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Procrastination and its Relation with Self-Efficacy and Clinical Decision Making among Staff Nurses

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Abstract
Aim of the study was to investigate procrastination and its relation with self-efficacy and clinical decision making among staff nurses. **Subject and method**: A descriptive correlational design was used to fulfill the aim of this study. **Setting**: This study was conducted at (Minia University; Gynecology, Obstetric and Pediatric University; and Minia Psychiatric Health and Addiction Hospitals)**. Subject**: the present study included all staff nurses at previous 3 Hospitals (n= 386)**. Tools of data collection**: Personal data sheet and three scales were used. 1st scale, General procrastination scales 2nd scale, General Self-Efficacy Sub-Scale and 3rd scale, Clinical Decision Making Nursing Scale. **Results:** the highest level of procrastination (52.8%) was staff nurses who working at Minia University Hospital comparing with staff nurses who working at Gynecology, Obstetric and Pediatric University and Minia Psychiatric Health and Addiction Hospitals as (37.2% & 19.6%) respectively. **Conclusion:** there were a negative correlation between staff nurses' procrastination and self-efficacy. Also, there are a negative correlation between staff nurses' procrastination and clinical decision making. While, there are a positive correlation between clinical decision making and self-efficacy. **Recommendation:** further study to investigate factors that affect staff nurses procrastination, self-efficacy, and clinical decision making

Keywords: Procrastination, Self-efficacy, Clinical Decision Making & Staff Nurses.

Introduction
Considering the constant diversity and changes in today's world, knowledge of time alone is insufficient for the success of any job. However, good use of time is considered to be one of the most significant factors in job success **(Khoshouei, 2017).** According to **Paulsen, (2015)** the proper use of time and doing things on time is an individual as well as an organizational necessity, and procrastination or unjustified delay can have unfavorable consequences, particularly in professions dealing with human life, this problem (procrastination) is more important. Nursing is one of these professions where, at the right moment, proper intervention leads significantly to quality. One of the most common nursing problems is nurse procrastination due to heavy workloads and constantly rotating shifts **(Farzi et al., 2015).**
Procrastination is generally described as a dysfunctional tendency in which, despite anticipated negative consequences, people needlessly delay a task or an action, with this behaviour usually characterized as a failure to self-regulate towards a desired goal (**Paulsen, 2015).** Accordingly **Kim & Sue, (2015)** and **Gareau et al., (2019)** the results that the person has consistently found higher levels of procrastination lead to poor performance and low level of self-efficacy, as well as lower levels of emotional well-being**.**
Undoubtedly, the human capital is the most essential precious components of any agency. Nurses are the most important and greatest human resource in healthcare organizations, so nurses play a very important role in improving the social welfare of patients and clients. Furthermore, without providing trained nurses with high self-efficacy, no healthcare organizations can achieve any success **(Dehghani, et al., 2020).**
Self-efficacy refers to self-confidence in particular areas of life such as education, work, and relationships, to perform well and to accomplish. Self-efficacy affects self-esteem because faith in the ability to perform well in areas that are crucial to achieving valued goals significantly influences how one feels about oneself overall**.** Self-efficacy is a sort of personality factor that has an effect on coping with environmental pressures **(Maddux, & Kleiman, 2017).** In the same sense **Mahdizadeh, et al., (2016)** stated that the social cognitive theory of Bandura, it is also an essential and useful term. Cognitive mechanisms of human actions play a decisive role in this theory. In addition, **Holder (2020)** shows that self-efficacy not only impacts the care capacity of nurses, but also reduces many clinical mistakes in clinical practice.
In this regard **Ilmu et al., (2018),** self-efficacy increases the expectations of workers about work relationships and job satisfaction. This condition

suggests that the person should behave for the achievement of long-term results and communicate with individuals in their work environment. They added that people with elevated self-efficacy will increase high self-confidence in the achievement of the mission. In addition, they can conquer the hurdles in their assignments. This evidence indicates that the greater the self-efficacy, the more the person is able to complete the assignment and make decisions.

Today, when delivering health care, nurses are constantly facing dynamic challenges, which have asked them to build and refine their skills as critical thinking and decision-making for problem-solving. These talents are important qualities for nurses, and also support them in the delivery of health care and strengthen the expertise of nurses. The rapid growth of nursing practice further reinforces the autonomy of nurses in the delivery of health care and makes them more accountable for determining the impact of their interventions on patient care (**Ludin, 2018**).

Clinical decision-making (CDM) defines practice as the most effective, beneficial and suitable choice among the solutions. The form of treatment that comes after the impact of the disease on the patient and family is included in CDM in nursing. It also means assessing the patient and family's mental, socio-cultural and economic shortcomings and then using the skills required to deal with those shortcomings. In summary, CDM in nursing means the practice of technical experience and skills in nursing **(Edeer, & Sarıkaya, 2015)**

In the same context **Abdelrahman & Thabet, (2018)** clinical decision-making has a significant and vital role in the standard of treatment rendered by nurses to patients. Poor decision-making can sequentially lead to inverse effects as well as negative patient results. It is estimated that when nurses make better choices, up to 65 per cent of the inverse impact may be reduced and forbidden. In addition, **Gizaw, et al., (2018)** postulated that, there are numerous problems that help nurses (CDM), nursing care, and their ability to develop awareness and search for information. **Firstly,** patient status awareness provides guidelines for recognizing the patient's condition; information on deficits would limit the capacity of the nurses to make decisions correctly. **Second**, nurses may have adequate information, but they have trouble applying the research information and improving decision-making because of the poor thinking process. **Third**, the experience of nurses will impact their ability to make choices.

Also, CDM is one of the most important and essential aspects of nursing practice. As nurses have the capacity to make professional clinical decisions, it results in the dismissal of drug mistakes and patient death, and can improve the ability of nurses to identify a declining patient status and enhance patient safety **(Johansen &O'Brien, 2016).** In highly stressful environments, self-efficacy not only impacts human lives, but it also allows one to gain confidence and visualise daunting life goals. It also affects private and professional CDM over the course of one's life **(Gizaw et al., 2018).**

Significance of the study

Procrastination is a behavioural style that represents self-regulatory failure, which causes delays leading to poor performance and negative results in the beginning or completion of tasks. In addition, it is related to higher anxiety, depression, perceived stress and has a detrimental impact on the well-being of people **(Ferrari, 2018).** Nurses deal with patients and more frequently experience the problems caused by health-related procrastination in which their self-efficacy and decision-making are further adversely affected.

In a research study conducted by **Abd Elhamed, et al., (2019)** studied relationship between nurses' self-efficacy and job performance, the study results revealed that the majority of the nurses had low self-efficacy and more than half of them had inadequate job performance (82% & 59%) respectively.

Another study by **Zaki ,(2016)** investigate job stress and self-efficacy among psychiatric nursing working in Mental Health Hospitals at Cairo, Egypt, the main results showed that psychiatric nurses suffering from a different aspect of stress regarding psychiatric nurses ability, the attitude of patient, attitude to nursing and communication with patients and their families. Also, the result indicated that mostly of psychiatric nurses were have low self- efficacy.

In addition, procrastination is a relatively new but important issue in the field of health. Most procrastination studies deal with academic procrastination, while no study is available on the issue of procrastination among nurses to the best of our knowledge. These three interrelated variables were also not linked together in prior studies. Therefore, the researchers introducing this study to investigate procrastination and its relation with self-efficacy and clinical decision making among staff nurses because it is vital to nursing practice.

Aim of the Study

The aim of the current study was to investigate procrastination and its relation with self-efficacy and clinical decision making among staff nurses.

Research Questions

1. Is there is a difference between Minia university, Gynecology Obstetric and Pediatric University and Minia Psychiatric Mental Health and Addiction Hospitals regarding to procrastination, self-efficacy and clinical decision making among staff nurses?

2. Is there is a relation among procrastination, self-efficacy, and clinical decision making among staff nurses?

Subjects & Method

Research Design

A descriptive correlational design was used to fulfill the aim of this study

Setting

This study was conducted at three Hospitals. Which were included (Minia University; Gynecology, Obstetric and Pediatric University; and Minia Psychiatric Mental Health and Addiction Hospitals)

Sample

The subject of the present study included all staff nurses at selected Hospitals. Their total numbers were 386 nurses and are classify as follows:

Department (Hospitals)	No
Minia University Hospital	193
Neurosurgery	24
ICU	23
Operating room (OR)	17
Surgical department	29
Medical department	21
Orthopedic department	20
Ophthalmology	16
Neurology	13
Burn department	18
ENT department	12
Gynecology, Obstetric and Pediatric University Hospital	137
Emergency Delivery Room(EDR)	25
NICU	27
Dialysis unit	30
Obstetric department	28
Pediatric department	27
Minia Psychiatric Mental Health and Addiction Hospital	56
Economic mental illness department	13
Female mental illness department	12
Male mental illness department	13
ECT	4
Addiction department	14
Total	**386**

Data Collection Tools:

Three scales and one tool were utilized to collect pertinent data for this current study.

Tool 1: Personal data sheet: designed by the researchers. It was used to collect data about the personal data characteristics of the study participants. It included items related to age, gender, educational qualification, years of experience, and hospital name.

Scale 1: General procrastination scale (GPS)

This scale was developed by **Lay (1986**). It consisted of (20-items), with score using 5-point likert scale which ranges from (1= Extremely Uncharacteristic, 2= Moderately Uncharacteristic, 3=Neutral, 4=Moderately characteristic and 5= Extremely characteristics) for positive statements the score were be reversed in the negative statements. The negative statements are (3, 4,6,8,11,13,14,15,18, and 20). So the scoring system was ranged from 20 to 100, and it divided into three levels as follow:

- Low procrastination ranged from 20 to 46.
- Moderate procrastination ranged from 47 to 73.
- High procrastination ranged from 74 to 100.

Scale 2: General Self-Efficacy Sub-Scale.

This scale was developed by **Sherer, et al , (1982).** It was used to measure of the concept of self-efficacy, consisted of (17 items). With score using 5-point likert scale which ranges from (1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= strongly agree). The scoring system was ranged from 17 to 85, and it divided into three levels as follow:

- Low self-efficacy ranged from 17 to 39.
- Moderate self-efficacy ranged from 40 to 62.
- High self-efficacy ranged from 63 to 85.

Scale 3: Clinical Decision Making Nursing Scale (CDMNS).

This scale was developed by **Jenkins (2001**). It was used to measures the subjects' self-perceptions of decision making behaviors currently utilized when working with patients in the clinical setting, consisted of (40-items). The scale included four dimensions as follow: Search for Alternatives or Options (10-items), Canvassing of Objectives and Values (10-items), Evaluation and Reevaluation of Consequences (10-items), and Search for Information and Unbiased Assimilation (10-items). Each item was measured by 5 likert scale ranged from (1= Never, 2= Seldom, 3= Occasionally, 4= Frequently and 5= Always) for positive statement; the score were be reversed in the negative statements. The negative statements are (2, 4, 6, 12, 13, 15, 19, 21, 22, 23, 24, 25, 30, 31, 32, 34, 39, and 40). The scoring system was ranged from 40 to 200, and it divided into three levels as follow:

- Low clinical decision making ranged from 40 to 93.
- Moderate clinical decision making ranged from 94 to 147.
- High clinical decision making ranged from 148 to 200.

Validity of the study tools

The face validity of the current study tools was established by a panel of five experts in the field of Psychiatric and Mental Health Nursing as well as Nursing Administration from Faculty of Nursing, Minia University. Each expert panel was asked to

assess the tools for its content, wording, length, coverage clarity, format and its overall appearance. Based on their recommendation, all jury members agree that the current study tools were valid and relevant with the aim of the study, so no modification was done from the Jury panel.

Reliability of the study tools

Using Cronbach's Alpha Coefficient for the analysis instruments, the reliability test was calculated. To test the internal accuracy of the study scales, Cronbach's Alpha Coefficient was used. The reliability values for the General Procrastination scale (GPS) were .89, the sub-scale for general self-efficacy was .93, and the nursing scale for clinical decision-making (CDMNS) was .87.

Pilot study

The pilot study was carried out on (10%) of the participants (39) staff nurses from selected Hospitals to ensure the clarity and applicability of the tools items, and to determine the time required to complete the tools. The results showed that the time spent in filling the tools was ranged between 25-30 min. Based on the pilot study analysis no modifications were done in the tools.

Procedure

- Tools were translated into Arabic.
- Official permission was obtained from the director of the Hospitals after explaining the nature of the work.
- The researchers explained the aim, nature and significance of the study for every participant to get better cooperation during the implementation of the research.
- Oral consent was obtained from each participant in the study after explaining the purpose of the study.
- During data collection the researchers handled the questionnaire sheets individually to the participant nurses then explained the questionnaire sheets to them asking for their participation.
- The researchers waited until the participants completed the sheets.
- Data was collected for a period nearly three months from beginning of August to the end of October 2020.

Ethical Considerations

Official permission was obtained from the ethical committee in faculty after explaining the nature of the work. A verbal explanation of nature and the aim of the study had been explained to the staff nurses who included in the study, Staff nurses were given the right to refuse, withdrawal or to participate, and they were promised that their information and data would be confidentially; and will be utilized and used for the study purpose only.

Statistical analysis of data

Using computer software, the Statistical Package for Social Studies (SPSS), version 21, data entry and statistical analysis were performed. Suitable descriptive statistics have been used for quantitative variables, such as frequencies, and percentages for qualitative variables, means, and standard deviations. To estimate the proximity association between variables, the correlation coefficient (r) test was used. Statistical significance was considered at p-value <0.05 for all the tests used.

Results

Table (1): Distribution of personal characteristics of study subject (No =386).

Characteristics	No	%
Age		
• ≤29year	120	31.1
• -30 ≤39 year	**135**	**35**
• -> 40 year	131	33.9
Mean± SD	34.419±8.993	
Gender		
• Male	162	42
• Female	**224**	**58**
Educational qualifications		
• Diploma	134	34.7
• Technical	**172**	**44.6**
• Bachelor	80	20.7
Years of experience		
• ≤ 6	**139**	**36**
• 7- ≤12	121	31.4
• ≥13	126	32.6

Characteristics	No	%
Mean+ SD	9.899+5.567	
Hospitals		
• Minia University Hospital	193	50
• Gynecology, Obstetric and Pediatric University Hospital	137	35.5
• Minia Psychiatric Mental Health and Addiction Hospital	56	14.5

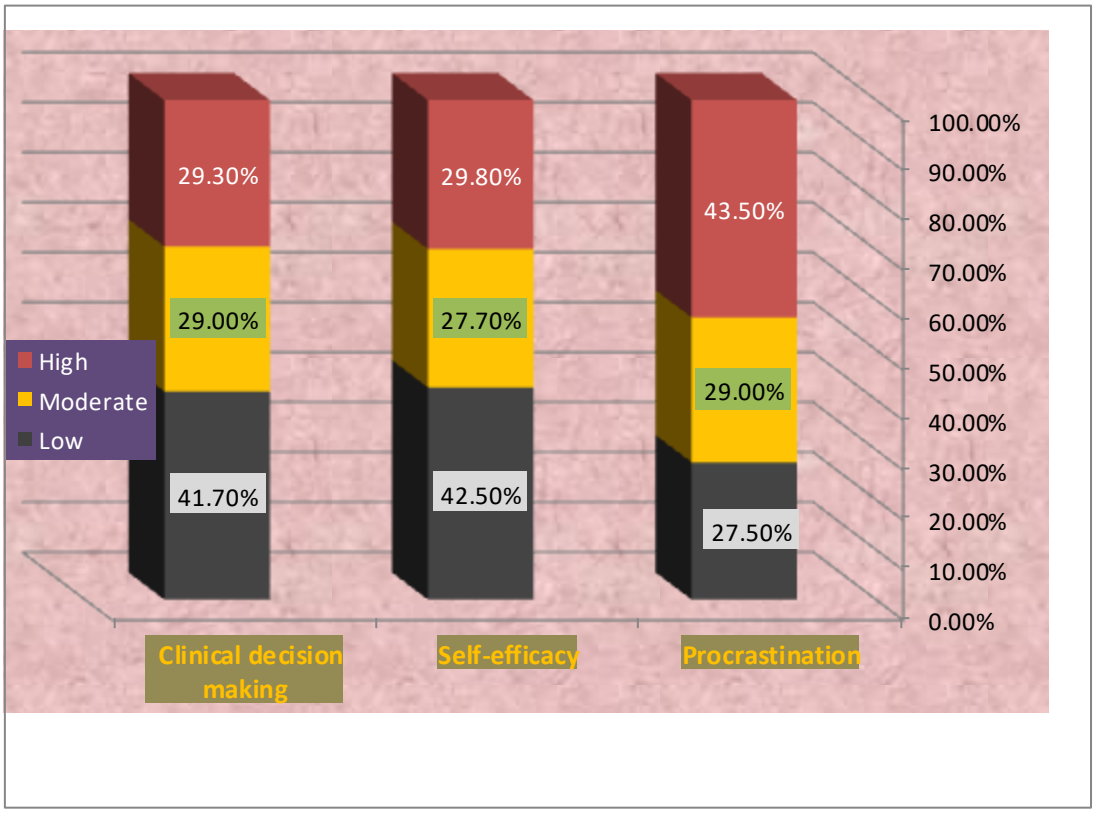

Figure (1): Distribution of staff nurses' responses level regarding procrastination, self-efficacy and clinical decision (N=386).

Table (2): Distribution of staff nurses' responses level regarding procrastination, self-efficacy and clinical decision making according to their hospitals (N=386).

Hospitals	Procrastination			Self-efficacy			Clinical decision making			X2 (p value)
	low No %	Moderate No %	High No %	low No %	Moderate No %	High No %	low No %	Moderate No %	High No %	
• Minia University Hospital	36 (18.7)	55 (28.5)	102 (52.8)	100 (51.8)	50 (25.9)	43 (22.3)	99 (51.3)	56 (29)	38 (19.7)	28.695 (.001**)
• Gynecology, Obstetric and Pediatric University Hospital	47 (34.3)	39 (28.5)	51 (37.2)	52 (38)	39 (28.5)	46 (33.5)	50 (36.4)	39 (28.5)	48 (35.1)	28.714 (.001**)
• Minia Psychiatric Mental Health and Addiction Hospital	27 (48.2)	18 (32.2)	11 (19.6)	10 (17.8)	17 (30.3)	29 (51.9)	9 (16)	17 (30.4)	30 (53.6)	24.781 (.001**)

Table (3): Distribution of procrastination, self-efficacy and clinical decision making levels in related to staff nurses departments (N=386).

Variable		Procrastination						Self-efficacy						Clinical decision making					
		Low		Moderate		High		Low		Moderate		High		Low		Moderate		High	
Department	**No**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Neurosurgery	24	13	54.2	8	33.3	3	12.5	3	12	8	32	14	56	2	8	10	40	13	52
ICU	23	10	43.5	9	39	4	17.5	4	17.4	8	34.8	11	47.8	3	13	10	43.5	10	43.5
Operating room (OR)	17	5	29.4	8	47.1	4	23.5	4	17.6	7	41.2	7	**41.2**	4	23.5	7	41.2	6	**35.3**
Surgical department	29	1	3.4	5	17.3	23	**79.3**	21	72.4	5	17.2	3	10.4	23	79.3	5	17.2	1	3.4
Medical department	21	1	4.8	5	23.8	15	71.4	15	71.4	5	23.8	1	4.8	14	66.7	5	23.8	2	9.5
Orthopedic department	20	1	5	5	25	14	70	13	65	5	25	2	10	14	70	5	25	1	5
Ophthalmology	16	1	6.2	4	25	11	68.8	10	62.5	4	25	1	12.5	11	68.8	4	25	1	6.2
Neurology	13	1	7.7	4	30.8	8	**61.5**	7	53.7	3	25	2	15.3	8	66.7	3	25	1	8.3
Burn department	18	2	11.1	4	22.2	12	66.7	10	55.6	4	22.2	4	22.2	12	66.7	4	22.2	2	11.1
ENT department	12	1	8.3	3	25	8	66.7	5	41.7	5	41.7	2	16.6	7	58.3	4	33.4	1	8.3
Emergency Delivery Room(EDR)	25	11	44	11	44	3	12	2	8	11	44	12	48	3	12	11	44	11	44
NICU	27	15	55.6	9	33.3	3	11.1	3	11.2	7	25.9	17	62.9	3	11.1	9	33.3	15	55.6
Dialysis unit	30	19	63.3	8	26.7	3	10	3	10	7	23.3	20	66.7	3	10	8	26.7	19	63.6
Obstetric department	28	1	3.6	5	17.8	22	78.6	22	78.6	4	14.3	2	7.1	22	78.6	5	17.8	1	3.6
Pediatric department	27	1	3.7	5	22.2	20	74.1	18	**66.7**	8	28.6	1	3.7	19	**70.4**	6	22.2	2	7.4
Economic mental illness department	13	12	92.3	1	7.7	0	**0**	0	0	0	0	13	**100**	0	0	1	7.7	12	**92.3**
Female mental illness department	12	1	8.3	6	50	5	**41.7**	4	33.4	6	50	2	16.6	5	41.7	5	41.7	2	16.6
Male mental illness department	13	3	23	4	30.8	6	46.2	5	38.5	5	38.5	3	23	6	46.2	4	30.8	3	23
ECT	4	2	50	1	25	1	25	0	0	0	0	4	**100**	0	0	1	25	3	75
Addiction department	14	7	50	6	42.9	1	.7.1	1	7.1	6	42.9	7	50	0	0	7	50	7	50

Table (4): comparison among procrastination, self-efficacy and clinical decision making regarding personal data of staff nurses and hospitals (n=386)

Personal data	Procrastination						X^2 (p-value)	Self-efficacy						X^2 (p-value)	Clinical decision making						X^2 (p-value)
	Low n=110		Moderate n=112		High n=164			Low n=164		Moderate n=107		High n=115			Low n=161		Moderate n=112		High n=113		
	No.	%	No.	%	No.	%		No.	%	No.	%	No.	%		No.	%	No.	%	No.	%	
Age																					
• ≤29year	47	12.2	36	9.3	37	9.6	16.870 0.002**	37	9.6	35	9.1	48	12.4	16.000 0.003**	37	9.6	35	9.1	48	12.4	16.255 0.003**
• -30- <39 year	39	10.1	33	8.5	63	16.3		63	16.3	31	8	41	10.6		62	16.1	33	8.5	40	10.4	
• -≥ 40 year	24	6.2	43	11.1	64	16.7		64	16.7	41	10.6	26	6.7		62	16.1	44	11.4	25	6.6	
Gender																					
• Male	39	10.1	54	14	69	17.9	3.711 0.153NS	69	17.9	51	13.2	42	10.9	2.826 0.243NS	67	17.4	54	14	41	10.6	3.302 0.192NS
• Female	71	18.4	58	15	95	24.6		95	24.6	56	14.5	73	18.9		94	24.4	58	15	72	18.6	
Educational qualifications																					
• Diploma	46	11.9	30	7.8	58	15	13.657 0.008**	58	15	29	7.5	58	15	12.268 0.015*	57	14.8	30	7.9	47	12.2	13.509 0.009**
• Technical	35	9.1	56	14.5	81	21		81	21	53	13.7	38	9.8		79	20.5	57	14.7	36	9.3	
• Bachelor	29	7.5	26	6.7	25	6.5		25	6.5	25	6.6	30	7.9		25	6.5	25	6.6	30	7.9	
Years of experience																					
• ≤ 6	56	14.5	44	11.4	39	10.1	24.798 .001**	39	10.1	41	10.6	59	15.3	25.698 .001**	37	9.6	46	11.9	56	14.5	25.698 .001**
• 7- ≤12	23	6	30	7.8	68	17.6		68	17.6	30	7.8	23	6		67	17.4	30	7.8	24	6.2	
• ≥13	31	8	38	9.8	57	14.8		57	14.8	36	9.3	33	8.5		57	14.8	36	9.3	33	8.5	
Hospitals																					
• Minia University Hospital	36	9.3	55	14.2	102	26.4	28.695 .001**	102	26.4	52	13.5	39	10.1	28.714 .001**	99	25.6	56	14.5	38	9.8	24.781 .001**
• Gynecology, Obstetric and Pediatric University Hospital	47	12.2	39	10.1	51	13.2		51	13.2	39	10.1	47	12.2		51	13.2	39	10.1	47	12.2	
• Psychiatric Mental Health and Addiction Hospital.	27	7	18	4.7	11	2.4		11	2.4	16	4.1	29	7.5		11	2.4	17	4.4	28	7.3	

** p≤0.05 (significant) * Statistical significant difference **Highly Statistical significant difference*

Table (5): Analysis of variance among study settings regarding to procrastination, self-efficacy and clinical decision making (N=386).

Variable	Minia University Hospital N=193	Gynecology, Obstetric and Pediatric University Hospital N=137	Psychiatric Mental Health and Addiction Hospital N=56	F ANOVA	P
	Mean+ SD	Mean+ SD	Mean+ SD		
Procrastination	67.17+14.55	60.17+17.55	54.15+17.45	23.472	.001**
Self-efficacy	39.99+18.00	48.96+18.48	52.37+15.89	15.668	.001**
Clinical decision making	102.06+40.14	122.29+43.57	138.75+39.91	20.773	.001**

Table (6): Correlation among procrastination, self-efficacy, and clinical decision making (N=386)

Variable		Procrastination	Self-efficacy	Clinical Decision making
Procrastination	r P	1	-.856- .001**	-.839- .001**
Self-efficacy	r P	-.856- .001**	1	.329 .001**
Clinical decision making	r P	-.839- .001**	.329 .001**	1

Table (1): Shows that (35%) of the staff nurses are in age group ranged between 30-<39 years, (58%) of them are female. Also, (44.6%) are technical degree. Moreover (36%) of the participants sample have < 6 years of experience. Finally regards to Hospitals, (50%, 35.5%, and 14.5%) respectively of them work in Minia University Hospital followed by Gynecology, Obstetric and Pediatric University Hospital, and Minia Psychiatric Mental Health and Addiction Hospital.

Figure (1): Presents that, (43.5%) of the studied sample have high level of procrastination while, (42.5%) of them have a low level of self-efficacy. Also, (41.7%) of the studied sample has a low level of clinical decision making.

Table (2): Illustrates that, most of the studied sample that have a high level of procrastination (52.8%) working at Minia University Hospital compare with Gynecology, Obstetric and Pediatric University Hospital and Minia Psychiatric Mental Health and Addiction Hospital as (37.2 % & 19.6%) respectively with high statistical significance difference (p= .001). While, self-efficacy low at Minia University Hospital staff nurses (51.8%) compare with Gynecology, Obstetric and Pediatric University Hospital and Minia Psychiatric Mental Health and Addiction Hospital as (38% & 17.8%) respectively with high statistical significance difference (p= .001). Also, clinical decision making low among staff nurses working at Minia University Hospital (51.3%) compare with Gynecology, Obstetric and Pediatric University Hospital and Minia Psychiatric Mental Health and Addiction Hospital as (36.4 % & 16%) respectively with high statistical significance difference (p= .001).

Table (3): Illustrates that staff nurses that had the highest percent regarding to procrastination of work for all departments except (Neurosurgery, CCU, OR, EDR, NICU, Dialysis unit, Economic mental illness, ECT, and Addiction) and the scores are ranged from (41.7% to 79.3%). Also the same table shows that staff nurses have the highest percent regarding to self-efficacy and clinical decision making for departments of (Neurosurgery, CCU, OR, EDR, NICU, Dialysis unit, Economic mental illness, ECT, and Addiction), the scores are ranged from (41.2% to 100%) for self-efficacy and the scores were ranged from (35.3% to 92.3%) for clinical decision making .

Table (4): Shows that there are statistically significant differences between procrastination with (age, educational qualification, years of experience and hospitals) as (p=0.002, 0.008, 0.001 & 0.001 respectively)**.** Also there are statistically significant differences between self-efficacy with (age, educational qualifications, years of experience and hospitals) as (p=0.003, 0.015, 0.001 & 0.001 respectively). Moreover, shows that there are statistically significant differences between clinical decision making and (age, educational qualifications, years of experience and hospitals) as (p=0.003, 0.009, 0.001 & 0.001 respectively).

Table (5): Clarifies that there are a highly statically significant differences between Minia University, Gynecology, Obstetric and Pediatric University, and Minia Psychiatric Mental Health and Addiction

Hospitals regarding to procrastination, self-efficacy and clinical decision making (p=.001).

Table (6): Illustrates that there are a negative correlation between staff nurses' procrastination and self-efficacy (r=. -.856 & p=.001) and, there are a negative correlation between staff nurses' procrastination and clinical decision making (r= -.839& p=.001) Also, there are a positive correlation between clinical decision making and self-efficacy (r= .329& p=.001).

Discussion

In the current study more than one quarter of the staff nurses are in the age group ranged between 30≤39 years with one to six years of experience. Also more than half of them are females and more than one third have technical institute degree education.

Regarding to levels of procrastination, self-efficacy and clinical decision making among staff nurses in the three hospitals the results of the present study revealed that, more than half of nurses who working at Minia University Hospital reported the highest level of procrastination compare with staff nurses who working at Gynecology, Obstetric and Pediatric University and Minia Psychiatric Mental Health and Addiction Hospitals. while, self-efficacy were low among staff nurses who working at Minia University Hospital compare with nurses who working at Gynecology, Obstetric and Pediatric University as well as Minia Psychiatric Mental Health and Addiction Hospitals. Also, clinical decision making were low among nurses who working at Minia University Hospital comparing with nurses who working at Gynecology, Obstetric and Pediatric University and Minia Psychiatric Mental Health and Addiction Hospitals with high statistical significance differences.

This may be attributed to that nurses who working at Minia University Hospital have heavy workload, low self-regulation on tasks, more nursing and non-nursing responsibilities, as well as low efficient and count of resource that require to perform tasks, all of this issues lead to increase stress for nurses which reflect on delayed of tasks comparing with other hospitals.

The current study findings are not consistent with the findings of **Yarmohammadian, et al., (2016**) in which nearly to three quarter of the staff nurses had low procrastination, and mean score of procrastination scale had significant relationship with hospital service. This may be explained by the culture difference and good hospital services and available resources that facilitate task performance. Also **Steel (2007)** indicates that those who procrastinate suffer greater stress, more health problems, and have poorer performance than those who have greater self-control.

In the same line **De Armond, et al., (2014**) the negative relationship between workload and psychological detachment and some examples of how exhaustion is involved in the recovery process have been demonstrated. Perhaps a heavy workload, a widely studied chronic stressor in the workplace, is connected to psychological detachment issues that can deplete vital resources, leaving someone exhausted and more vulnerable to actions such as procrastination.

As regards to levels of procrastination, self-efficacy and clinical decision making in work place study the results represented that, staff nurses who had the highest percent of procrastination items of work were founded in all departments except (Neurosurgery, CCU, OR, Emergency, NICU, Dialysis unit, Economic mental illness, ECT, and Addiction department) and lowest level of self-efficacy and clinical decision making for staff nurses in all departments except the previous mentioned departments. It may be due to the emergency of situations in these departments that require immediate intervention. These findings incongruent with the study findings of **Yarmohammadian, et al., (2016)** who are reported that, procrastination in emergency and surgical wards 'staff, midwives, official employees was higher.

In the present study there are statistically significant differences between procrastination, self-efficacy and clinical decision making with (age, educational qualifications, years of experience and hospitals). While, there are no statistically significant differences between procrastination, self-efficacy and clinical decision making with gender. This may be attributed to nurses (male or female) present in the same place of work and the same work condition.

Similar results showed by **Alizadeh, et al., (2020)** in which there was a significant difference between the self-efficacy score with age and work experience. In which nurses whose work experience from 6 to 10 years had a better average score of clinical decision making. It was also indicated that participants with a work experience of over 20 years had a better average score of self-efficacy, compared to the less experienced counterparts. However, there was no significant difference between the nurses' clinical decision making score with the demographic variables of age and education level or work experience.

As yielded by the current study results shows that there are highly statically significant differences among Minia University, Gynecology, Obstetric and Pediatric University, and Minia Psychiatric Mental Health and Addiction Hospitals regarding to procrastination, self-efficacy and clinical decision making. This may be explained by that there are

various factors in each hospital that influence making decisions and help nurses take decisions very rapidly. Such factors such as the different authoritative and administrative culture, the best administrative support, the satisfactory staffing, work overload, available resources, and even the time requirements.

The study result is parallel to **Soliman (2010)** who explained that the variables connected with the systems and the work organizations are more impacting and spurring when nurses take decisions. This is the same viewpoint of **Courtney, et al., (2015)** they announced that the organizational morals board, the organizational strategy, and ethics like self-regard, self-governance and benevolence are examples of the elements that encourage and support the process of taking decision.

Concerning to the relation among procrastination, self-efficacy and clinical decision making of the current study results showed that, there are a negative correlation between staff nurses' procrastination and self-efficacy also, there are a negative correlation between staff nurses' procrastination and clinical decision making while there are a positive correlation between clinical decision making and self-efficacy.

These findings are consistent with the study findings of **Ravanipoura, et al., (2016**) they founded that there were significant, positive and relatively strong relationship between nurses self-efficacy and their clinical decision-making ability. Moreover, **Attia & Abdelwahid, (2020)** reported that grit, self-regulation and self-efficacy were negatively and significantly correlated with procrastination ($r = -0.43^{**}$, -0.39^{*} & -0.81^{**} at $p < 0.05$ respectively).

Also, the results of the current study is consistent with a study done be **Kandemir (2014)** which revealed that procrastination is related to self-regulation and self-efficacy. In the same line; **Littrell (2016)** conducted a study at Chattanooga, demonstrated that; grit and self-efficacy had a negative correlation with procrastination. Additionally, another study done by **Ocala (2016)** in Turkey, found that self-efficacy was a significant predictor of procrastination.

In the same context **Hall, et al., (2019)** reported that, Higher levels of self-efficacy intercepts and slopes were hypothesised to correspond to lower intercepts of procrastination and slopes, respectively, it said. As outlined in Bandura's theory, this hypothesis was derived from assumed positive relations between self-efficacy and self-regulation competencies.

Conclusion

The present study revealed that, the highest level of procrastination among nurses who working at Minia University Hospital and there are statically significant differences between Minia University Hospital, Gynecology, Obstetric and Pediatric University Hospital, and Minia Psychiatric Mental Health and Addiction Hospital regarding to procrastination, self-efficacy and clinical decision making.

Also, there were a negative correlation between staff nurses' procrastination and self-efficacy. Moreover, there are a negative correlation between staff nurses' procrastination and clinical decision making. While, there are a positive correlation between clinical decision making and self-efficacy.

In light of the conclusions of this study, it was recommended that

- Analyze causes of procrastination and try overcome this causes
- Hospitals administration must remove all organizational factors that hinder decision making process or generate conflict and create a healthy work environment and culture.
- Basic nursing programs need to incorporate decision-making content; self-efficacy believes into clinical experiences throughout the curriculum.
- Apply the finding results to hospital staff to improve staff nurses self-efficacy beliefs and clinical decision making abilities.
- Further study to investigate factors that affect staff nurses procrastination, self-efficacy, and clinical decision.
- Further research studies are needed to assess the effect of self-efficacy training program on clinical decision making.

References

- **Abd Elhamed, S., Morsy, S., & Mohamed, A., (2019):** Relationship between Head Nurses' Self-efficacy and Job Performance. Assiut Scientific Nursing Journal, 7(19), 17-25.
- **Abdelrahman, S., & Thabet, M., (2018):** Nurses' Barriers When Using Research Information in Clinical Decision Making. International Journal of Advanced Nursing Studies**.** 7, (1) ,27-33 . doi: 10.14419/ijans.v7i1.8824.Website:www.sciencepubco.com/index.php/IJANS
- **Alizadeh, I., Salari, A., Ahmadnia, Z., & Moaddab, F., (2020):** An Investigation into Self-efficacy, Clinical Decision-making and the Level of Relationship between them among Nurses in Guilan Province. Journal of Guilan University of Medical Sciences, 29(114), 38-49.
- **Attia, N., & Abdelwahid, A., (2020):** Grit, Self-Regulation and Self-Efficacy as Predictors of Academic Procrastination among Nursing Students. Amarjeet Kaur Sandhu, 12(1), 130.
- **Courtney, M., Nash, R., Thornton, R., & Potgieter, E., (2015):** Leading and managing in nursing practice: Concepts, processes and challenges. Leadership & nursing—Contemporary

- **De Armond, S., Matthews, R., & Bunk, J., (2014):** Workload and procrastination: The roles of psychological detachment and fatigue. International Journal of Stress Management, 21(2), 137.
- **Dehghani, F., Barkhordari-Sharifabad, M., Sedaghati-kasbakhi, M., & Fallahzadeh, H., (2020):** Effect of palliative care training on perceived self-efficacy of the nurses. BMC Palliative Care, 19, 1-6.
- **Edeer, A., & Sarikaya, A., (2015):** Adaptation of clinical decision making in nursing scale to undergraduate students of nursing: the study of reliability and validity. International Journal of Psychology and Educational Studies, 2(3), 1-9.
- **Farzi, N., Bahlakeh, A., & Bordbar, G., (2015):** Relationship between nurses' job stress and procrastination: case study. Quarterly Journal of Nursing Management. 2015; 4 (2): 71- 79.
- **Ferrari J., (2018):** "Delaying Disposing: Examining the Relationship between Procrastination and Clutter across Generations". Current Psychology. (New Brunswick, N.J.) (1046-1310), 37 (2) (2): 426–431. doi:10.1007/s12144-017-9679-4. S2CID 148862313
- **Gareau, A., Chamandy, M., Kljajic, K., & Gaudreau, P., (2019):** The detrimental effect of academic procrastination on subsequent grades: the mediating role of coping over and above past achievement and working memory capacity. Anxiety, Stress, & Coping, 32(2), 141-154.
- **Gizaw A., Kidane B., Negese D., & Negassa E., (2018):** Factors Affecting Clinical Decision- Making Practice among Nurses Working in Jimma University Medical Center, Jimma Southwest Ethiopia. Annuals of nursing and practice : https://www.researchgate.net/publication/327345189
- **Hall N., Lee, S., & Rahimi, S., (2019):** Self-efficacy, procrastination, and burnout in post-secondary faculty: An international longitudinal analysis. Plos one, 14(12), e0226716.
- **Holder A., (2020):** The Relationship of Self-Efficacy and Clinical Reasoning of Undergraduate Nursing Students East Tennessee State University, PHD thesis. Retrieved from https://dc.etsu.edu/etd/3710/
- **Ilmu S., Pasundan E., Bandung & Indonesia (2018):** The Influence of Self-Efficacy on Satisfaction and Work-Related Performance. International Journal of Management Science and Business Administration Volume 4, Issue 4, May 2018, Pages 43-47
- **Jenkins, H., (2001):** Clinical decision making in nursing scale. Measurement of nursing outcomes, 1, 33-40. New York, NY:Springer.
- **Johansen M., & O'Brien J., (2016):** Decision making in nursing practice: a concept analysis. Nurs Forum.; 51: 40-48.
- **Kandemir M., (2014):** Reasons of academic procrastination: Self-regulation, academic self-efficacy, life satisfaction and demographics variables. Procedia-Social and Behavioral Sciences, 152, 188-193.
- **Khoshouei M., (2017):** Prediction of Procrastination Considering Job Characteristics and Locus of Control in Nurses. Journal of Holistic Nursing and Midwifery. 27(2). DOI: 10.18869/acadpub.hnmj.27.2.27
- **Kim K., & Seo, E., (2015):** The relationship between procrastination and academic performance: A meta-analysis. Personality and Individual Differences, 82, 26-33.
- **Lay C., (1986):** At last, my research article on procrastination. Journal of research in personality, 20(4), 474-495.
- **Littrell S., (2016):** Waiting for the right place and right time: belief content correlates of academic procrastination. A Thesis Submitted to the Faculty of The University of Tennessee at Chattanooga in Partial Fulfillment of the Requirements of the Degree of Master of Science: Psychology The University of Tennessee at Chattanooga Chattanooga, Tennessee.
- **Ludin, S., (2018):** Does good critical thinking equal effective decision-making among critical care nurses? A cross-sectional survey. Intensive and Critical Care Nursing, 44, 1-10.Nurs Res. 61(3): 149–158 .doi: 10.1097/NNR.0b013e318253a750).
- **Maddux J., & Kleiman, E., (2017):** Self-efficacy. In R. Biswas-Diener& E. Diener (Eds), Noba textbook series: Psychology.Champaign, IL: DEF publishers. Retrived from https://nobaproject.com/modules/self-efficacy
- **Mahdizadeh J., Daihimfar F., & Kahouei M., (2016):** The relationship of job stress with self-efficacy among nurses working in hospitals of Semnan University of Medical Sciences, Iran. Biosc.Biotech.Res. Comm.9 (3). doi: http://dx.doi.org/10.21786/bbrc/9.3/14.
- **Ocal K., (2016):** Predictors of Academic Procrastination and University Life Satisfaction among Turkish Sport Schools Students. Educational Research and Reviews, 11(7), 482-490.
- **Paulsen R. (2015).** Non-work at work: resistance or what? Organization 22, 351–367. doi: 10.1177/1350508413515541

- **Ravanipour, M., Ahmadian, A., Yazdanpanah, A., & Soltanian, A., (2016)**: Assessing the relationship between self-efficacy and clinical decision-making in hospital nurse. Avicenna Journal of Nursing and Midwifery Care, 23(4), 77-86.
- **Sherer M., Maddux J., Mercandante B., Prentice-Dunn S., Jacobs, B., & Rogers R., (1982):** The self-efficacy scale: Construction and validation. Psychological reports, 51(2), 663-671.
- **Solieman S., (2010):** Factors Affect Decision-Making among Nurse Managers in Different Hospitals in Zagazig (Doctoral dissertation, Zagazig University). perspectives, 1-20.
- **Steel P., (2007):** The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. Psychological bulletin, 133(1), 65.
- **Yarmohammadian M., Mahmoodzade H., & Ardakani H., (2016):** Assessing the prevalence of organizational procrastination and the associated factors among nursing and midwifery staff. Quarterly Journal of Nursing Management, 5(1), 17-28.
- **Zaki R., (2016):** Job Stress and Self-Efficacy among Psychiatric Nursing Working in Mental Health Hospitals at Cairo, Egypt. Journal of Education and Practice, 7(20), 103-113.