two thirds of them are married with percentage(66.1%) and more than half of them their level of qualification are technical institute with percentage (60 %). Also, it presents that more than half of them have(≤ 2-5) years of experience with percentage (55 %) with Mean ± SD score (1.81±1.04)



**Figure (1):** Percentage distribution of the nurse’s residences at Samalout Specialized Hospital (no. = 220) and Al –fekria Central Hospital (no. = 180).

Figure (1): Demonstrates that more than half (51.40 %) of nurses in Samalout Specialized Hospital live in Rural areas, while less than half (48.60%) of them live in Urban areas. Also demonstrates that more than half (52.20%) of nurses in Al- fekria central Hospital live in Rural areas, while less than half (47.80 %) of them live in Urban areas.



**Figure (2):** Percentage distribution of the nurse’s at Samalout specialized Hospitals (no. = 220) and Al –fekria Central Hospital (no. = 180).

Figure (2): illustrates that (55%) of nurses are from Samalout Specialized Hospital while (45%) of them are from Al-fekria Central Hospital

**Table (2):** Mean score of nurses’ regarding factors affecting performance self-rating at Samalout Specialized Hospital (no=220) and Al-Fekria Central Hospital (no. =180)

Factors affecting nurses performance	Samalout Specialized Hospital					Al-Fekria Central Hospital				
	Mean + SD	Minimum	Maximum	Range	Ranking	Mean + SD	Minimum	Maximum	Range	Ranking
1-Knowledge and skills	48.75+11.7	20	70	50	1	47.42+11.9	18	70	52	1
2-Performance appraisal and utilization	21.65+6.24	7	33	26	4	21.12+6.28	8	35	27	4
3- Remuneration, benefit and recognition	13.35+5.95	6	28	22	8	15.20+5.24	6	30	24	8
4-Staffing and work schedule	18.82+6.24	7	33	26	6	18.50+5.24	7	35	28	6
5-Staff development	23.36+7.29	8	40	32	3	23.00+6.37	8	40	32	3
6-Work space and environment	25.73+8.03	8	40	32	2	23.38+6.32	10	37	27	2

Factors affecting nurses performance	Samalout Specialized Hospital					Al-Fekria Central Hospital				
	Mean + SD	Minimum	Maximum	Range	Ranking	Mean + SD	Minimum	Maximum	Range	Ranking
7-Organisational mission and goal	12.15+3.98	4	20	26	9	11.54+3.63	4	20	16	9
8-Commitment and satisfaction	17.96+5.22	6	30	24	7	17.80+4.85	6	30	24	7
9-Leadership and management style	20.76+6.35	7	35	28	5	18.58+5.40	7	32	24	5

It is evident from Table (2) that the highest mean score among the factors affecting performance in two hospitals are knowledge and skills followed by work space and environment, staff development is the third factor and ended by organizational mission and goals (47.42+11.9, 23.38+6.32, 23.00+6.37 and 11.54+3.63)

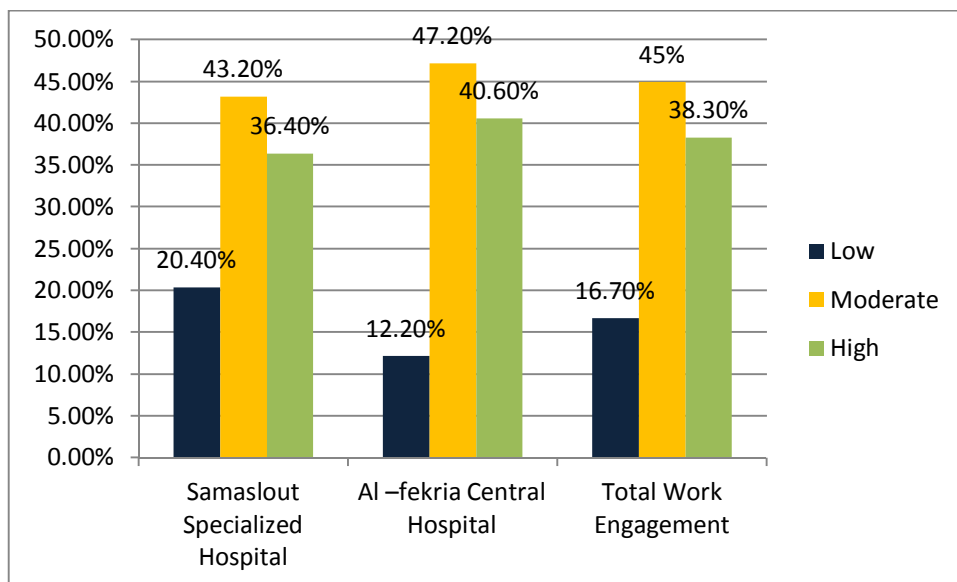


Figure (3): Percentage distribution of nurses' total work engagement factor at Samalout specialized Hospital (no. = 220) and Al-fekria Central Hospital (no. = 180).

Figure (3) : shows that less than half of Samalout Specialized Hospital nurses have moderate effect toward total work engagement factor with percentage (43.20 %), while more than one third of them have high effect with percentage (36.40%) and (20.40%) of them have low effect. Also shows that less than half of Al-fekria central Hospital nurses have moderate effect toward total work engagement factor with percentage (47.20%), while less than half of them have high effect with percentage (40.60%) and (12.20%) of them have low effect. The total work engagement factor is less than half of nurses have moderate effect with percentage (45 %), while more than one third of them have high effect with percentage (38.30%) and (16.70 %) of them have low effect.

Table (3): The relation between total nurse's factor affecting performance and their socio-demographic data at Samalout Specialized Hospital (no. =220) and Al-Fekria Central Hospital (no.=180).

Socio-demographic data	Samalout Hospital	AL-Fekria Hospital
	Mean + SD	Mean + SD
<b>Age</b>		
• ≤ 21-30yrs	199.2+48.25	194.8+38.9
• 31-40yrs	199.1+46.52	196.7+52.8
• 41-50yrs	234.7+55.52	218.1+68.7
• >50	229.0+0	
<b>Anova test (P-value)</b>	3.349 (.020*)	1.27(.283) NS
<b>Gender</b>		
• Male	167.2+50.9	171.8+28.6
• Female	209.9+45.6	203.6+45.7
<b>T test (P-value)</b>	5.14(.000**)	4.17(.000**)
<b>Marital status</b>		
• Single	193.6+45.9	37.74+5.23
• Married	203.8+50.2	44.97+4.12
• Divorced	218.3+32.5	48.99+24.4
• Widow	259.3+50.1	202.2+93.9
<b>Anova test (P-value)</b>	2.17(.092) NS	.123(.946) NS
<b>Qualification</b>		
• Secondary school nursing diploma	204.6+52.71	203.8+57.3
• Technical institute of nursing	202.8+48.49	194.2+40.1
• Bachelor of nursing science	46.50+6.85	195.9+42.5..
<b>Anova test (P-value)</b>	.198(.821) NS	.641(.528) NS
<b>Years of experience</b>		

Socio-demographic data	Samalout Hospital	AL-Fekria Hospital
	Mean ± SD	Mean ± SD
• ≤ 2-5 yrs.	197.5+45.2	197.3+41.32
• 6-10yrs.	197.9+57.3	189.0+43.16
• 11-15 yrs.	189.8+43.4	191.3+46.72
• 16-20 yrs.	225.4+46.5	214.0+57.1
• >20 yrs.	227.0+2.82	1.45(.227) NS
<b>Anova test (P-value)</b>	3.43(.010*)	
<b>Residence</b>		
• Urban	201.9+52.2	191.4+48.9
• Rural	203.1+46.4	201.2+39.7
<b>T test (P-value)</b>	.176(.861) NS	

\* p<0.05 (significant) T-test: P – value based on independent sample t-test, F-test P – Value based on compares mean, NS= No Significant difference \* statistically significant difference

**Table (3):** reveals that there is statistical significance relation between nurse's factors affecting their performance (age, gender as well as years of experience), while there is no statistical significance relation between nurses' factors affecting their performance (marital status, qualification as well as residence) in **Samalout Specialized Hospital**.

**Also:** reveals that there is no statistical significance relation between nurse's factors affecting their performance and all socio demographic characteristics except (gender) in **Al-fekria Central Hospital**.

**Table (4):** The relation between total nurse’s work engagement factor and their socio-demographic data at Samalout Specialized Hospital (no. = 220) and Al-fekria Central Hospital (no.=180).

Socio-demographic data	Samalout Specialized Hospital	Al-fekria Central Hospital
	Mean ± SD	Mean ± SD
<b>Age</b>		
• ≤ 21-30yrs	18.41+8.32	20.69+8.26
• 31-40yrs	19.86+8.09	21.42+8.25
• 41-50yrs	24.85+7.09	20.50+9.25
• >50	30.00+0	.133(.876) NS
<b>Anova test (P-value)</b>	4.278 (.006**)	
<b>Gender</b>		
• Male	14.21+8.37	18.9+8.97
• Female	20.53+7.93	21.3+8.01
<b>T test (P-value)</b>	4.42(.000**)	
<b>Marital status</b>		
• Single	<b>17.90+9.20</b>	<b>22.28+7.44</b>
• Married	<b>19.64+8.02</b>	<b>20.57+8.49</b>
• Divorced	<b>22.33+7.22</b>	<b>15.2+10.2</b>
• Widow	<b>29.66+5.77</b>	<b>17.00+8.48</b>
<b>Anova test (P-value)</b>	2.40(.068) NS	
<b>Qualification</b>		
• Secondary school nursing diploma	20.70+8.42	20.51+7.89
• Technical institute of nursing	19.24+8.33	20.46+8.18
• Bachelor of nursing science	18.02+8.16	22.42+8.99
<b>Anova test (P-value)</b>	1.48(.229) NS	
<b>Years of experience</b>		
• ≤ 2-5 yrs.	18.14+8.14	21.8+8.28
• 6-10yrs.	18.39+8.67	18.6+8.81
• 11-15 yrs.	17.57+7.82	19.8+7.34
• 16-20 yrs.	23.97+6.97	21.5+8.04
• >20 yrs.	31.00+1.41	21.5+8.04
<b>Anova test (P-value)</b>	5.88(.000**)	
<b>Residence</b>		
• Urban	20.11+9.08	20.1+8.89
• Rural	18.80+7.56	21.6+7.63
<b>T test (P-value)</b>	1.16(.246) NS	

**Table (4):** Reveals that there is statistical significance relation between nurse’s work engagement factor affecting their performance (age, gender as well as years of experience), while there is no statistical significance relation between nurse’s work engagement factor affecting their performance (marital status, qualification as well as residence) in **Samalout Specialized Hospital**.

**Also:** Reveals that there is no statistical significance relation between nurse’s work engagement factor affecting their performance and all socio demographic data in **Al-fekria central hospital**.

## Discussion

Current healthcare practice is changing and developing rapidly, requiring the necessity for highly qualified nurses to provide patient care. This care requires latest knowledge as well as skills, proficient competence, critical management skills, and the capacity to deliver appropriate and safe moral and legitimate services. As a result, attaining professionalism is a key objective for nurses. Professionalism is linked to the overall knowledge, attitudes, as well as behaviors of nurses that make up proficient nursing practice. Professionalism is crucial in nursing as it assists nurses perform well as a team, confirms that they deliver the top standards of care to their patients, and fosters their professional growth (Ahmed, 2023).

Job performance is considered as the effectiveness of the nurse in carrying out his/her roles and responsibilities related to direct patient care. Work performance can be divided into two distinct categories: task performance and contextual performance. Task performance is defined as "behaviors that contribute directly to the organization's technical core and includes those activities that are typically recognized as part of a worker's job". Contextual performance refers to "those behaviors that maintain the broader social environment in which the technical core must function". Task performance behaviors are delineated according to role requirements and should be identified through analysis of the job (Ibrahim, 2019; Kakemam *et al.*, 2022).

There are several factors affect the nurses' performance level. Job satisfaction, organizational commitment, level of education, experience, nurses' morale, work-related stress & burnout, support from co-workers, supportive supervision & feedback, training on clinical tools, recognition, job expectations, work environment, motivation, incentives, knowledge, skills, promotion, remuneration and competency level are among the numerous factors affecting nurses' performance level (Atta *et al.*, 2019). So, the current study aimed to assess factor's affecting the performance of professional nurses at Minia Selected District Hospital.

**As regard to demographic data among the studied subject**, the study findings showed that nearly two thirds of nurses in Samalout Specialized Hospital and more than two /thirds in Al-Fekria Central Hospital are in age group ranged between ( $\leq 21-30$ ) years. with Mean  $\pm$  SD score ( $29.57 \pm 2.67$ ) and ( $30.48 \pm 4.54$ ) respectively. Also this study found that the majority of the staff nurses were female in both hospitals.

**Concerning distribution of staff nurse regarding their marital status**, the current study finding showed that less than three/quarter of staff nurses were married in Samalout Specialized Hospitals and nearly two / third in Al-fekria Central Hospital were married. **As regards educational level of qualification**, findings of the present study showed that less than half of nurses at Samalout Specialized Hospital and more than half of nurses in Al-fekria Central Hospital had a technical institute degree of nursing.

**Moreover as related to years of experience**, findings of the current study showed that, more than half in Al-fekria Central Hospital and less than half of the current study subject in Samalout Specialized Hospital had ( $\leq 2-5$ ) years of experience. **Additionally** more than half of the study subject resides in rural areas in both hospitals.

**The current study findings in both hospitals** revealed that the highest mean score among the factors affecting performance in both two hospitals are knowledge and skills followed by work space and environment, staff

development is the third factor and ended by organizational mission and goal .The current study finding is agreed with study of Atta *et al.*, (2019) in the 2nd ranking factor who reported that the nursing staff perceived the most factors influencing on their performance according to their perception was "organization policies(1), work environment and supplies(2), reward effect(3), management style(4), work relation(5), job design influence(6) and training and development opportunities(7) respectively.

This result is contradicted with (Abdelmaksoud, 2017) who mentioned that 1st rank is Hospital policies, training and development opportunities are the 2nd ranking factor affecting nurses' performance according to mean percent of their perception.

**Concerning Percentage distribution of nurses according to total work engagement factor and its dimensions**, the current study findings showed that less than half staff nurses had moderate effect regarding total work engagement. This may be due to strong organizational support preserves their nurses by making a safe environment and suitable for work, helping them in solving of their problems and making decisions. So, nurses feel with dedication, high emotion and high feeling of enthusiastic and pride toward their job.

The study finding confirmed by (Kindipan, 2017) who found that new graduate nurses experienced moderate effect regarding total work engagement . on the other side this result was in contradiction with (Badawy *et al.*, 2022) who stated that more than half of staff nurses had low perception regarding total work engagement.

**Related to the relation between total nurse's factor affecting performance and their socio-demographic data**, the current study findings showed that there were statistical significance relations between nurses' factors affecting their performance and (age, gender as well as years of experience) in Samalout Specialized Hospital. In addition to the current study findings revealed that there were no statistical significance relations between nurses' factors affecting their performance and all socio demographic characteristics except gender at Al –fekria Central Hospital.

The current study finding was compatible with the study conducted by Atta *et al.*, (2019) who found that there were highly positive statistically significant relation between age and year of experience from personal data variable with nurses' factors affecting their performance, and highly negative statistically significant relation between nurses' factors affecting their performance with variables of qualification and department.

**Regarding the relation between total nurse's work engagement factor and their socio-demographic data**, the current study revealed that there was a statistical significance relation between nurses' work engagement factor affecting their performance (age, gender as well as years of experience) at Samalout Specialized Hospital. While at Al –fekria Central Hospital revealed that there was no a statistical significance relation between nurses' work engagement factor affecting their performance and all socio-demographic characteristics.

The current study findings were agreed to the study of ( Hegazy *et al.*, 2022) who reported there was highly significant statistical positive correlation between nurses' personal data and their level of work engagement at Menoufia University hospital. Also, the current study was in an agreement with (Zhu *et al.*, 2023) who found there was a

statistically significant difference between nurses socio demographic data and total work engagement.

## Conclusion

**In light of the study findings, it can be concluded that,**

The current study findings revealed that there were statistical significance relations between nurses' factors affecting their performance and (age, gender as well as years of experience) in Samalout Specialized Hospital. In addition to the current study findings revealed that there was no statistical significance relation between nurses' factors affecting their performance and all socio demographic data except gender at Al –fekria Central hospital.

Moreover, the current study revealed that there were statistical significance relations between nurses' work engagement factor affecting their performance and (age, gender as well as years of experience). Finally the current study concluded that the nursing staff ranking their factors influencing on their performance as follow; knowledge and skills factors followed by work space and environment, staff development is the third and ended by organizational mission and goals.

## Recommendations:

**Based on the results of the present study, the researcher came up with the following recommendations:**

- The hospital managers should improve the work environment to be suitable and comfortable to help the staff to do their work easier.
- The nurse managers should make periodic orientation program for new nurses to know the goals, policies, objectives, mission and regulation of the organization and provide equal distribution of work schedules.
- The nurse managers should evaluate the training needs of staff nurses periodically.
- The nurse manger enhance supervisors' leadership skills to ensure that supervisors embrace positive leadership styles

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