

## THE STUDENT NURSES' SKILL OF MANAGING THEIR TIME

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### Abstract:

**Introduction:** Time is one of the basic resources in each human activity. It holds a special place in health care. Either its deficiency or underestimation may lead to the negative and even fatal aftermath for human life.

**Objective:** The purpose of this report is to identify the reasons for poor time management of student nurses.

**Methods:** A standardized questionnaire was answered by a total of 89 student nurses from the 1st year and 3rd year courses, in the nursing bachelor degree from the Ruse University of Angel Kanchev, Bulgaria. The questionnaire was held in January 2021.

**Results:** From this study we have determined that those who are capable of managing their time and always plan well are just 26% (23n) of all respondents, more than a half of them only sometimes plan their tasks, 61% (54n), whereas 13% (12n) never do. As for the compliance of the deadlines, only 31.5% (28n) of them always manage to do so, while the rest of the students only sometimes do so.

**Conclusions:** The inability of student nurses to plan their time is just one of the reasons for concern. It was determined that the lack of training for effective time management, intense workload in higher education, not realizing they have to manage their time and their young age, significantly affect the student nurses' proper management of time.

**UDC Classification:** 37.04, **DOI:** <https://doi.org/10.12955/pmp.v2.171>

**Keywords:** Time Management; Student Nurses; Time Management Training; Time Planning Skills;

### Introduction

Time management for students is crucial for their success. When students are still freshmen at university, they often find difficulties in managing their time. Just like all other organization resources – financial, material, human – time is also in the management system of this organization. Time gets into and participates in the process of transforming resources into results. And of course, time wastes like other resources in this process. Without it, it is impossible for one organization to work (Borisova, 2005).

Time management is a process of both organization and planning how to divide one's time between specific activities. Planning expresses itself in two important steps dealing with organizing one's life, how to get from the current to the target point, and how to achieve this goal in short amount of time (Waterworth, 2003; Eldeleklioglu, 2008). Good time management allows us to work smarter, not more difficultly. It allows us to do more things for a shorter time, even when time is limited and it's pressing us. Our inability to manage time reduces the effectiveness of our work, and causes stress. This is especially true for student nurses.

Time management is one of the most important and difficult skills for student nurses to form. The students realize at the very beginning of their training in university that time management is one of the hardest aspects of their learning process. With so much to do, commitments can sometimes seem impossible to fulfill, and overall, time is one of the university's most valuable resources. (Hristova et al., 2019).

In order for students to learn how to manage their time, they need to make certain efforts. Effective time management personally guarantees comfort and emotional stability, while professionally – it assists the organization's prosperity and development (Draganova & Doseva, 2012).

The students studying the Nursing bachelor degree in the Ruse university of Angel Kanchev, Ruse Bulgaria, are not trained to manage their time in any of their disciplines. They manage their time without being trained for it. We need to study their own concept for time management, and the necessity of assisting that process, so to be as useful as possible. The purpose of this report is to identify the reasons for poor time management in student nurses.

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## Methods

A standardized questionnaire was given to a target group – students studying the Nursing bachelor degree, in the Ruse university Angel Kanchev, Bulgaria. The processing, analysis and graphical presentation of data and results were carried out with the help of the statistical programs SPSS 20.0 and RStudio (Pencheva et al., 2018).

## Results

In January 2021 a total of 89 student nurses from the first year and the third year were questioned. They responded to 5 statements concerning time management during their training process. The questions were assessed on a 3-pointscale: Always, Sometimes, Never. The data was automatically worked up by the applied software.

Meeting the deadlines of performance eliminate the risk of hindering the work of other people, and of the team in general. The students' daily routine is dealing with meeting all kinds of deadlines, their own opinion on how far they succeed on meeting them, and whether they accomplish all tasks for the day, is shown in Table 1.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	28	31.5	31.5	31.5
	Sometimes	61	68.5	68.5	100.0
	Total	89	100.0	100.0	

Source: Author

Only 31.5% (28n) of the student nurses always manage to finish what they have for the day, whereas the rest of them only sometimes manage – 68.5% (61n). It's of paramount importance for the student nurses to plan their time so they can meet the deadlines for the tasks that are laid to them, and to finish everything planned for the day, or the period.

One of the important steps for effective time management is planning. It allows one to both foresee and vary between tasks.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	23	25.8	25.8	25.8
	Sometimes	54	60.7	60.7	86.5
	Never	12	13.5	13.5	100.0
	Total	89	100.0	100.0	

Source: Author

From the study, we have determined that those student nurses who always plan their time are just 26% (23n) of all the respondents. More than a half of them only sometimes plan their tasks – 61% (54n), and 13% (12n) never do. Good time management is primarily and foremost good planning for the future.

Good time management is achieved via planning, and the development of a schedule. Of course, there is no exact formula for the perfect schedule, but a well-structured plan saves a lot of time. One of the most useful things for the organization of time is to write down plans, schedules, deadlines and tasks in a To-do list. We have studied the student nurses' self-assessment for planning their time by writing down a To-do list.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	21	23.6	23.6	23.6
	Sometimes	39	43.8	43.8	67.4
	Never	29	32.6	32.6	100.0
	Total	89	100.0	100.0	

Source: Author

Keeping a to-do list helps arrange one’s priorities and avoid senseless wastes of time. It’s a disturbing fact that one third of the respondents never keep a To-do list – 32.5% (29n), and only 23.5% (21n) all always do. The rest of them state that only sometimes do they plan their tasks for the day, or for a week in written form – 44% (39n).

Planning is one of the most important skills for managing time. Sorting out tasks by priority is of great importance for good time management.

**Table 4: Answers to the statement: I prioritize my list in order of importance, not urgency.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	25	28.1	28.1	28.1
	Sometimes	46	51.7	51.7	79.8
	Never	18	20.2	20.2	100.0
	Total	89	100.0	100.0	

Source: Author

Only 28.1% (25n) of the responding students have answered positively to the statement that they prioritize their tasks by importance and not as an emergency case, while more than a half of the students do that sometimes – 51.7% (46n). The remaining 20.2% (18n) never do prioritize their tasks by importance.

The results obtained from the study have shown that the majority of the student nurse respondents, are unable to manage their time properly, but didn’t clarify the reasons for that. This necessitated a new questionnaire among the same group of respondents. In the second questionnaire, the student nurses expressed their opinion on the main reasons for their poor time management, thus identifying four main groups of reasons: they are not trained for that in secondary school; an intense workload in higher education; they didn’t know they have to manage their time; according to them, their young age doesn’t suggest time management.

The programming language and free software environment for statistical computing and graphics RStudio was used for data analysis. The initial analysis was performed by calculating descriptive statistics including frequency and percentage (Table 5.).

**Table 5: The main reasons for poor time management.**

The main reasons for poor time management				
	Frequency	Percent	Valid Percent	Cumulative Percent
they are not trained for that in secondary school	46	51.7	51.7	51.7
an intense workload in higher education	28	31.5	31.5	83.1
they didn’t know they have to manage their time	11	12.4	12.4	95.5
according to them, their young age doesn’t suggest time management	4	4.5	4.5	100.0
Total	89	100.0	100.0	

Source: Author

We have determined that the student nurses who are always satisfied in the way they manage their time account for only 46.1% (41n) of all the respondents. More than half of the student nurses are only sometimes satisfied in the way they manage their time – 52.8% (47n), and just one student (1.1%) is never satisfied in their own time management. The majority of the student nurse respondents are unable to manage their time properly. These results need to be further analyzed after the second questionnaire, where different possible reasons for poor time management were given by the students.

Ordinal logistic regression models the relationship between a set of independent variables and an ordinal response variable. An ordinal response needs to have at least three groups with a natural order, such as hot, medium, and cold.

We have chosen Ordinal regression, as it helps us determine which of our independent variables have a statistically significant effect on our dependent variable. For categorical independent variables (as in our case), we can interpret the odds that one “reason” (e.g., "they’re not trained for that in secondary school") has a higher or lower score on our dependent variable.

For the purpose of this project:

1. Independent categorical variables:

- Reason 1: "they're not trained for that in secondary school";
- Reason 2: "an intense workload in higher education";
- Reason 3: "they didn't know they have to manage their time";
- Reason 4: "according to them, their young age doesn't suggest time management";

2. Dependent variable:

The last statement to which the student nurses have responded, is about their personal satisfaction from their time management. This is indeed the dependent variable in our model. The student's answers have been used as ordinal levels ("always", "never", "sometimes").

The aim is to observe whether each of the reasons really has a significant effect on the time management of students.

The first step is to create a two-way table between each of the possible reasons and time management.

Reason 1 ("they're not trained for that in secondary school") and Satisfaction of time management (Table 6.).

Table 6: Reason 1			
	Always	never	sometimes
No	23	0	20
Yes	18	1	27

Source: Author

Reason 2 ("an intense workload in higher education") and Satisfaction of time management (Table 7.).

Table 7: Reason 2.			
	Always	never	sometimes
no	23	1	37
yes	18	0	10

Source: Author

Reason 3 ("they didn't know they have to manage their time") and Satisfaction of time management (Table 8.).

Table 8: Reason 3.			
	always	never	sometimes
No	36	1	41
Yes	5	0	6

Source: Author

Reason 4 ("according to them, their young age doesn't suggest time management") and Satisfaction of time management (Table 9.).

Table 9: Reason 4.			
	always	never	sometimes
No	41	1	43
yes	0	0	4

Source: Author

An interesting observation is that all of the students who think that their young age is the main reason for poor time management, have selected 'sometimes' as the answer to the question 'I am satisfied with the way I use my time'. Therefore, we can conclude that Reason 4 is a significant reason for poor time management and young students think it is normal for their age to not be fully satisfied with the way they use their time.

We have used the polr command from the MASS package to estimate the ordered logistic regression model.

Null Hypothesis  $H_0$ : The two variables are independent of each other.

Alternate Hypothesis  $H_1$ : The two variables are related to each other.

Coefficients and t-values for each reason have been calculated. However, some people are not satisfied without seeing a p-value. One way to calculate a p-value in this case is by comparing the t-value against the standard normal distribution. Results are as follows (Table 10.).

	Value	t value	p value
Reason 1	-16.15375	-56.25158	0.000000e+00
Reason 2	-17.14126	-50.33856	0.000000e+00
Reason 3	-16.36178	-34.75741	1.071012e-264
always never	-16.57112	-84.44818	0.000000e+00
never sometimes	-16.52163	-83.54029	0.000000e+00

Source: Author

We can also get confidence intervals for the parameter estimates. If the 95% CI does not cross 0, the parameter estimate is statistically significant.

Reason 1: (-16.71659,-15.59091)

Reason 2: (-17.80866,-16.47385)

Reason 3: (-17.28442,-15.43915)

All of the intervals are fully negative, hence all the reasons are significant.

For additional information, let us explore the odds of satisfaction for each of the reasons.

The output shows that for students who selected "they're not trained for that in secondary school"(q1) as the reason, the log odds of being always satisfied with time management (versus never or sometimes) is actually 0.53 points lower than students who did not selected this as the reason. In other words, that for students who selected "they're not trained for that in secondary school"(q1) as the reason, the odds of being less satisfied of their time management is  $\exp(0.53)=1.7$  times that of students who did not select this as the reason.

Similarly, for "an intense workload in higher education" (q2), the odds of being less satisfied of their time management is  $\exp(-1.06)=0.34$  times that of students who did not select this as the reason.

for "they didn't know they have to manage their time" (q3), the odds of being less satisfied of their time management is  $\exp(0.05624)=1.06$  times that of students who did not select this as the reason.

### Discussion

Multiple scientific studies report the link between time management, and students' academic achievements, which are usually measured either by exams, or ongoing evaluation. The respective studies determine that efficient time management is positive on their results, whereas poor time management reduces their academic results. That's why the universities could, and should, play a greater role in assisting the students in their understanding of time management from their first year of studies onwards (Meer et al., 2010). These skills will help them learn to efficiently and use their time well in different working environments, where they can have various roles and responsibilities during their training, or after their graduation. (Kaya et al., 2012).

We have determined the inability of time planning in a greater part of the student nurses. No one can afford to always finish everything at once and at any cost, and at the same time, with quality. The ability for prioritizing tasks is different for each of the individuals, and it's connected with the person, and his experience (Middleton et al., 2018). Those who are trained well for efficient time management, can prioritize their tasks by importance, and not as an emergency. Therefore, the priority tasks are the most important and urgent ones, while the rest of them remain in the background for the given moment.

A number of factors negatively affect good time management, such as a lack of training for effective time management, high workload of the educational process, many things to do, insufficient planning and other factors. The lack of training for effective time management among student nurses is one of the factors for the negative results obtained in the study. Setting objectives and effective planning is an essential part of proper time management. Nurse students cannot manage their time well and focus if they prioritize the wrong things and invest time in tasks that yield little or no results related to their goals (Petrova, 2017).The group of students in this study has an average age of 22.8 years and this

gives us reason to believe that the young age of students and lack of life experience also have a negative impact and hinder the effective management of time. Therefore, more emphasis should be placed on practical case studies and job training with electronic apps for time management.

## Conclusion

A cause for concern is that many student nurses are unable to plan their time. Another disturbing conclusion is that only one of every three respondents always manages to complete their tasks for the day. A more profound study of how effectively do student nurses plan their time is needed in addition to a study on ways to achieve effective time management. We believe that an introduction of a program for training the student nurses how to effectively manage their time would be beneficial for organizing their daily tasks in both an academic and learning environment, and also for their forthcoming professional and personal development. The findings of this study show the need for these students to be trained to manage their time with methods that are appropriate for their age. By learning and using time management skills every day, student nurses can successfully go through their daily tasks and live happier and stress-free lives. It's necessary to provide both training, and consultations in regard to the student nurses' time management skills, especially in the first year of university. The introduction of the compulsory discipline, effective time management, in secondary education will solve most of the students' problems and prepare them to cope with the multiple responsibilities with advancing age. Through the second questionnaire among the student nurses, we tried to clarify the main reasons for poor time management. Two main reasons for this emerged from the analysis of the responses, namely the lack of training for effective time management, and the intense (high) workload of tasks in higher university education. A tutorial academic program for easy adaptation and orientation for all freshmen at Ruse University Angel Kanchev, is successfully applied. An additional admonitory program Student-student works in the Department of Health care, which is an innovation in the training process of nurses in Ruse University. The goal of the program is a successful psycho-social adaptation, reducing the freshmen's level of stress, and increasing academic performance. Nevertheless, training of time management is required in the initial courses at the university.

In conclusion, the data collected from the second questionnaire of student nurses were analyzed to identify the problem of time management and the reasons for this. Based on this, the null hypothesis ( $H_0$ ) was rejected in favor of the alternative hypothesis ( $H_1$ ). It was determined that the lack of training for effective time management, intense workload in higher education, not realizing they have to manage their time and their young age, significantly affect the proper management of time.

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