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**The link between time management and students’ performance.**

**Keywords: time management, academic performance, mental health, strategies, tools.**

Introduction

“Time is a priceless resource and continues to pass by without coming back therefore, the secret to achieve success in life is effectively managing this resource that everyone possesses equally and paying sufficient emphasis to plan.” (Arumugam et al., 2021)

Time is an important value of people that should be used in a smart way. Nowadays, the pressure of the educational system is increasing, so students are supposed to manage to combine exams preparation, sport, house choirs and other responsibilities. Also, a competitive environment of life encourages people from elementary education to plan and manage time effectively. Therefore, it is important to work smarter than harder.

Based on our personal and academic interest we want to identify the most efficient time management strategies that would improve our productivity and improve academic performance and outcomes. Following the time management, students would have an opportunity to cope with delayed plans and as a result increase their academic progress.

As we are NIS students we need to balance assignments, extracurricular activities, housework, sport, preparation for external and internal exams, IELTS and SAT, and admission to university. So there are several obstacles like, laziness, last minute cramming, social media distractions, postpone deadlines to follow time management that lead to poor academic achievements and performance, waste of time. In this regard, our opinion may be distorted. To avoid personal interest in our research, our supervising teacher, Taishyman Aigerim Zhailybekkyzy, will check our work at every step and control information received.

Methods

The main purpose of this research is to identify how time management affects students’ academic performance and achievements in NIS Oskemen. To study this we used triangulation method, which means that one method answers two research questions. We gathered both qualitive and quantitative data conducting surveys with mostly closed-ended questions, interviews and focus group with students.

The first method we used to gather quantitative data is survey, which includes close-ended. We used Microsoft forms platform and sent it to school chats via messengers. It was effective, because it is the fastest way to collect statistics whether students follow time-management or not and identify which strategies they use. Also the reason why we chose the survey method is cost-effectiveness, resources are not needed to conduct the survey. Our conducted survey answered these research questions: how does time management habits among NIS students impact academic performance and achievements? What are the most effective strategies that contribute to improving academic success Our population were students at NIS school, from 7th grade to 12th grade, we surveyed more than 50 students. The survey was the same for all grades. This method gave us generally quantitative data, because the main challenge was that students skip open-ended questions.

The second method we used is a semi-structured interview to gather in-depth quality data and answer these research questions: what are the most effective strategies that contribute most to improving academic success? How do poor time management skills influence students’ physical and mental health? We interviewed six students from 7th to 12th grade and they were asked the same questions. The participants were chosen based on a Microsoft forms survey, their achievements and performance. We entered into a confidentiality agreement with participants and recorded interviews for further analysis. The interviews took place in the school, which were conducted face to face and spent 15-20 minutes on each interview. The interview allowed us to gather more detailed information and modify the list of queries to obtain a complete answer. Moreover, it helped to analyze the body language of participants. However, participants’ constraints and finding a suitable time were challenging to conduct an interview.

The third method was a focus group with school psychologists, who follow strict time management, as they have high level of pressure, meeting deadlines and need to balance assignments, application to university, projects and life behind the school, including sport etc. This method answers two research questions: how do time management habits among NIS students impact academic performance and achievements? How do poor time management skills influence students’ physical and mental health? This method was chosen because of group interactions, which allow to stimulate discussions and identify participants’ attitudes, opinions and motivations, observing their emotions and interactions. During the discussion the assistant took notes, which will be needed in our research, facilitator asked open-ended questions and made participants involved in the conversation. As all questions were open-ended all data was qualitive.

Results

Survey results

The survey involved 58 students of NIS Oskemen.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Time management skills | Academic performance | | | | Total |
| Poor | Satisfactorily | Good | Excellent |
| Very high | 0 | 0 | 0 | 4 | 4 |
| High | 0 | 1 | 14 | 3 | 18 |
| Neither low nor high | 0 | 6 | 17 | 3 | 26 |
| Low | 0 | 1 | 5 | 2 | 8 |
| Very low | 0 | 0 | 2 | 0 | 2 |
| Total | 0 | 8 | 36 | 12 | 58 |

*Table* 1

The results show that most students rate their time management skills as neither low nor high (45%), and their academic performance is good (mode = good). It is also interesting to note that most of the students with excellent academic performance have high time management skills and those who have satisfactory rate their academic performance as neither low nor high

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Study hours per day | Academic performance | | | | Total |
| Poor | Satisfactorily | Good | Excellent |
| Less than 1 hour | 0 | 3 | 3 | 2 | 8 |
| 1-2 hours | 0 | 1 | 10 | 4 | 15 |
| 2-3 hours | 0 | 3 | 10 | 5 | 18 |
| More than 3 hours | 0 | 1 | 13 | 1 | 15 |
| Total | 0 | 8 | 36 | 12 | 58 |

*Table 2*

Most of the students with good academic performance spend more than 1-2 hours on average studying each day, while students with excellent marks spend less than 2-3 hours.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Time management skills | Study hours per day | | | | Total |
| <1 hour | 1-2 hours | 2-3 hours | >3 hours |
| Very high | 1 | 1 | 1 | 1 | 4 |
| High | 1 | 8 | 5 | 4 | 18 |
| Neither low nor high | 6 | 3 | 9 | 6 | 24 |
| Low | 0 | 3 | 3 | 2 | 8 |
| Very low | 0 | 0 | 0 | 2 | 2 |
| Total | 8 | 15 | 18 | 15 | 56 |

*Table 3*

Moreover, most students study for 2-3 hours per day and result in good academic performance shown in tables 3 and 4.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Time management skills | Tools | | | | | | Total |
| Mobile apps | To - do list | Planner/dairy | Digital calendar | Remember in the head | Nothing |
| Very high | 0 | 1 | 1 | 1 | 1 | 0 | 4 |
| High | 5 | 4 | 5 | 2 | 1 | 1 | 17 |
| Neither low nor high | 6 | 9 | 2 | 1 | 3 | 5 | 26 |
| Low | 2 | 0 | 4 | 0 | 2 | 0 | 8 |
| Very low | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 13 | 14 | 12 | 4 | 7 | 6 | 56 |
| Frequency | 0.23 | 0.25 | 0.21 | 0.07 | 0.13 | 0.11 | 1.00 |

*Table 4*

While participants with a high level of time management use mobile apps (5), to-do list (4) and planner/ dairy (5) to manage their time, students with low skills tend to remember in the head (2) and use planner/diary (4).

*Figure 1*

Regarding the figure 1 daily schedule and prioritizing tasks strategy are equally effective among students. Setting specific tasks is almost as efficient as breaking complex tasks into small parts strategy. The least useful strategy is reflection and adjustment with a mean rate of 3.70.

|  |  |  |
| --- | --- | --- |
| Influence of TM on academic achievements | Number of students | Frequency |
| Very high | 14 | 0.25 |
| High | 25 | 0.45 |
| Neither low nor high | 12 | 0.21 |
| Low | 5 | 0.09 |
| Very low | 0 | 0.00 |
| Total | 56 | 1.00 |

*Table 5*

Students were asked about the influence of TM on academic achievement. 45% of them said that the correlation between TM and academic achievement is high, 25% said that it is very high, which is near as those, who said that it is neither low or high. No students mentioned that there is no correlation.

Interview results

TRP – Task prioritization

RS – Reward system

TDL – To-do list

ST – Setting a timer

MA – Mobile application

PN – Planner/notes

TS – Time saving

ND – Navigation through a day

LR – Low results

HR – High results

SQ – Sleep quality

SR – Stress reduction

|  |  |  |
| --- | --- | --- |
| **Themes** | **Codes** | **Quotes** |
| Strategies | TPR | “I try to do the most difficult tasks first to improve my efficiency.”  “I start with the up-coming deadline tasks first”  “…by importance”  “I prioritize tasks and try to complete them on time.” |
| RS | “I use the reward method … I reward myself with playing games.”  “I use the reward for completed tasks strategy.”  “…goal and reward” |
| Used tools to manage time | TDL | “…to-do list…”  “I make a to-do list … and strictly follow this to-do list.”  “I usually write to-do sheets in my notes.” |
| ST | “…I use a timer.” |
| MA | “I use mobile applications on my phone…” |
| PN | “…and planner.” |
| Benefits of using those tools | TS | “Keeping a planner helps me save time so I don't waste my free time on pointless things.”  “…to devote enough time to each task and not get distracted.” |
| ND | “They help me navigate through the day.” |
| Effects of poor time management | LR | “…has a very negative effect on my grades. … my scores are dropping very sharply.”  “…resulted in poor term results.”  “I didn't have time to do my homework, I could have gotten a low grade.” |
| Influence on academic performance | HR | “My grades improved significantly by about forty percent and my average GPA rose to 4.7.”  “They influence quite strongly. You can prepare well for the upcoming exams and get higher results.” |
| Improvements in mental and physical health | SQ | “…my sleep quality has improved…”  “My sleep pattern has improved…”  “…I started sleeping better.” |
| SR | “I became less nervous about deadlines and my overall stress level dropped significantly”  “Also, stress levels have decreased.” |

*Table 6*

Three interviews with NIS students, who have high time managing skills were conducted. Regarding strategies, TPR was mentioned by all three participants, while RS is common for Anna and Timothy. Next, there were four ideas about tools that respondents use in planning and managing their time. TDL is used by all three respondents, Rose prefers ST, and MA with PN are used only by Anna. As for the benefits of using those tools, Anna and Rose believe that it is timesaving (TS) and helps to navigate through the day (ND). They were asked about occasions whether poor time-management affected their academic performance, all three respondents mentioned that it resulted in low results (LR). They mentioned that managing their time resulted in HR. As for improvements in mental and physical health it enhanced SQ and SR. All three participants mentioned strategies they believe are the most effective ones. For Anna it is Pomodoro method, for Rose it is ST, for Timothy it is TDL.

Focus group results

TM – time management

DC – Direct connection

HLS – High level of stress

LSC – Low self-confidence

DA – Depression and anxiety

PL – Planning

EH – Eisenhower technique

PM – Pomodoro technique

TPR – Task prioritization

|  |  |  |
| --- | --- | --- |
| Themes | Codes | Quotes |
| The relationship between TM skills and academic achievement | DC | “I believe there is a direct connection…”  “It definitely has an impact…” |
| The impact of poor TM skills on physical and mental health | INS | “…have a negative impact, it can result in insomnia  lead, as we know, to insomnia, decreased immunity and fatigue.” |
| HLS | “…high levels of stress and constant sense of worries…”  “…experience stress from not having enough time and being in a constant rush... |
| LSC | “...may experience deeper problems, lack of self-confidence and low self-esteem.” |
| DA | “…may cause anxiety, depression.”  “…will become angrier because he doesn’t have time to do anything, and then he reaches an apathetic state.” |
| Suggestions for effective TM strategies to students | PL | “First of all, planning. You need to use calendars, planning applications.  “…planning.  “Planning. Writing down daily small tasks and sticking to them.” |
| EH | “...Eisenhower technique. |
| PM | “...set some time limits. ...Pomodoro technique.” |
| TPR | “First we distribute the important aspects of life...”  “…define tasks as more important and urgent, important and not urgent, and urgent but not important … the priority” |

*Table 7*

Focus group was conducted with school psychologists. All three psychologists mentioned that there is direct connection between TM skills and academic performance of students. Charlotte described NIS students TM skills as diverse and evolving. Charlotte said that poor TM can lead to insomnia and problems with sleep quality, while Amelia said that it can result in depression, anxiety and apathetic state. Moreover, Charlotte and Amelia have a common idea that poor TM can lead to rush state, constant worries and high level of stress. Regarding to the suggestions for effective strategies all participants mentioned planning which helps to organise time and write clear plan for a day. Charlotte and Amelia both mentioned TPR as one of the effective strategies, whereas Charlotte also suggested PM and EH techniques to manage time.

Conclusion & Discussion

The hypothesis was that effective time management positively influences students’ academic performance and overall achievement in NIS Oskemen. According to the research results, we found out that it is true. Also, the hypothesis was that one of the strategies which contribute the most to improvement in academic performance is planning. Students who were surveyed and interviewed noted that the most effective time-management strategy is prioritization of tasks. According to the focus group results, psychologists noted that poor time management may lead to physical and mental health issues, they are high levels of stress, insomnia, burning out and as a result, poor academic performance. Our study found five findings which were expected

*Finding 1: Having high time management skills improves academic performance and influences positively on students’ academic success.*

This conclusion was based on survey results among NIS students and interviews (table 5 and table 6). More than half of the students (69%) rated influence of TM on academic achievements and performance as “high” and “very high”. Similarly, interview participants noticed a significant rise in their average GPA. This complemented the results of study in NIS Pavlodar, which showed that students that have prominent time management skills have a high GPA (Makasheva, 2016). However, our study results did not confirm the results of the study of Razali et al. (2018) which showed that the relationship between time management and academic achievements is weak. So, this has its own degree of generalization, as students with poor time management skills and academic performance were not interviewed. Perhaps if students with poor academic performance had become one of the interviewees, the results would have changed.

*Finding 2: The most effective TM strategy is task prioritization which allows students to use their time wisely.*

All three interviewed students and psychologists who participated in focus-group noted that the TM strategy which helps to manage time wisely is task prioritization. Also, according to the survey the most effective TM strategies are daily schedule and prioritizing tasks (at mean rate 3.91). This finding completed the study gap, as we identified the most used TM strategy among NIS students. Finding has an average degree of generalization, because only 58 students were surveyed.

*Finding 3: Poor TM negatively impacts students’ academic performance, leading to low grades and grades.*

All three interviewed students noted occasions when they were not following TM and were not able to manage their time, which resulted in lower grades and time wasting. So, this way they have introduced the importance of TM for their higher academic achievements. But it has its own degree of confidence, as only three students were asked. Additionally, this finding added confirmation to the study of Razali et al. (2018) which highlighted that students who plan and allocate time for tasks have high achievements.

*Finding 4: Better TM skills affect students mental and physical health by improving sleep quality and reducing stress levels, while poor TM leads to worse sleep patterns, higher stress and fatigue.*

Psychologists who took part in the focus group noted that students who do not know how to manage their time, use it wisely to achieve goals and balance between leisure and study, experience difficulties with both mental and physical health. They noted harmful consequences such as insomnia, high levels of stress and burning out, which also resulted in poor academic performance. Thomas (2020) mentioned effective time management allows to reduce procrastination, gain more control, less stress, complete more tasks and enjoy free time. Our study completed this one. It has a higher degree of generalization, because psychologists’ conclusions are based on observation of almost all NIS students.

*Finding 5: The most effective tool among students is a to-do list which helps to save time and navigate through the day.*

This conclusion was based on the survey and interview results among NIS students (table 4 and 6). Most of the surveyed students chose to-do list as the beneficial TM tool frequency (0.25). The interview participants mentioned that making notes and writing daily to-do lists helps to devote adequate time to each task, do not get distracted and navigate through the day. Similarly to our finding the Academic advising office of Nazarbayev University suggested six effective tools of time management which included writing a to-do list. The degree of generalization of this finding is average due to the low number of surveyed and interviewed students.

• How does time management habits among NIS students impact academic performance and achievements?

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