

Relation between Time Management Skills and Stress Level among Fourth Year Students at Faculty of Nursing

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Abstract

Background: In the highly competitive world today's nursing students had to achieve high goals in less time which lead to high level of stress among students especially due to the nature of study in nursing and having continuous examination. Thus, students can limit their academic stress by use of effective time management. **Aim:** the aim of this study was to assess the relation between time management skills and stress level among fourth year students at Faculty of Nursing. **Design:** Descriptive correlational research design was used to achieve the aim of the current study. **Subjects:** of this study compromised convenient fourth year nursing students who enrolled for the academic year 2017-2018 (n=235). **Setting:** Faculty of Nursing, Minia University. **Tools:** two tools were used to collect data pertinent to the study as: Time management skills questionnaire; and student nurse stress index. **Results:** The study results revealed that nursing students had moderate time management skills scores (75.3%) and moderate stress level scores (54.5%). **Conclusion:** this study concluded that, there was a negative correlation between time management skills and stress level. **Recommendations:** Conducting workshops to develop student's time management skills and stress coping skills. **Keywords:** Time management skills, Stress level, Fourth year students, Faculty of Nursing.

Introduction

In an era of increasing competition in nursing field, nursing education is considered as one of the most crucial element for improving the quality of professional identity for the future nurses (1). Today's nursing students are the nucleus of the professional nurses of tomorrow, who will interact with their colleagues and other health care professionals on a daily basis and provide the care for patients, their families and society in the area of health and education in the future. Therefore, nursing students are faced with a lot of academic responsibilities that let them feel that 24 hours in day is too short time due to the nature of their study in nursing such as: assignments, and hospital and laboratory practice as well as the continuous practical and theory exams (2).

Stress is a crucial and likely response of daily living, and is unavoidable because it related to any external incident, whether it is satisfying or worries producing. A person reaction towards stress found on whether an event is judged as a challenge or a warning. Challenging stimulus can bring constructive outcome for instance improved task performance and increase motivation. In other way threatening ones can lead social discomfort, depression, anxiety, and even develop suicidal intention (3).

Stress in nursing education is acknowledged as one of the most important issues in the modern world (4). Stress refers to a forceful interaction between the individual and the environment. In this interaction and boundaries related to work may be apparent as threatening to exceed the person's resources and skills (5, 6).

Furthermore, nursing students are prone to the incidence of stress compared to other students, because they are often faced with a situation that requires them to take many responsibilities such as; care for the life and death of others; aware of new social spheres; adjust to the academic expectations that may be difficult; mastering all learning outcomes in a specific duration of the study; master many theories that must be learned; and learn with people of different cultures and beliefs (7).

Moreover, if students are not able to adapt to the stress experienced, this stress will affect their academic performance and overall health condition. Nursing students in general, may share general concerns and stressors which may possibly be internal or external. However, cultural beliefs and situational factors could also affect their levels of stress (8).

Thus, time management has a greater buffering effect on academic stress and poor time management has been found to be a predictor of academic stress. More than that, academics and time management were often mentioned together as factors causing stress (9). Time management can be defined as the act or process of exercising conscious control over the amount of time spent on specific activities, especially to increase efficiency or productivity. Time management may be aided by a range of skills, tools, and techniques used to manage time when accomplishing specific tasks, projects and goals (10).

Nursing student may need to prioritize all their activities to provide more time for other activities that are important as well. Time management may be the best tool for student nurses. Also, time management is one of the most important techniques that everyone needs to learn (11). Therefore, learning how to manage time effectively will help students feel more relaxed, focused and in control (12). In addition, good time management such as setting goals and priorities as well as monitoring the use of time can facilitate productivity and minimize stress, contributing to work effectiveness (13).

Significance of the study

Time management is a major issue among nursing faculty students which can affects how they view and use the time available to them, and how they adjust to their academic responsibilities. Some of nursing faculty students are very stressful by: busy schedules, midterms, final examinations, research papers, other assignments, and clinical experiences at hospitals. Students often feel stressed by the many requirements of nursing curricula.

In addition, nursing faculty students experience a clinical component, which is highly stressful. Also, all these elements combined with outside responsibilities such as family and hanging out with friends that can lead to unnecessary stress. So the researcher introducing this study to assess the relation between time management skills and stress level among nursing students.

Aim of the study:

The aim of current study was to assess the relation between time management skills and stress level among fourth year students at Faculty of Nursing.

Research Questions

- 1) What are the time management skills among fourth year students at Faculty of Nursing?
- 2) What is the stress level among fourth year students at Faculty of Nursing?
- 3) Is there a relation between time management skills and stress level among fourth year students at Faculty of Nursing?

Subjects and Methods

Study design:

Descriptive correlational research design was used to achieve the aim of the current study.

Setting:

The study was conducted at Faculty of Nursing, Minia University.

Subjects:

The subjects of study sample included all fourth year nursing students who enrolled in Faculty of Nursing at Minia University for the academic year 2017-2018. Total number was 265 participants but 30 of them refused to participate in the study sample, and only 235 were used in statistical analysis.

Tools for data collection:

Data collected through the utilization of two tools as follow:

Tool (1): Time management skills questionnaire; It consisted of two parts:

Part I: personal data:

It used to collect data about nursing students. It included five items related to age, sex, residence, number of family members, and monthly household income.

Part II: Time management skills questionnaire:

This tool developed by (Alay and Kocak, 2002)⁽¹⁴⁾ and translated into Arabic by the researcher to assess the time management skills among nursing students. It consisted of 27 items; and divided to 3 dimensions as follow: time planning (16 items), time attitude (7 items), and time wasters (4 items) with 5 point likert scale ranged as: (never=1, infrequently=2, sometimes =3 frequently =4, always =5). The scores were reversed in the negative statements.

The scoring system ranged from [27 to135]. If the total scores were less than 50% considered as low time management skills. If the total scores ranged from 50% less than 75% considered as moderate time management skills, and if the total scores were 75% or more considered as high time management skills.

Tool (2): student nurse stress index (S.N.S.I)

This tool developed by (Jones and Johnston, 1999)⁽¹⁵⁾ and translated into Arabic by the researcher to assess the stress level among nursing students. It consisted of 22 items; and divided into 4 dimensions as follow: academic load (7items), clinical concerns (7 items), personal problems (4 items), and interface worries (7items) with 5-point Likert scale ranged as: (1=not stressful, 2= low stress, 3=moderate stress, 4= stressful, 5=extremely stressful).

The scoring system ranged from [22 to 110]. If the total scores were less than 50% considered as low stress level. If the total scores ranged from 50% less than 75% considered as moderate stress level, and if the total scores were 75% or more considered as high stress level.

Validity of the tool:

The first tool "time management skills" was developed by Alay and kocak (2002) and the second tool "nursing student stress index " was developed by Jones and Johnston (1999).

Reliability of tools:

The tools were tested and demonstrated good internal reliability with cronbach' alpha test. The alpha coefficient for time management skills tool was ($\alpha= 0.726$), and for nursing student stress index tool was ($\alpha=0.801$).

Pilot study:

A pilot study was conducted on 10% (27) of participants who selected randomly from the total participated students prior to data collection; in order to facilitate the execution of the study. Results indicated that; the tools were applicable and don't need any changes.

Study procedure

An official letter was granted from the Nursing Faculty Dean; vice dean for education and student affairs; and heads of all academic department in Faculty of Nursing at Minia University. This letter included a brief explanation of the objectives of the study.

A group interview was done by the researcher to explain the nature and purpose of the study. Data collection tools were introduced to students to be filled. Data was collected two days per week during the second semester of the academic year 2017-2018, and each interview consisted of ten to fifteen students and lasted for thirty minutes. The time required for filling the questionnaire was estimated after making of the pilot study, it was approximately 25 minutes.

Ethical consideration

A written initial approval was obtained from the research ethics committee of the Faculty of Nursing, Minia University. Approval to conduct the study obtained from the Dean of faculty, as well from the Vice dean for education and students affairs in Faculty of Nursing at Minia University. The participants were informed that their participation in the study will be completely voluntary and there will be no harm if they not participate in the study. Informed consent was obtained from participating students after explaining the nature and benefits of the study. Each assessment sheet was coded and student names were not appearing on the sheets for the purpose of anonymity and confidentiality.

Statistical analysis:

The collected data were coded, categorized, tabulated and analyzed using the statistical package for the social science (SPSS 20.0). Data was presented using descriptive statistics in the form of percentages, frequency, mean, and standard deviation. Inferential statistical tests of significance

such as Friedman's man ANOVA, Pearson correlation, and independent t-test were used to identify group differences and the relations among the study variables. Level of significance at $p < 0.05$ was used as the cut off value for statistical significance.

Results

Table (1): percentage distribution of the fourth year nursing students according to personal data characteristics

Personal characteristics	Fourth year nursing students (n=235)	
	No	%
Age		
• 19-21 yrs	59	25.1
• 22-24 yrs	176	74.9
Mean+ SD	21.97+0.72	
Sex		
• Male	96	40.9
• Female	139	59.1
Residence		
• Rural	175	74.5
• Urban	60	25.5
No of family members		
• 1-3	6	2.6
• 4-6	120	51.1
• 7-10	109	46.4
Monthly household income		
• low	91	38.7
• Moderate	112	47.7
• High	32	13.6

Table (1) showed that about three quarter of the fourth year nursing students (74.9%) had age ranged from 22-24 years, more than half (59.1%) of them were female, and near three quarter (74.5%) of them come from rural areas. In addition more than half of them (51.1%) had 4-6 family members, and (47.4%) of them were moderate house hold income.

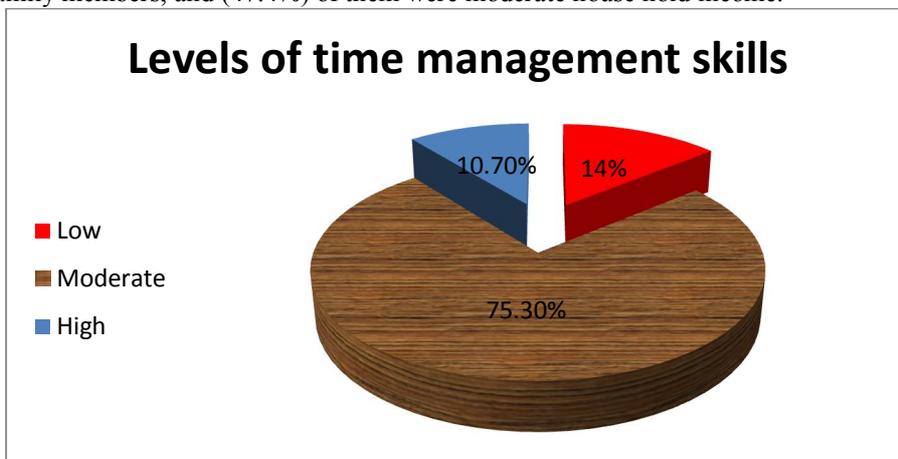


Figure (1): levels of time management skills among fourth year nursing students

Figure (1) presented that the time management skills level among the fourth year nursing students were moderate level (75.3%), whereas (14%) of them possessed low level time management skills, and (10.6%) of them had high level time management skills.

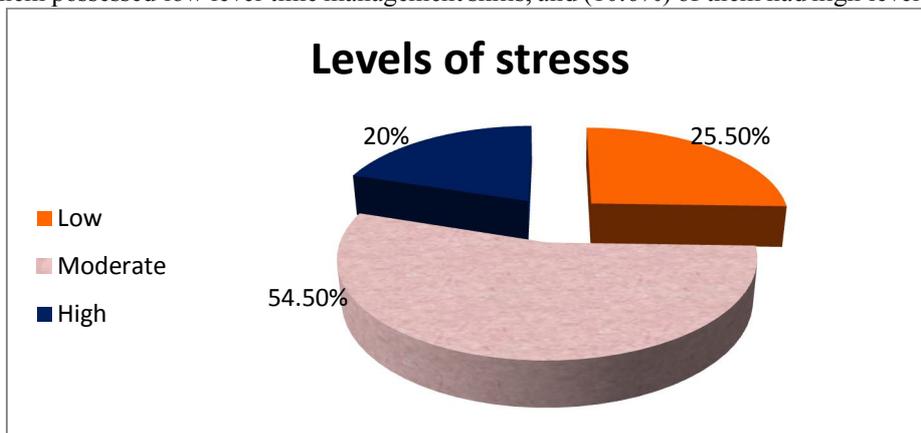


Figure 2: Levels of stress among fourth year nursing students

Figure (2) presented that the stress level among the fourth year nursing students were moderate level (54.5%) while (25.5%) of them possessed low stress level, and (20%) of them had high stress level.

Table (2): Correlation between time management skills and stress level among the fourth year nursing students

Variable	Time management skills		Stress
Time management skills	R	1	0.364-
	P		0.000*
Stress	R	0.364-	1
	P	0.000*	

Table (2) reported that there was a fair negative correlation (0.364-) between time management skills and stress level among fourth year nursing students.

Discussion

Academic stress among university students has been a topic of interest for many years. Faculty students suffer from stress due to the transitional nature of college life (16). Nursing student can manage stress through using many methods as; daily exercise, eat natural food, increase drinking of water, stop an undesirable thoughts or feelings, determine goals and working to achieve them, and manage time effectively (17).

Time is an important resource and cannot be renewed (18). Time is to be deemed very substantial to human beings as age and capital; especially that entire human life is made of time segments (19). Time is a scarce resource. Managing time and determination of priorities are essential skills for the nurse student (20).

The current study was conducted to assess the relation between time management skills and stress level among fourth year students at Faculty of Nursing. Regarding the personal data of the students, this result revealed that about three quarter of nursing students age ranged between 22-24 years, above half of them were female, about three quarter of them come from rural areas, nearly half of them had 4-6 family members, and less than half of them were moderate house hold income.

In the current study it was found that about three quarter of the nursing students were at moderate level of time management skills. This means that most of students were not at positive or negative extreme positions but stayed at moderate level in terms of their time management. The student were at moderate level might be due to curriculum of nursing management that contain time management topic; and not high level may be due to the increased time demands including busy schedules, midterm exams, final examinations, research papers, assignments, and practical training imposed upon nursing students which make them still in a need for having training about time management. However, students value their time; but they need to be more efficient when managing their time by giving more concern to factors that lower their total score of time management such as no short range planning, no goal setting, and procrastinate till the exam date.

This was agreed with **Ocak and poyraz (2016)** (21) who found that participants were generally in moderate level in terms of their time management skills and asserted that students with higher time management skill might be expected to show less tendency towards academic procrastination. Also this finding was in the same line with the results of **Kaya, et al., (2012)** (22) who mentioned that nursing and midwifery students' time management skills were at mid-level point. Parallel to this study, the findings obtained from another study conducted by **Kebriaei, Sabahi, and Saeedi (2014)** (23) on

students of Zahedan University of medical sciences and who found that time management skills were moderate.

However this finding was inconsistent with the results of **Hosseini et al., (2009)** (24) who found the lowest score of study skills associated with time management. Also, **Babacan and Kucukosmanoglu (2015)** (25) found that majority of the participating students had high-level time management skills.

The difference between these findings and finding of current study might be due to the nature of study as the present study's sample was nursing students whereas **Hosseini, et al., (2009)** (24) and **Babacan and Kucukosmanoglu (2015)** (25) studied students from other faculties. Nursing students are confronted with more responsibilities than other students that enforce them to manage their time.

Moreover, the current study presented that more than half of the nursing students had moderate level of stress and about one quarter of them had low level. This might be due to nursing curriculum introduced to fourth year nursing students in the psychiatric department which teach them how to cope with stressful situations. Also, students didn't have low level may be due to schedule courses load that can increase their feeling of stress. In this sense, **(Alsaqri (2017)** (26) stated that mild stress level can be helpful to the individual's health particularly when confronted with challenge and responsibility.

The present study finding was in line with findings of **Singh, Sharma and Sharma (2011)** (27) who found that two third of interns had moderate stress. Also, the finding of **Prasad, et al., (2013)** (28) revealed that most of students 51.6% had mild level of stress and only 1.7% had severe stress.

On the other side, this finding appeared to be irreconcilable with a study conducted by **Mahfouz and Alsahli (2016)** (29) which showed that 94.1% of nursing students had high stress whereas 5.9% had moderate stress, while no one of the students had low stress. This might be due to the study population of this study was consisted of students from the faculty of nursing level five who were newly in practicing the clinical training in different hospitals. Hence, they might confront a greater amount of stressors because of being set in a new environment, detachment from the guardians, and fear of making mistakes in the treatment of patients.

Also, the finding of current study was contradicted to a study conducted by **Pariat, Rynjah and Kharjana, (2014)** (30) who found that majority of the participants were experiencing very low stress on their study on college students enrolled in five reputed colleges of Shillong city.

Adding to the above mentioned results, the current study revealed a fair negative correlation (0.364-) between time management skills and stress level. This could be

interpreted in the light of nursing students were confronted with much responsibilities such as vast curriculum, exams, and different type of assignments which make them very stressful; but the stress level was moderate due to psychiatric nursing curriculum they mastered. Students who did not manage their time might not be able to balance their study time and their leisure time which increased their stress level. Conversely, students who managed their time might be able to balance their study life and work life which minimized their stress level.

This finding was consistent with **Abdolvand and Saki, (2010)**⁽³¹⁾ on a study conducted to investigate time management and occupational stress in secondary and high school managers and the results showed that there was an inverse and significant relationship between stress and time management. Also, results of current study was agreed with **Souza, et al., (2016)**⁽³²⁾ who stated that difficulty of time management for the fulfillment of academic activities at the expense of leisure and recreation can cause physical and psychological consequences of stress.

However, finding of current study was in contrast to **Wahat, et al., (2012)**⁽³³⁾ that showed no relationship between time management and stress in students of speech Sciences University; and asserted that it might be due to the fact that students used computer based planner and they almost never prepared for their exam during the last minute. Also they were able to prioritize their studies from leisure activities, even though, the students often felt stressed during their clinical years.

Conclusion:

It can be concluded from the current study that time management has a buffering effect on student's stress level. Time management is a main factor that contributes to a sense of wellbeing and low stress level among fourth year nursing students studying in Minia University. Moreover, from this study it can be concluded that fourth year nursing students had moderate time management skills and moderate stress level. And, there was a negative statistical significant relation between time management skills and stress level among nursing students.

Recommendations:

Based on the findings of the current study, the following recommendations are suggested

- Conducting workshops to develop student's time management skills and stress coping skills.
- Nursing educators should have more workshop to develop their time management skills and coping stress strategies
- Curriculum designer should consider the optimization of curriculum to offer a less stressful experience for students.

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