Assiut Scientific Nursing Journal
http://asnj.journals.ekb.eg http://www.arabimpactfactor.com
DOI: 10.21608/asnj.2024.308966.1878 http://olddrji.lbp.world/indexedJournals.aspx
https://vlibrary.emro.who.int/journals/assiut-scientific-nursing-journal

Relation between the Time Management Skills and Nurses' Work Stress Levels

Mona Magdy Mohammed[1], Samah Mohmad Abdullah[2] & Amal Sayed Mohamed[3]
[1.] Bachelor Degree in Nursing Science, Faculty of Nursing, Assiut University, Egypt.
[2.] Professor of Nursing Administration, Faculty of Nursing, Assiut University, Egypt.
[3.] Assistant Professor of Nursing Administration, Faculty of Nursing, Assiut University, Egypt.

Abstract:
Background: Using time management techniques can have a big impact on how nurses feel stressed at work in a medical setting. **Aim**: The study sought to ascertain the relation between the time management skills and nurses' work stress levels. **Setting:** The current study conducted at El-Eman General Hospital in Assiut city **Sample:** 250 nurses. **Research design:** The study employed a descriptive research design. **Tools: Two tools of data collection namely, Structured Self-Administered Time Management Assessment Questionnaire and Work Related Stress Questionnaire (WSQ). Results:** The highest percentage of nurses have fair time management skills (70%), and two third of nurses have high work related stress levels (67.2%), **Conclusion:** There are statistically significance negative correlation between work related stress levels and time management skills $p \leq 0.001$. **Recommendation:** Provide training programs for nurses about time management strategies and implement stress resolution techniques.

Keywords: Nurses, Time management & Work stress.

Introduction:
Time management is one concept of management organizational behavior. It's an effective way to reduce workload. Effective time management enables people to mobilize and make efficient use of both human and material resources, as well as to create task-oriented coping behaviors in the face of demands. Thus, developing managerial skills is aided by having a solid understanding of time management. But ineffective time management has an impact on every department inside the organization, which can lead to annoyance, exhaustion, and discontent **(Al shobaki, & Abu-Naser, 2018)**.

Time management means as the practice of planning and organizing how to divide up your time between different tasks. It is the art of making the most of the time you have available, particularly at work **(Cambridge dictionary, 2020).**

Time management that has been introduced is the practice of organizing and using deliberate control over the amount of time spent on particular tasks, particularly in order to boost productivity, effectiveness, and efficiency **(Chen, et al., 2024)**. Time management is the process of organizing tasks and activities to maximize the efficacy of each person's effort basically, to help people complete more, better work in less time **(Ding et al., 2024).**

Effective time management will increase worker output, facilitate work scheduling, enable workers to perform at their greatest level, assist workers in prioritizing and completing critical tasks, record and eliminate unnecessary tasks, postpone tasks that can delayed, assign tasks that can be assigned, and steer the company toward accomplishing its established objectives while boosting worker satisfaction **(Eckart, et al., 2017).**

There are important skills for effective time management which includes; firstly, personal skills; these are private talents that need to be matched with the individual's management style and circumstances, secondly, organizational skills; Six dimensions comprise, which are possessed by those with managerial experience or those employed in an organization: communication management, delegation, goal formulation, operational planning, and prioritizing goals and actions. Clarity of intention, focus on effectiveness, desire for improvement and meeting management **(Beyramijam, et al., 2020)**

Nurse and nurse managers should be aware of the essential principles of time management which it's a core idea relies on main principles that include; list goals and set priorities, delegation, make a daily "to do "list (daily planning), interruption control, start with the problems that need immediate decision, ask how i can utilize my time best now, accomplish each task only once, do it now and follow Pareto principle: this describes how, typically, a small number of important circumstances or problems require 20% of the time spent in the group to achieve 80% of the positive outcomes, whereas a large number of inconsequential situational problems require 80% of the group's effort to produce 20% of the positive outcomes **(Mozzarelli et al., 2024).**

There are several key techniques exist for enhancing time management abilities, such as; time analysis, scheduling, evaluation, implementation of the daily plan and daily follow-up is essential to time

management, motivate to save time; when have done a good job, or completed a top priority task before time, give yourself a treat or reward **(Radhika Kapur, 2020).**

Certain human needs, such as physical and mental activity, self-worth, and a sense of competence and mastery, are satisfied by work. It might, however, also be a significant cause of stress. All people who work in different careers experience stress, which can drive them in different ways. Organizational changes, such as shifts in employment, compensation, promotions, manpower levels, and societal shifts, put pressure on an individual in one way or another and cause uncertainty, fear, and anxiety, which in turn increases stress at work **(Stein, & Bartone, 2020).**

The dynamic interaction between an individual, the social, and organizational context in which they work can be understood as the source of work-related stress. This is because there is a relationship, between the stresses imposed by a task or role and the operator's capacity to manage them in contemporary systems. Because of the associated costs, stress at work causes issues for both organizations and health professionals **(Giorgi et al., 2014).**

Workplace stress lowers confidence and is a contributing factor to poor performance of employees. Stress is any stimuli or alterations in the internal and external environment that have the potential to throw life's equilibrium off balance and, in certain cases, become harmful **(Ekienabor, 2016).**

Work-related stress is characterized as a subjective phenomenon; it seems problematic that a significant portion of the workforce is involved in assessing it **(Barbaranelli et al., 2018).** The inability to adjust to changes in one's physical, mental, and emotional state results in stress. Stress is frequently linked to limitations and expectations. High levels of work-related stress cause people to lose focus on their desires and make reference to their lack of them **(Barber, 2020).**

When stress is the performance is poor. Individual performance is only enhanced when stress levels are at an average, ideal level. Given that people spend one-third of their lives at work, this might have a significant impact on how they behave. According to recent studies, The main factors that contribute to stress at work include the workforce, disagreement and annoyance. As long as stress is perceived as an unavoidable challenge in both life and the workplace **(Eckart, et al., 2017).**

From this respect, managing your time well can help you feel less stressed at work. Time management is a strategy for accomplishing personal objectives and for making efficient use of available resources. Both the harmful consequences of work-related stress and resource consumption can be reduced or eliminated with effective time management **(Beyramijam, et al., 2020)**

Significance of the study:

The researcher observed at El - Eman General Hospital at Assiut city, nurses do not have awareness regarding to the time management skills that may affect their work performance and work stress. Effective time management skills are critical for nurses due to the demanding nature of their profession, where they must balance patient care, administrative tasks, and collaboration with other healthcare professionals. The ability to manage time efficiently is directly linked to well-being. However, nurses often face substantial work stress, stemming from factors such as long work shifts, high workloads, and the emotional demands of the job. Work stress in nursing is a well-documented phenomenon, which cause emotional exhaustion. Time management skills can serve as a coping mechanism to mitigate these stressors. So the researcher was motivated to study the significance relationship of time management skills in reducing work stress among nurses.

Aim of the study:

The study aimed to ascertain the relation between the time management skills and nurses' work stress levels

Specific Objectives:

1. Determine time management skills between staff nurses.
2. Measure work related stress levels between staff nurses.
3. Revealed the relationship between time management skills and a work related stress level between staff nurses.

Research Questions

The current study aims to address the following research questions:

1. What are staff nurses' time management skills?
2. What are the levels of work related stress between staff nurses?
3. What is the relationship between time management skills and a work related stress levels between staff nurses?

The methodology pursued in the conduction of the current study were portrayed according to the following designs:

1. Technical design.
2. Administrative design.
3. Operational design.
4. Statistical design.

Technical design:

It involves the study design, setting, subject, and data collection tools.

Study Design: Descriptive research design was used in the current study.

Setting:
The study was conducted **at** El-Eman General Hospital in Assiut city which affiliated to Ministry of Health and Population and serve all Upper Egypt population. It consists of two buildings, the first building contains 21 outpatient clinics, and the second one contains eight intensive care units, four operation departments and nine inpatient departments with bed capacity 274 beds. The hospital served about 291069 patients according to 2023 statistics.

Subject:
Nurses number at El Eman General Hospital 492 the study sample consists of **250** nurses they determined by using the software EPI/ Info, version 3, with a 95% confidence interval (CI) they are randomly selected.

Tools of data collection:
Two tools were used in the current study**:**

Tool I: **Structured Self-Administered Time Management Assessment Questionnaire** Which Developed by Wayne (2007), consists of two parts:

Part (1): Personal data sheet: used to gather information on age, gender, years of experience, marital status, levels of education, and department in which nurses are employed.

Part (2): Time Management Assessment Questionnaire consists of 25 items which used to determine nurses current time management skills. The nurses were respond to 3 point Likert scale which ranged between always = 2, or sometimes =1, or never = zero. Each participant respond to all statements using the previous score **and** the total score were computed and summed up and if nurses obtained from 45 to 50 the nurse had good time management skills and if the nurse obtained score from 30 to 44 she/he had a fair time management skills, lastly, if the nurse obtained score from 0 to 29 she/he had a poor time management skills.

Tool II: Work Related Stress Questionnaire (WSQ): Was Developed By Holmgren, et al., (2013), to measure nurses' stress levels in relation to their work. It is a self-administered questionnaire consists of 46 questions nurses were respond to all statements using true = 1 and false = 0, **Then** the nurse total score was summed up and if the total score was 23 and less, then nurse had low work related stress level, if the nurse obtained score from 24 to 32, the nurse had a moderate work related stress level, and if the nurse obtained score from 33 to 46, she/he had high level of work related stress.

Administrative design
Official approval to conduct this study was acquired from the Dean of Faculty of Nursing- Assiut University, also official approval was taken from El-Eman General Hospital directors, both medicine and nursing, and from all departmental heads in which the study was conducted to enable the researcher to collect necessary data, also oral agreement were taken from all studied nurses who participated in the current study.

Ethical consideration

The study was carried out carefully, adhering to the ethical guidelines for clinical research, and all participant rights were maintained. The study's proposal was approved by Ethical Committee, Faculty of Nursing, Assiut University and awritten consent was obtained from all studied nurses. The study was followed common ethical guidelines in clinical research. The right to decline, withdraw, and participate in the study was underlined, as was the assurance of respondent anonymity and confidentiality. Staff nurses were informed by the researcher that all data collected would use only for research purpose.

Operational design:

Preparatory phase:
This phase lasted about 8 months from January to August 2021.The existing literature on the study issue was reviewed before the study tools were translated from English to Arabic. The opinions of expertise were used to verify the **face validity** of the study tools (jury) which consists of 5 expertise (2 professors and 3 assistant professors) from nursing administration department-Faculty of Nursing- Assiut University to test each statement's comprehension, the confirmatory factor analysis test was used to measure the **content validity**, and the results showed that all study tool items had more than one, so all items were confirmed and items rejected = zero.

Pilot study:
A pilot study was conducted to evaluate the tools' clarity, applicability, and test duration needed to complete the questionnaire form, as well as to identify potential issues during the data collection phase. It was utilized on twenty five nurses from different units (9 from inpatient department, 9 from intensive care units and 7 from emergency department. Data collected from the pilot study were analyzed, and before the study tool was used in its final form, any necessary modifications were done (nurses taken in the pilot study excluded from the current study).

Reliability of the study tools internal consistency was measured using Cronbach's Alpha Coefficient test and its results was 0.88 for all items of the time management assessment questionnaire and 0.89 for all items of the work related stress questionnaire.

Field work: Following the preparation of the study's tools, the researcher met with each participating nurse to discuss the goal of the research and solicit their participation. Following this, the participants were given structured, self-administered questionnaires to complete. The questionnaires took about 40 minutes

to be full filled. This phase took about 9 months from October to July 2022.

Statistically analysis:

Before undergoing any statistical analysis, the data were checked for homogeneity variances and normality using the Anderson-Darling test. Numbers and percentages were used to describe categorical variables (N, %), where the mean and standard deviation (Mean, SD) are used to characterize continuous variables. Whereas the t-test and ANOVA test are used to compare continuous variables, the chi-square test and Fisher exact test are used to evaluate categorical variables. To show the relationship between scores, parson correlation was employed, Multivariate Linier regression to determine effect of personal data on nurses' time management questionnaire and nurses' work stress questionnaire. All analyses were conducted using IBM SPSS 20.0 software, and a two-tailed $p < 0.05$ was deemed statistically significant.

Result:

Table (1): Distribution of nurses Personal Data Working at EL-Eman General Hospital (n=250)

Personal data	No	%
Age		
Less than 25 year	**165**	**66**
From 25-30 year	50	20
More than 30 year	35	14
Mean± SD	**28.84±3.91(21-55)**	
Gender		
Male	80	32.0
Female	**170**	**68.0**
Years Of Experience		
Less than 5 years	**137**	**54.8**
From 5-10 years	65	26.0
More than 10 year	48	19.2
Mean± SD	**5.05±7.61(0.1-34)**	
Marital Status		
Single	**132**	**52.8**
Married	116	46.4
widow/divorced	2	.8
Educational Qualification		
Bachelor Degree in Nursing Science	85	34
Technical Nursing Institute Diploma	165	**66**
Department Name:		
Emergency department	**80**	**32**
Inpatient department	**85**	**34**
Intensive care unit (ICU)	**85**	**34**

Table (2): Levels of Time Management Skills among Studied Staff Nurses at EL-Eman General Hospital (n=250)

Time Management Skills	Max Score	No	%
Poor	Less than 30	**24**	**9.6**
Fair	From 30-40	**175**	**70.0**
Good	More than 40	**51**	**20.4**
Mean±SD		**27.54±7.19**	

Table (3): Distribution of Nurses Work related Stress Levels at EL-Eman General Hospital (n=250)

Nurses' Work Stress Levels	Max Score	No	%
Low	Less than 116	**6**	**2.4**
Moderate	From 116-161	**76**	**30.4**
High	More than 161	**168**	**67.2**
Mean±SD (range)	**230**	**165.61±18.35(113-211)**	

Table (4): Correlation Co-Efficient between Time Management Skills and Work related Stress Levels between Nurses Working at EL-Eman General Hospital (n=250)

Correlations	Mean±SD	R	P
Time Management Skills	27.54±7.19	-0.421	**<0.001****
Nurses' Work Stress	165.61±18.35		

** *Statistically Significant Correlation at P. value ≤0.001*

Table (5): Relation between Nurses Personal Data and Time Management Skills at EL-Eman General Hospital (n=250)

Personal data	No	%	Mean±SD	P. value
Age				
Less than 25 year	165	66	27.88±7.09	0.290
From 25-30 year	50	20	26.23±8.08	
More than 30 year	35	14	28.11±6.03	
Mean± SD(range)			**28.84±3.91(21-55)**	
Gender				
Male	80	32.0	26.64±8.24	0.174
Female	170	68.0	27.96±6.63	
Marital Status				
Single	132	52.8	27.72±7.38	0.098
Married	116	46.4	27.16±6.92	
Widow/Divorced	2	.8	38±0	
Educational Qualification				
Bachelor Degree in Nursing Science	85	34	28.54±6.44	0.005**
Technical Nursing Institute Diploma	165	66	25.4±7.99	
Years of experience				
Less than 5 year	137	54.8	27.2±8.04	0.708
From 5-10 year	65	26.0	27.91±6.35	
More than 10 year	48	19.2	28.02±5.58	
Mean± SD			**5.05±7.61(0.1-34)**	
Department Name:				
Emergency department	80	32	29.25±7.3	0.909
inpatient department	85	34	28.15±6.88	
Intensive care unit (ICU)	85	34	28.15±6.88	

- *Independent T-test quantitative data between the Two groups*
- *One-way Anova test quantitative data between the three groups or more*
- *Statistical significant p≤ 0.005*

Table (6): Relation between Work related Stress Levels and Personal Data of Staff Nurses Working at EL-Eman General Hospital (n=250)

Personal data	No	%	Mean±SD	P. value
Age				
Less than 25 year	165	66	164.21±18.63	0.44
From 25-30 year	50	20	170.95±18.66	
More than 30 year	33	14	163.32±15.28	
Mean± SD			**28.84±3.91(21-55)**	
Gender				
Male	80	32.0	170.44±18.57	0.224
Female	170	68.0	163.34±17.85	
Marital Status				
Single	132	52.8	164.39±19.45	0.275
Married	116	46.4	167.23±17.04	
Widow/divorced	2	.8	152±0	
Educational Qualification				
Bachelor Degree in Nursing Science	85	34	163.56±16.04	0.005**
Technical Nursing Institute	165	66	169.9±21.29	
Years Of Experience				
Less than 5 year	137	54.8	165.38±21.86	0.960

Personal data	No	%	Mean±SD	P. value
From 5-10 year	65	26.0	166.17±12.84	
More than 10 year	48	19.2	165.52±13.26	
Mean± SD			**5.05±7.61(0.1-34)**	
Department Name:				
Emergency department	80	32	167.6±15.13	
Inpatient department	85	34	162.84±18.49	0.127
Intensive care unit (ICU)	85	34	162.84±18.49	

- *Independent T-test quantitative data between the Two groups*
- *One-way Anova test quantitative data between the three groups or more*
- *Statistical significant p≤ 0.005*

Table (1): Shows that about two thirds of nurses have less than 25 years old and graduated from Nursing Technical Institute (66%), more than two thirds of them are female (68%) while more than half of nurses less than 5 years of experience and single (54.8%, and 52.8%) respectively, more than one third of nurses works at Intensive Care Unit and the same percentage works at inpatient departments (34%).

Table (2): Shows that highest percentage of nurses have fair time management skills (70%) and lowest percentage of them have poor time management skills (9.6%).

Table (3): Shows that more than two thirds of nurses have high work related stress level (67.2%) while (30.4%) of nurses have moderate level of work related stress, but the lowest percentage of nurses have low work related stress level (2.4%).

Table (4): Indicates that there is a statistically significant negative association existed between work stress levels and time management skills P≤0.001.

Table (5): Depicts that there is a statistically significant difference relation between nurse's time management skills and educational qualification p≤0.005.

Table (6): Shows that there is a statistically significant difference relation between nurses work stress levels and educational qualifications p≤ 0.05.

Discussion:

Nursing is a profession which is responsible for managing a patient's medical care from start to end of care. Nursing is an occupation which is prone to high stress and busy schedule. In addition to handling a lot of patient-related tasks, nurses often need to make a lot of make number of urgent decisions. Nurses monitor patients' progress and declining health condition while providing collaborative treatment **(Gualandi et al., 2021).**

Time management is crucial since the number of patients in today's society is increasing, placing a heavy demand on healthcare professionals and either directly or indirectly increasing the workload of nurses. The most precious resource we have in life is thought to be time. Time management refers to planning one's time such that it aligns with personal objectives and takes into consideration one's own preferences, dislikes, and likes **(Ghiasvand, et al, 2017).**

When nurses are unable to manage their time, they may or may not experience stress at work due to the strain of caring for patients and other pressures related to nursing profession, such as physical demands, a lack of resources, managerial concerns, and challenges juggling work and home obligations **(Reed et al., 2021).**

The purpose of the current study was to ascertain nurses' work stress levels and time management skills. This can be studied by testing 250 nurses who works at El Eman General Hospital and results of the current study confirmed that two thirds of nurses have less than 25 years old and graduated from Nursing Technical Institute, more than two thirds of them were female while more than half of nurses less than 5 years of experience and single, more than one third of nurses works at intensive care unit and the same percentage works at inpatient departments.

According to the findings of the current study which indicated that the highest percentage of nurses reported that they had fair time management skills and the lowest percentage had poor time management skills.

From the perspective of the researcher the highest percentage of nurses answered that they had fair time management skills because large sector of nurses had Bachelor's degree in nursing science and had more than five years of experience. So, they become familiar with time management strategies to some extent. As that significant portion of nurses feels that they have fair control their own time and can make decisions accordingly.

The previous result was supported by **Salem & Youssef, (2017)** who examined time management skills between nurses in a neonatal intensive care unit (NICU) setting and they found that most nurses had fair level of time management skills.

The current study goes in the same line with the study done by **Barua et al., (2019) & Goldsby et al., (2020)** who found that the greatest percentage of

nurses answered that they have fair levels of time management skills and they are crucial for nurses to effectively prioritize and manage their workload, ensuring patient care is delivered efficiently and safely.

Also the current study agree with study done by **Chanie et al., (2020)** who found that the highest number of the studied nurses having fair time management skills. Also **Zasa et al., (2020)** goes the same line with the current study findings because they found that the lowest percentage of studied nurses had poor time management skills that may have alternative approaches to organizing their tasks that may not align with traditional time management techniques.

Ghiasvand et al. (2017) contradicted with the current study as they investigated time management practices between greatest number of hospital nurses and found that the highest percentage of studied nurses had good time management skills, Also **Aryankhesal et al., (2019)** disagree with the current study findings as they found the highest percentage of the studied nurses had a good time management skills.

In the same respect **Alkhawaldeh et al., (2020)** disagree with the current study results as they reported that the highest percentage of nurses reported having poor time management skills. And **Cleary et al., (2020)** contradict with the current study as they shows that greatest number of studied nurses had good time management skills which positively impact teamwork and collaboration between healthcare professionals, enhancing communication and coordination.

The current study found that more than two thirds of nurses had high work stress level and the lowest percentage of them had low work stress level. From the perspective of the researcher it might be the result of ongoing staff nursing shortages, which lead to lengthy workdays with extremely high patient acuity and inadequate supplies and equipment. These factors may have an impact on the staff nurses' well-being, job satisfaction, and overall quality of care. It is important to address and mitigate work-related stress to promote the well-being and job satisfaction of nurses while ensuring the delivery of high-quality patient care.

As well **Van Bogaert et al., (2019)** supported the current study as they found that the highest percentage of studied nurses had high levels of work stress suffer from ignoring their opinions in work place and not participating in the organization decisions which negatively impacted nurses' job satisfaction. This match with **Ilić et al., (2020)** who reported that the greatest percentage of nurses who had high level of work-related stress suffered from heavy workload, time pressure, lack of control, and inadequate support.

The current research findings supported by **Alluhidan et al., (2020)** because they reported that two thirds of nurses experienced high levels of work-related stress believed to have low pay, a scarcity of nurses and necessary resources, expose nurses to overly stressful situations, and create difficult working conditions that raise the risk of exhaustion in them.

Ejeh et al., (2020) & Galanis et al., (2021) corresponds with the results of the current study, which showed that the majority of the nurses under study experienced high levels of stress at work, a need to speed tasks, and possible sensations of overload.

The results of the current study investigation are consistent with **Jermsittiparsert et al., (2021)** they added that greatest number of nurses had a high levels of work stress because of workload that can impact job satisfaction and contribute to stress and burnout.

Also **Goodarzian et al., (2021)** agree with the current findings as they explored that the highest percentage of nurses showed that they had elevated stress levels related to work due to complex nature of balancing tasks, excessive patient care duties and responsibilities. **Galanis et al., (2021)** found that the greatest number of nurses had an excessive workloads can lead to time pressure, the need to rush tasks, and express high levels of stress at work.

In the other hand, **Kakemam et al., (2019)** not supported the results of the current study, because the researchers found that all nurses have moderate percentage work stress level. Also **Dewi & Riana, (2019)** disagreed with the results of the current study as when they conduct research on workplace dynamics and interpersonal relationships in healthcare settings acknowledges that the greatest percentage of nurses had low level of work related stress. The current study contradict with **Ulenaers et al., (2021)** because they found that the most of studied nurses may handle high workloads more effectively or have coping mechanisms in place and they had low stress levels.

The results of the current study showed a negative relationship between time management skills and work stress levels. From the opinion of the researcher, the negative correlation implies that as work stress levels increase, time management skills tend to decrease, and vice versa when improving time management skills will leads to reduce work stress level can shed light on the dynamic relationship between the two factors and implementing interventions and measure changes in both work stress and time management skills, researchers can gain insights into the causality and potential for improvement. Factors such as individual differences,

coping mechanisms, and organizational support can influence the relationship between work stress and time management skills.

Mento et al. (2020) corresponds to and is consistent with the current study findings when examined the relationship between work stress and time management skills between healthcare professionals. They found a significant negative correlation between work stress and time management skills

The current study supported by **Hou et al. (2020)** as they examined the connection between primary healthcare workers' organizational commitment, time management, and workplace stress. the research revealed a negative correlation between work stress and time management skills. From the same respect **Galanti et al., (2021)** found a negative correlation between work stress and time management skills.

The current results not match with **Samroodh et al., (2022)** as they reported that other factors may have the greatest impact on work stress levels as job autonomy, organizational support, and individual coping strategies can act as mediators, mitigating the impact of work stress and time management abilities.

According to the current study, there is a statistically significant difference in the educational qualifications, time management skills and stress levels of staff nurses. From the perspective of the researcher the educational level attained by nurses has an impact on their ability to manage their time effectively and work-related stress. Nurses with higher qualifications may possess higher time management skills compared to those with lower qualifications. Higher education often emphasize on time management skills, prioritization, and efficient use of time, which can positively influence nurses' ability to manage their work tasks effectively and enable them to handle work-related stressors more effectively, leading to lower levels of stress.

The current study supported by **Alluhidan et al., (2020)** who found that higher qualifications may provide opportunities for nurses to advance to roles with greater autonomy and control, which can contribute to reduced work stress. Also the current result match with, **Hou et al., (2020)** they found nurses with lower qualifications may face increased stress level due to limited job options or a lack of specialized training and support from nurses point of view.

Another study done by **Ghawadra et al., (2020)** agree with the current study results they found significant difference between time management skills and work stress levels based on the nurses' qualifications, indicating that higher qualifications were associated with more effective time management and lower work stress .

In the same line, **Aloufi et al., (2021)** found a statistically significant difference in both time management skills and work stress levels based on the nurses' qualifications, indicating that higher qualifications were associated with better time management skills and lower work stress levels.

Lundin & Godskesen, (2021) contradict with the current study results as they found that no a statistically significant distinction between nurses time management skills and work related stress with their educational qualification.

Conclusions:

The current study showed that:

- The highest percentage of nurses have fair time management skills and lowest percentage of them have poor time management skills.
- Over two thirds of nurses have high work related stress level while the lowest percentage of nurses have low work related stress level .
- There is statistical significance negative correlation between works related stress levels and time management skills.
- There is a statistically significant difference in the time management skills, work-related stress levels, and educational qualifications of nurses.

Recommendations:

The following suggestions were made in light of the current study's finding:

- Provide training programs for nurses about time management strategies.
- Implementation of stress resolution techniques.
- Provide support and mentorship programs for early-career nurses.
- Empower nurses to minimize stressors in their daily practice.
- Implement motivation strategy to enhance time management ability, decrease work related stress.
- Farther studies should be implemented to test time management training programs and its effect on eliminating job stressors.

References:

- **Al Shobaki, M., & Abu-Naser, S., (2018):** The effectiveness of a website to improve the effectiveness of time management for employees in the beauty dental clinic, 5(2), 33-45.
- **Alkhawaldeh, J., Soh, K., Mukhtar, F., Peng, O, & Anshasi, H. (2020):** Stress management interventions for intensive and critical care nurses: a systematic review. Nursing in critical care, 25(2), 84-92.
- **Allande, R., García, J, Ruiz-Frutos,C., Domínguez, S., Rodríguez, C., & Gómez, J. (2021):** Work Engagement in Nurses during the

COVID-19 Pandemic: A cross-sectional study. In Healthcare (Vol. 9, No. 3, p. 253). MDPI

- **Alluhidan, M., Tashkandi, N., Alblowi, F., Omer, T., Alghaith, T., Alghodaier, H., & Alghamdi, M. (2020):** Challenges and policy opportunities in nursing in Saudi Arabia. Human Resources for Health, 18(1), 1-10.
- **Aloufi, M., Jarden, R., Gerdtz, M., & Kapp, S. (2021):** Reducing stress, anxiety and depression in undergraduate nursing students: Systematic review. Nurse Education Today, 102, 104877
- **Aryankhesal, A., Mohammadibakhsh, R., Hamidi, Y., Alidoost, S., Behzadifar, M., Sohrabi, R., & Farhadi, Z. (2019):** Interventions on reducing burnout in physicians and nurses: A systematic review. Medical journal of the Islamic Republic of Iran, 33, 77.
- **Bang, H., & Midelfart, T., (2018):** What characterizes effective management teams? A research-based approach. Consulting Psychology Journal: Practice and Research, 69(4), 334.
- **Barbaranelli, C., Ghezzi, V., Di Tecco, C., Ronchetti, M., Fida, R., Ghelli, M., & Iavicoli, S. (2018):** Assessing objective and verifiable indicators associated with work-related stress: validation of a structured checklist for the assessment and management of work-related stress. Frontiers in psychology, 9, 2424.
- **Barbaranelli, C., Ghezzi, V., Di Tecco, C., Ronchetti, M., Fida, R., Ghelli, M., & Iavicoli, S. (2018):** Assessing objective and verifiable indicators associated with work-related stress: validation of a structured checklist for the assessment and management of work-related stress. Frontiers in psychology, 9(1), 24-36.
- **Barua, N., Latif, M., & Islam, S. (2019):** Time management of the clinical nurses at Public Hospital in Bangladesh. Open Journal of Nursing, 9(10), 1041
- **Beyramijam, M., Akbari Shahrestanaki, Y., Khankeh, H., Aminizadeh, M., Dehghani, A., & Hosseini, M. A. (2020):** Work-Family Conflict between Iranian Emergency Medical Technicians and Its Relationship with Time Management Skills: A Descriptive Study. Emergency Medicine International, 2020.
- **Cambridge dictionary of philosophy, (2020):** Cambridge: Cambridge university press.
- **Chanie, M.,Amsalu, E., & Ewunetie, G. (2020):** Assessment of time management practice and associated factors between primary hospitals employees in north Gondar, northwest Ethiopia. PloS one, 15(1), 279-289.
- **Chen, Mengjie (2024):"**The effect of health quotient and time management skills on self-management behavior and glycemic control between individuals with type 2 diabetes mellitus." Frontiers in Public Health 12 (2024): 1295531
- **Cleary, M., Kornhaber, R., Thapa, D., Sancia, W., & Visentin, D. (2020):** A systematic review of behavioral outcomes for leadership interventions between health professionals. Journal of Nursing Research, 28(5), e118
- **Dewi, R., & Riana, I. (2019):** The effect of workload on work stress and burnout. Journal of Multidisciplinary Academic, 3(3), 1-5
- **Ding, Xue, Wenxin, & Shiai. (2024):** "Centralized or decentralized? Communication network and collective effectiveness of PBOs—A task urgency perspective." Buildings 14.2 (2024): 448.
- **Eckart, K., McPhee, Z., & Bolisetti, T. (2017):** Performance and implementation of low impact development–A review. Science of the Total Environment, 607(14), 413-432.
- **Ejeh, F.,Saidu, A., Owoicho, S., Maurice, N., Jauro, S., Madukaji, L., & Okon, K.(2020):** Knowledge, attitude, and practice between healthcare workers towards COVID-19 outbreak and work stress in Nigeria. Heliyon, 6(11
- **Ekienabor, E. (2016):** Impact of job stress on employees' productivity and commitment. International journal for research in business, management and accounting, 2(5), 124-133.
- **Galanis, P., Vraka, I., Fragkou, D., Bilali, A., & Kaitelidou, D. (2021):** Nurses' burnout and associated risk factors during the COVID-19 pandemic: A systematic review and meta-analysis. Journal of advanced nursing, 77(8), 3286-3302
- **Galanti, T., Guidetti, G., Mazzei, E., Zappalà, S., & Toscano, F. (2021):** Work from home during the COVID-19 outbreak: The impact on employees' remote work productivity, engagement, and stress. Journal of occupational and environmental medicine, 63(7), e426
- **Ghawadra, S., Lim Abdullah, K., Choo, W., Danaee, M., & Phang, C. (2020):** The effect of mindfulness-based training on stress, anxiety, depression and job satisfaction between ward nurses: A randomized control trial. Journal of nursing management, 28(5), 1088-1097
- **Ghiasvand, A,Naderi, M., Tafreshi, M., Ahmadi, F., & Hosseini, M. (2017):** Relationship between time management skills and anxiety and academic motivation of nursing students in Tehran. Electronic physician, 2(1), 3678-3684.
- **Giorgi G. , Leon,j. , Cupelli V. , Mucci N., Arcangeli G. (2014):** just look stressed or am i stressed? Work-related stress in a sample of Italian employees, Ind Health, 52 (2014), pp. 43-53.

- **Goldsby, E., Goldsby, M., Neck, C., & Neck, C. (2020):** Under pressure: Time management, self-leadership, and the nurse manager. Administrative Sciences, 10(3), 38
- **Goodarzian, F., Abraham, A., & Fathollahi-Fard, A. (2021):** A biobjective home health care logistics considering the working time and route balancing: a self-adaptive social engineering optimizer. Journal of Computational Design and Engineering, 8(1), 452-474
- **Gualandi, R., Masella, C., Piredda, M., Ercoli, M., & Tartaglini, D. (2021):** What does the patient have to say? Valuing the patient experience to improve the patient journey. BMC health services research, 21(1), 1-12
- **Hofstetter N. & Jaffe E., (2005):** The Early Childhood Leaders Magazine Science, 161, 8-11.
- **Holmgren K, Fjallstrom, M, & Hensing, G (2013):** Early identification of work related stress predicted sickness absence in employed women with musculoskeletal or mental disorders: a prospective, longitudinal study in a primary health care setting. Disabil Rehabil. 2013;35 (5):418–26.
- **Hou, T., Zhang, T., Cai, W., Song, X., Chen, A., Deng, G., & Ni, C. (2020):** Social support and mental health between health care workers during Coronavirus Disease 2019 outbreak: A moderated mediation model. Plos one, 15(5), e0233831.
- **Hussein, R., Everett, B., Ramjan, L., Hu, W., & Salamonson, Y. (2017):** New graduate nurses' experiences in a clinical specialty: A follow up study of newcomer perceptions of transitional support. BMC nursing, 16(1), 1-9.
- **Ilić, I., Arandjelović, M., Jovanović, J., & Nešić, M. (2020):** Relationships of work-related psychosocial risks, stress, individual factors and burnout–Questionnaire survey between emergency physicians and nurses. Medycyna pracy, 68(2), 167-178.
- **Jermsittiparsert, K., Petchchedchoo, P., Kumsuprom, S., & Panmanee, P. (2021):** The impact of the workload on the job satisfaction: Does the job stress matter?. Academy of Strategic Management Journal, 20, 1-13
- **Kakemam, E., Raeissi, P., Raoofi, S., Soltani, A., Sokhanvar, M., Visentin, D., & Cleary, M. (2019):** Occupational stress and associated risk factors between nurses: a cross-sectional study. Contemporary nurse, 55(2-3), 237-249..
- **Lundin, E., & Godskesen, T. (2021):** End-of-life care for people with advanced dementia and pain: a qualitative study in Swedish nursing homes. BMC nursing, 20(1), 1-11.
- **Mento, C., Silvestri, M., Bruno, A., Muscatello, M., Cedro, C., Pandolfo, G., & Zoccali, R. (2020):** Workplace violence against healthcare professionals: A systematic review. Aggression and violent behavior, 51, 101381.
- **Mozzarelli, F., Catinella, A., & Tuccio, C. (2024):** Mapping ward managers' core competencies using the Balanced Scorecard model. Nursing Management, 31(1).
- **Radhika Kapur, (2020):** Time Management Skills: Fundamental in taking out Time for all Job Duties
- **Reed, K., Reed, B., Bailey, J., Beattie, K., Lynch, E., Thompson, J., & Wilson, R. (2021):** Interprofessional education in the rural environment to enhance multidisciplinary care in future practice: Breaking down silos in tertiary health education. Australian Journal of Rural Health, 29(2), 127-136
- **Salem, M., & Youssef, M. (2017):** Health care providers' perspectives for providing quality infection control measures at the neonatal intensive care unit, Cairo University Hospital. American Journal of Infection Control, 45(9), e99-e102.
- **Samroodh, M., Anwar, I., Ahmad, A., Akhtar, S., Bino, E., & Ali, M. (2022):** The indirect effect of job resources on employees' intention to stay: A serial mediation model with psychological capital and work–life balance as the mediators. Sustainability, 15(1), 551-559
- **Stein, S., & Bartone, P. (2020):** Hardiness: Making Stress Work for You to Achieve Your Life Goals. John Wiley & Sons.between medical doctors in Addis Ababa, Ethiopia. PLoS One.;13(8),201
- **Ulenaers, D., Grosemans, J., Schrooten, W., & Bergs, J. (2021):** Clinical placement experience of nursing students during the COVID-19 pandemic: A cross-sectional study. Nurse education today, 99 (12), 104-146
- **Van Bogaert, P., Peremans, L., Van Heusden, D., Verspuy, M., Kureckova, V., Van de Cruys, Z., & Franck, E. (2019):** Predictors of burnout, work engagement and nurse reported job outcomes and quality of care: a mixed method study. BMC nursing, 16, 1-14.
- **Wayne, R. (2007):** A review of the time management literature, Journal of Emerald, 2007, 36(2), 182-191.
- **Yalmaz A., & Eldelekioglu J., (2010):** Social and Behavioral Science, 2(2), 342- 348.
- **Zasa, F., Patrucco, A., & Pellizzoni, E. (2020):** Managing the hybrid organization: How can agile and traditional project management coexist?. Research-Technology Management, 64(1), 54-63.