Time Management Experience for 1st Year Students of the Faculty of Medicine

Rudīte Koka

Latvia, Rīga Stradiņš university, Department of Biology and microbiology

Ingus Skadiņš

Latvia, Rīga Stradiņš university, Faculty of Medicine

Abstract

Stradinš University (RSU) has almost 70-year-experience in implementing health care and 20-year-experience social science studies. RSU has more than 9000 students, 26% of whom are international students. Beginning of studies at Rīga Stradinš university (RSU) Faculty of Medicine, students have to change several aspects of studies compare to high school: much deeper study content and scope of studies, type of learning, more emphasis on full-time work, practical class and lecture schedule for day, week, semester, types examinations and their regularity, new organizational culture, study year members, study course lecturers, must learn new concepts, such as matriculation, study regulations, study course, department, colloquium and others. Some students of the Faculty of Medicine do not set priorities in time and end up lacking time, do not fulfill their goals, are not satisfied with their study results, even have health problems. Therefore, time planning, selection of appropriate study strategies, setting priorities is a challenge for 1st year students and lecturers to make a pedagogical contribution to help students successfully move forward in the study process. The aim of the research is to find out the student's opinion about time management, the set goals and their implementation and implement and test a support system at the university level.

Keywords: time management, time planning strategies, self-discipline, effective support.

Introduction

Theoretical background

Time management and setting priorities are skills that each student and lecturer at the university develops on daily basis. Often, we each encounter difficulties, such as too much work to be done in one unit of time. This most often indicates errors in work planning. Another typical example of errors are delays and non-compliance with deadlines in setting priorities.

We each begin to learn time management skills firstly in the family and then continue to do it in school, and they will be needed throughout our lives. At school, you learn how to organize your time, how to set and follow your goals, how to organize your work, how to develop and improve self-discipline skills. At the same time, personal responsibility is being improved. According to the current educational standard in Latvian schools in social lessons students learn to analyze their strengths and weaknesses, learn strategies on how to improve their weaknesses, learn basic time management skills.

It is just as important to learn to be aware of your strengths, where and how to use them. Therefore, when starting their studies at the university, students use the acquired skills, but as the data of our research show, time management skills for students are developed at a different level.

As experts from other universities admit, then a time is a finite resource. Balancing responsibilities at your job, home, and school is not easy. No matter what, you're always left with the same 24 hours in a day to check items off to-do lists, spend time with family and friends, and unwind. By planning ahead and using your time wisely, you'll be able to accomplish more and enjoy added free time (Purdue University, 2018.)

Learning and comparing how to manage your time better will help you maintain academic performance as well as a life outside of school (Brown, 2017; Garbugli, 2017; Purdue University Global. Time Management Tips for Busy College Students, 2018; Princeton University The McGraw Center for Teaching and Learning, 2016).

Not only medical studies are taught about time management, but mastering any specialty and all recommendations could be see common: setting and achieving goals, self-control and self-discipline, real time deadlines, rewarding yourself, concentration, assistance.

Dartmouth Academic Skills Center experts emphasizes that define long-term and short-term goals and build your schedule around them, examine and revise your lifetime goals on a monthly basis and be sure to include progress towards those goals on a daily basis. Experts recalls that keep paper or a calendar with you to jot down the things you have to do or notes to yourself.

Therefore, Purdue University experts also describes what is already known the Pomodoro Technique, developed in the 1990s, work in short intervals and take short, regular, timed breaks or "Pomodoros."

E. Garbugli from Duke University say that work around procrastination. Procrastinate between intense sprints of work. Always prioritize. K. Farid from Ain Shams

University published in the Procrastination Research 2021 that in procrastination study, a widely used meaning is "the putting off of what is required to achieve some goal", but there is a difference as The delay of working on smaller or less important duties that interrupt Significant tasks which need to be completed is not considered procrastination but a wise and effective way controlling their time so it goes without saying that When a person chooses to postpone finishing an important task in order to achieve a more favorable as hanging out with colleagues is a typical form of procrastination.

Princeton University The McGraw Center for Teaching and Learning experts emphasizes important principles as commitment and recommends to be brutally realistic, not idealistic when making your schedule and "I'll get the most out of this time." Leave empty time slots, and schedule in recreation time. Also make time for enjoyable, rejuvenating and satisfying activities like organizations, sports, and entertainment. One thing at a time, when switching we lose the depth of our engagement, absorption. Principle First Things First means that schedule the things that are most important to you first thing in the day, or at the first available time slot. Think how do you incorporate flexibility into your schedule and be ready to reduce the amount of time, but don't compromise on your health. Don't let "mindgames" in which you create justifications get in the way or lead you astray. Another important principle is organizing your environment—both physical and social. Choose carefully where you study and use physical reminders, for example, if you want to work out more, but are getting bogged down in email or Facebook, put your running shoes on top of your laptop.

Summing up theoretical findings here are the main components from time management tips (Figure 1) that will help you build strong time management skills in medical school, when you need them most.



Figure 1. Time management tips

Materials and methods. Qualitative and quantitative methodology is used in the research: questionnaire for 1st year students Faculty of Medicine (N=405), focus group with field experts (N=5), student group leader (N=54) focus group twice in each academic year, up to 8-10 group leaders in each focus group.

The data obtained in the study were recorded in audio recordings, transcripts were prepared and Microsoft Excel 2016, IBM SPSS 26 program was used for the analysis. Personal data protection was ensured in data collection, processing and analysis.

In the 2014/2015 academic year, three focus group discussions were organized with the specialists of the RSU foreign department on the accumulated experience in organizing adaptation and introduction days for foreign students who come to Latvia and start their studies at our university.

The experience and documents of other universities were analyzed. The obtained data and conclusions were taken into account when creating the materials of the study course "Time Planning and Management" for the 1st year medical students and to start the implementation of this course in the 2016/2017 academic year.

The table shows the main content and study outcomes which we defined when creating to study course *Time Planning and Management*.

Content	Study outcomes
	, and the second
Study process in RSU	Explain: differences between the study process at school
	and university.
	Memorize about:
	Strategy and structure of RSU, study process organization,
	regulatory documents, Regulation of Ethics, RSU history,
	values and traditions; the structure and competence of the medical faculty.
	Schedule of lectures and practical classes, agenda of study
	course examinations, general, special and current
	information.
academic integrity	Discuss about:
academic integrity	Basic principles and concepts of academic integrity such as
	cheating, falsification of results, plagiarism, etc., as well as
	way how plagiarism is checked at RSU.
	Making references in essays, reports and scientific papers.
	What literature sources are reliable to use.
	Possible consequences if academic integrity is violated.
study environment in	Use:
RSU	wireless internet, photocopying services.
	RSU Student Portal, e-studies.
	RSU Library and Student Service, Career Center services.
	Services of the Open University and Medical Education
	Technology Center.
	calendar of the academic year.

Student government	opportunities for after studies activities (sports, artistic activities, etc.). Know: how to can apply for a scholarship; involve the mentor / curator in problem solving and to establish correct communication with lecturers. a student emails Elected group leaders, course leaders, their responsibilities. Memorize about:
btudent government	Structure and representation in the common RSU structure.
	Group leaders, course leaders, their responsibilities
	Solutions of the problems.
	Activities and events.
Time management	Discuss about:
	efficiency, strategies, effectiveness and productivity of time
	planning, self-discipline during the semester and the
	session.
Study aim	more successfully to the study process at the university.

After the implementation of this study course, a student survey was conducted. The survey included a total of 17 both open-ended and closed-ended questions and was conducted for three consecutive years (2018, 2019, 2020). Student involvement were voluntary.

The data of the survey results were analyzed by considering the following parameters - year, age group, gender, time management skills and when the goal to study medicine was set. Of the total number of respondents, 78 men, 321 women, 6 do not indicate gender. In total, 211 students participated in the survey in 2018, 150 students in 2019 and 44 students during distance learning in 2020. Distribution of respondents by age groups: 106 respondents in the age group 17-18 years, 237 respondents in the age group 19, 58 - 20 and more years, 4 - no answer. They had to rate their time management skills on a scale of "0 or 1" - no skills or very poor, "2" - bad, "3" - average, "4" - good and "5" - very good. when the goal was set to study medicine, there were categories: childhood, elementary school, high school, recently, before starting studies, another answer.

On a scale of 0-5 (0 - no need; 5 - very necessary) it was also necessary to assess the need for time management skills for medical students and whether medical students have differences in time management compared to students of other study programs or fields.

The obtained answers were grouped into categories to compare with the age at which the goal was set and the self-assessment of time management skills.

The research design consists of research methods, goals, target audience, research time distribution and the main result of each research phase (Figure 2.).

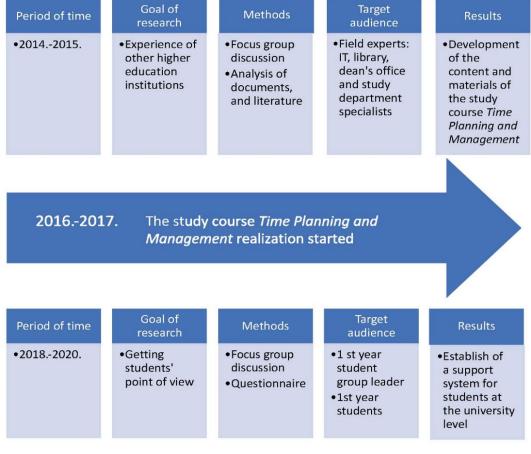


Figure 2. Research design

Results

According to research in other universities as a medical student, one of your biggest career goals is to become a doctor (Dyer, 2021). This takes years of hard work and dedication to learning medicine and the art of patient care. That means setting goals and creating plans of action to help you achieve them.

In the following, we will analyze the data in three parts. All parts combine: the goal to study medicine.

- 1. When was the goal of studying medicine set?
- 2. What could affect the change of goal?
- 3. What additional goals related to medical studies could be set?

Part I of the study "When was the goal of studying medicine set?"

Analysis of real-life stories - why I chose medicine, students admit that the sooner a prospective student sets a goal to study medicine, the more purposeful and successful the study. Therefore, we looked at the data in terms of when the goal to study was set. Total number of respondents n=405. In the analysis of the results we conclude that the trend is similar in all years, basically this decision is made in secondary school n=160, then successively in primary school n=114, in childhood n=80, least n=49 recently, before starting studies, and it is taken by 18% of men and 11% women.

To clarify one of the research tasks, we used the answers of the open-ended questions and grouped them in the following categories (Figure 3.):

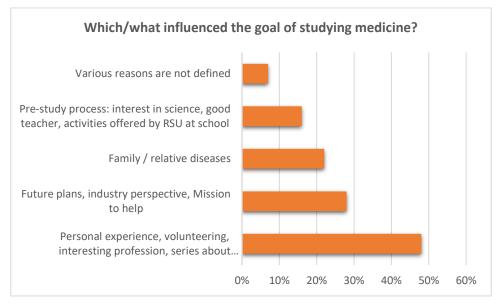


Figure 3. Which/what influenced the goal of studying medicine?

Comparing the obtained results, a logical regularity can be seen, if the choice of goal was influenced by "Personal interest and experience, volunteering, interesting profession, doctors", then this goal was set by 53% recently, before starting studies, equal distribution in 51%, because the experience gained in practice has facilitated the choice to study medicine and 52% evaluate their time planning skills as very good, there is no significant difference in the age group and gender.

Student A. writes: "Working in a medical institution, seeing the work of a doctor, I decided to study medicine... when I watched the surgery I realized that it really fascinates me"

28% of students noted that their choice is related to the future prospects of their profession, mission to help, then in this case the answers obtained are equal: 27% set goals in childhood and primary school, 30% in secondary school, 26% recently, before

starting studies. In the assessment of time planning skills, 35% are rated as very good and 35% as very bad.

"From childhood I was interested in medicine and there was a desire to work with people. I also like that studying medicine every day is a challenge. I was very attracted to the opportunity to help people, the doctor's daily life."

"This profession seems prestigious and interesting (you have to study for a long time, you like to study. The field of medicine is something that is necessary for humanity, it benefits humanity and, of course, medicine is vital for the successful growth of the nation and country. That's why I chose to study medicine, to do something good and necessary for people "

For 22% of students, the goal was influenced by family experience, their own or relatives' illness, so these students have chosen their goal the earliest - in childhood - 35% and only 8% decided recently before starting their studies. There are no significant differences in the age group, by gender. 26% rate time management skills as very good and 27% as very bad. Statically different this indicator is in 2019 - 17%, compared to 2018 - 26%

"there is a doctor in the family and the work of a doctor has always seemed very interesting and attractive to me personally." "Both parents are doctors and I had to spend a lot of time with doctors. When I spent time in an environment without medics, I realized what I was missing"

"I was in close contact with doctors / surgeons because I had several serious surgeries. I realized that I wanted to help others just as I was helped when I had health problems."

16% of students noted that an important role in their choice has been to the study process before the university, citing a variety of learning activities, such as biology and chemistry lessons, the teacher, participation in various school and extracurricular circles, including RSU organized lectures and practical classes for students. Statically significant results show that 27% set goals in secondary school and only 4% in childhood and also 4% recently, shortly before the start of studies.

In this case, no student rated their time management skills as very poor, and 9% rated them as very good. It should be noted that a significant difference in this measurement was 20% in 2018 and only 7% in 2020. We explain this with various activities organized in person in Latvian schools, for example, RSU student-journal discussions, lectures, talks with students, which could facilitate faster decision-making in the field of medicine.

"This goal was influenced by the fact that subjects related to anatomy and medicine seemed to be the most interesting when studying biology and chemistry in primary school."

"In-depth interest in biology; attending various seminars related to biology and medicine; Branch of the Academy of Young Doctors in Valmiera; and other competitions and Olympiads interested in studying medicine".

"Excursion to the scientific center" Aha "in Tartu, Estonia, where it was possible to study the pig's eye."

7% of students chose the answer chosen by various reasons, for example, series about doctors, books, publications, then 14% of this decision was made recently, before the start of studies, 8% in secondary school, 4% in childhood and also in primary school. For example, "...I didn't see myself in any other industry and saw it as my calling." or a student writes: ... I liked the white robe... I was impressed by the series "Emergency room". Statically different results were only in this category between the genders, 13% of men and 5% of women had answered different reasons have influenced their choice to study medicine.1% of respondents had not answered this question.

Part II of the study: What could affect the change of goal?

Often students drop out of medical studies already in the first year of studies. By analyzing the answers to the open-ended question: "What could affect the change of purpose?", We could identify problems in a timely manner and provide support. 26% of students did not comment on the change of goals. All other obtained answers were grouped in the following categories (Figure 4.):

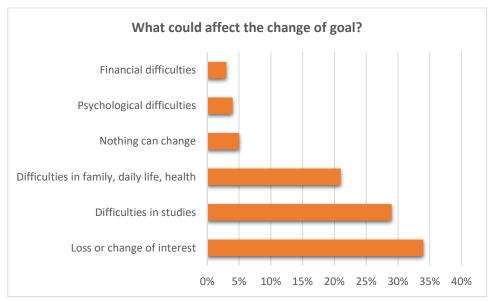


Figure 4. What could affect the change of goal?

In the analysis of the results, we conclude that the loss of interest and change of categories have been chosen differently by study years in 2018 47% and comparatively by year only 17%, while older students have chosen the least this

answer 15%, while younger ones 35%, which could indicate about the search for their own path and another profession, and these students could drop out of medical studies if they do not create fulfillment, interest, do not see themselves in this profession or do not want to devote so much time to learning the content.

"Since only two months of study have passed, I assume that the goal of studying medicine may change. There are other areas of healthcare in which I am also interested, I have not decided anything 100%."

"There will be other interests, I don't want to put too much effort into achieving the goal."

"Gaining experience, getting to know the real work environment."

29% of students write that one of the reasons for dropping out of medical studies is that they will not be able to cope with the heavy workload, that they may not pass the tests, that they may run out of time. 41% of students rate their time management skills as poor. This category is mentioned equally often in all years of the study and is not answered differently between women and men, and there is no difference in the choice of target. Naturally, older students mentioned it less - 19% than younger students - 31%, because they are more confident in choosing their next profession. Therefore, it is important for lecturers to notice the difficulties encountered by the student in the study process as early as possible, to invite them to individual consultations, to try to find a solution together.

"Difficulty adapting to the new, more complex way of life and study."

"Very great difficulties in studies, outstanding colloquia or exams, revelations that I do not learn the content."

"Excessive workload, my poor ability to plan time, set priorities."

21% mention various circumstances for changing their goals, and most often they are difficulties in family, everyday life or health. Students mention this reason less in 2019 - 14% compared to 2018 - 27%. The result was not measured during distance learning. Surprisingly, this category was less mentioned by older students 19%, who may have already experienced more difficulties in life compared to 26% of students who set a goal in childhood.

"Dramatic changes in personal life, health problems, family circumstances, change of residence."

5% of students are absolutely convinced that nothing can change the goal. Statically, the difference is 7% in 2018 and 3% in 2019, as well as older students 9% and younger 3%. Students rate their time management skills as very good 4% and no students rate them as very bad. Data on the time when the goal was set, 2% recently and 6% in childhood, also show a targeted choice.

"Nothing can change, because I want to improve the overall public health care system, the social guarantees of medical staff."

In the category of psychological difficulties, we collected answers in which students write that they may not fit into the team, that there may be disagreements with colleagues, lecturers, that they are afraid that they will not be able to look at blood and other medical manipulations. The group leaders confirm in the focus group discussion that such problems are real. In 2018 again more 6% and after a year 1%. It should be noted that older students did not give such an answer compared to younger ones. In addition, 7% of these students rate their time management skills as weak and no student rated their time planning skills as very good.

"There will be no friends" understanding that human nature is not fit for purpose. Conflicts with group members or lecturers."

"Better acquaintance with the personality, personal experiences that change specific beliefs."

"A new place to learn and young people around, which means adaptation and a possible change in habits."

Lack of funding was mentioned in 3% and there are no significant differences between the study years and the answers between women and men, naturally older students mentioned 9% more answers than younger 2%. In turn, their time management skills are assessed as weak 6% and very good 4%. This answer is mentioned by at least 1% of students who set their goal in primary school, compared to 2% of students who set a goal recently.

"Changing life situation - especially when the family / financial situation changes."

Part III of the study: What additional goals related to medical studies could be set?

In Part III of the study were asked an open-ended question "What additional goals related to medical studies could be set?" and the obtained answers were grouped into categories (Figure 5.):

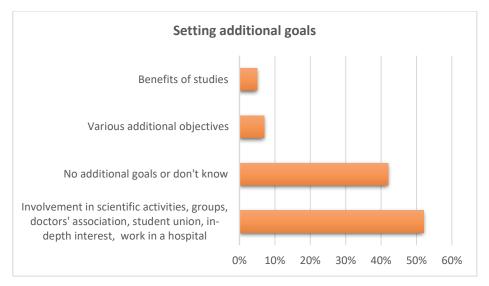


Figure 5. Setting additional goals

Involvement in scientific activities, groups, doctors' association, student union, indepth interest, specialization in the field, work in a hospital, medical institution, such as emergency medical service, some students also plan their career as RSU lecturer, students plan to participate in ERASMUS program, study in residency, doctoral studies, plans to open their own medical practice and some students plan to continue their careers abroad, to become a doctor in more than one field. There are no significant differences in the age group, but in 2019 this additional goal is mentioned by 44% less than in 2018 by 58%.

"Desire to develop in one direction, I want to participate in student union."

"Excellent for graduating from university, studying for a residency and then a doctoral study."

"Improve the overall state health care system, social guarantees for medical staff."

There are no significant differences in the assessment of your time management skills. In turn, only women have mentioned continuing their career as an RSU lecturer, while the goal of studying medicine is set at 60% in childhood, which is the highest reading in this category.

"Participation in a student scientific conference to gain a variety of experiences. I am very interested in attending scientific groups, writing scientific papers, working in a hospital. I want to find out the mechanism of gene mutation and find a way to solve it."

"Continuing my studies to become a professor of a medical field. Also enter and graduate from the Faculty of Dentistry to practice facial / maxillofacial surgery."

"Establishment of the clinic, conducting lectures, becoming a member of the RSU teamlecturer, rector... (in the future)." However, 42% do not know yet, they do not have an idea about additional goals yet, most often they answer that they will still arise during their studies. There is a statistically significant difference between the years in 2018 36% compared to 2019 49%

"I can't say. In my opinion, they will appear organically themselves as they acquire knowledge and expand. Maybe there will be an additional branch of medicine that will interest me. I think a specialty will be rethought many times."

7% of students' answers combined various additional goals that can be formed during their studies, for example, gaining financial independence, improving a hobby, spending meaningful free time, self-improvement, making friends, a sense of mission, being a member of a corporation. This answer was written by 6% women and 13% men, and less 3% of older students than 9% of younger students.

"Create a medical program or establish a new fund."

"Because medical studies are long, my goal during these years could be to start my own family."

"At the same time, have a good time, develop your fitness and health."

To become a doctor Clown, to get involved in the project "Big care for little ones" and make good contacts, help strangers, volunteer in a hospital."

5% of students plan to get various bonuses in the study process, for example, to improve their foreign language skills, to obtain automatic assessments in exams and to study in a state-paid study program, to obtain a scholarship. Only 3% of men write about bonuses, compared to 6% of women. This answer was given the least by students who have recently set a goal of 2%, compared to 8% when the goal was set in childhood.

"Learn another language and to work abroad."

"To enter the residency of a budget study place, because I want to become an anesthesiologist."

Conclusion and discussion Focusing on the set goal, recognizing time thieves, choosing learning and time management strategies, self-discipline, decisions and their implementation are new challenges for 1st year students. A support system for lecturers, study year members, organizations and families are recommended and desirable.

In order to organize meaningful and purposeful development of time management skills at the organizational level, we recommend:

Continue to identify the experience of senior students, the experience of other universities and classify possible problem situations in order to offer various strategies, solutions in time and students do not arrive until the end of studies.

Development of a time management study course based on RSU experience for 1st year medical program students, which could be an approbated example in other study programs, as well as in other universities.

Based on the experience of higher education institutions of other countries, to create time management recommendations and possible solutions to real problems on the RSU website, contacts of support structures.

For discussion: data from studies in other universities that the goal may differ depending on the year of study. What are the differences between general procrastination reasons and time management skills status our university students and relation between academic year, procrastination and time management skills.

References

- [1] Brown, E., (2017). 8 Practical Time Management and Study Strategies for Medical Students. The Student Doctor Network. 13 November 2017. [online] Available from: https://www.studentdoctor.net/ (Accessed: 12 June 2021).
- [2] Dyer, T., Interview Questions: Motivation for Medicine. [online] Available from: https://www.medicmind.co.uk/medicine-ucas-guide/model-answers-motivation-for-medicine/ (Accessed: 12 May 2021).
- [3] Garbugli, E., (2017). 26 Time Management Tricks I Wish I'd Known at 20.
- [4] 08 May 2017. [online] Available from: https://arc.duke.edu/26-time-management-tricks-i-wish-id-known-20 (Accessed: 22 June 2021).
- [5] Farid, K., (2021). Procrastination Research 2021. Prevalence of Procrastination and Its Associated Risk Factors Among Academic 5+2 Medical Students Integrated System, Ain Sham University. [online] DOI:10.13140/RG.2.2.18858.64961 (Accessed: 15 August 2021).
- [6] Principles of Effective Time Management for Balance, Well-Being, And Success. (Princeton University). [online] Available from: https://mcgraw.princeton.edu/effective-time-management (Accessed: 22 June 2021)
- [7] Real-life stories why I chose medicine. [online] Available from: https://www.healthcareers.nhs.uk/explore-roles/doctors/why-study-medicine/why-i-chose-medicine (Accessed: 02 June 2021).
- [8] *The Most Productive Way to Schedule Your Day.* Syracuse University [online] Available from: https://onlinegrad.syracuse.edu/blog/productivity/ (Accessed: 19 June 2021).
- [9] *Time Management*. Dartmouth experience. [online] Available from: https://students.dartmouth.edu/academic-skills/learning-resources/time-management-tips (Accessed: 10 June 2021).