MIDDLE EAST TECHNICAL UNIVERSITY

STUDY HABITS OF METU STUDENTS

Nebih Şahin

We asked 34 questions in this survey, whose main purpose is to examine the study habits of the students and to investigate what the students who came to this school do in common. We collected data from the internet with the survey we created with google surveys. 121 people participated in our survey, which we conducted among the students with METU in order to examine their study habits. 46.3 percent of these students were females, 53.7 percent were

males.

Our survey questions consist of two main categories: Demographic questions and questions in which we try to analyze students' study habits and attitudes with them. While demographic questions ask for information that will make it easier for us to categorize study habits such as department, relationship status, cgpa, education levels, the section of investigating students' study habits aims to examine how students work in general terms, break times, in-class and extra-curricular study activities, and in addition, their academic satisfaction. In addition to

these,

we also asked about the accommodation status of the students, their use of tobacco products, and

the possible effects of their families when the students choose their major. The purpose of

these

2 questions was whether such issues have an impact on examining students' satisfaction with their academic life, not their study habits. Finally, the general purpose of the questionnaire is to examine the relationship between students' study habits and academic achievement.

LITERATURE REVIEW

This study points to provide significant details and related factors about the study habits of METU students. Study habits are the consistent patterns and behaviors that one exhibits while studying and acquiring new knowledge. Simply said, study habits are the routines one follows when studying. Study habits are influenced by a variety of factors. This review focuses on technological, psychological and daily habits of students and teachers. These components are also examined in sub-titles.

Study habits have an impact on students' learning capacities. Among these, the use of technology has assumed a controversial role. The fact that technology affects students' study as it affects life in general is something that is to be expected. In the research of Study habits and technology use in Italian university students at the Sacred Heart Catholic University Rome, Italy (Paolo Parente et al., 2015) reviewed to examine how university students' study, how they use technology and how it affects their study habits. The Chi square test was used to determine whether there were any differences between the sex, age class, and socio-economic groups after stratification for sex, age, and socio-economic position. This survey indicates that the majority of college students still choose to approach their education via books. Most students used computers and the internet for their responses for up to 21 hours each week. These conclusions are supported by the results of a survey conducted among 549 undergraduate students enrolled in 95% of students at a highly prestigious Midwestern university reported using the internet daily, with email and surfing being the most popular activity. Additionally, 99.7% of students indicated they had at least one smartphone, iPhone, or iPad, and 68.7% stated they use one. Students with the highest socioeconomic status, older students, and male students appear to be more likely to use digital technologies and the Internet for educational purposes.

Moreover, psychology is another factor which plays an important role for student' study habits. Psychology is a quite large area, there is no only effect on study habits but on everything. From student social life, academic achievement or daily life. One of our

researches focuses on NfC (Need for Cognition) and study habits on academic achievement. With 86 participant questionnaire researchers use various of scalers like Likert or AMS (academic motivation scale). As a result of this survey ', the internal reliability of the student responses was examined first. Coefficient alpha was .82, indicating a good level of consistency among the scale items.' (Melissa et al., 2020). Every society relies on its youth to shape the nation's future, therefore mental health issues among students can have major consequences like lowering test scores, increased dropout rates, and student inefficiency. Studying according to certain criteria can promote personality development and growth in people, which in turn can improve mental health and help treat a variety of problems, including depression, a major global health concern (Susan et al., 2011). This research was a kind of descriptive and correlation survey. The statistical population included all MSc and Ph.D. Students in the second semester of the Isfahan University of Medical Science (263 students). This research used stratified and random sampling, in which a sample of 100 students was selected.

Also, for the habits of students and teachers, numerous educators look into the issue of some kids who did not study well in elementary and high school. Despite the availability of study materials, students currently appear to know less and apply knowledge less effectively. Students also lack the skills necessary to think and study effectively. A small number of teachers focused a lot of attention on developing these skills. As a result, a lot of students were able to go on to the next level of education without ever creating a schedule for their study time. Due to a lack of focus on their academic and personal development, many skills and potentials remain untapped. The academic success of students is influenced by a number of things. Among them are various practices known as study habits, which the students acquired, favored, and enjoyed doing for learning both in and outside of the classroom. The idea among students is to do the simpler assignments first and save the more challenging ones for last, which ultimately leaves them with inadequate time to finish the latter assignments. When studying in a noisy atmosphere, the mind might stray occasionally. Also, studying

while you're hungry or fatigued slows your thinking. Changing your study locations enhances the probability that you will remember what you have learned since memory is influenced by place. Moreover, actively engaging the brain, taking tests, sleeping properly, attending to the classes, managing time are the other effective study habits. In addition the instructor should clearly define the learning objectives so the students understand what is expected and, take periodic quizzes with the class to better test the pupils' understanding of the material. Regular assessments aid students in revising and remembering material, preparing them for final examinations. For keeping the notion flowing and to reacquaint students with the previous topics, instructors should offer a brief overview of what was accomplished in the last class. Connect feedback to essential ideas by doing a "postmortem" analysis to show students what they should study again.

As a result, there are different variables that influence the study habits which has a great impact on students' success and academic performance. Technological, psychological and daily habits of students and teachers are the main titles that affect the study habits in this review. These elements that we looked at can be used as questions, methods or prospective headings in our research on the study habits of METU students. Observing the general study habits of METU students, how they use technology while they are studying, and how their moods affect their learning can reveal surprising information about the university's students.

THE AIM OF THE STUDY

The aim of our study is to examine the study habits of the students and whether they have an effect on their academic success or satisfaction.


WEAK POINTS OF DATA

First of all, the weakest point of the data was that the number of collected data was very small. Beyond that, we worked with data that had many weak points. There were only 2 numeric variables in 34 questions, which prevented the use of statistical methods that required more than 2 numeric values.

One of the problems we encountered while editing the dataset was that the answers to the question in which we wanted information about the majors of the students, which we did not foresee that would cause such a problem later on, were in very different formats from each other. As an example of the answers to this question, the answers of those who read chemical engineering differed as follows: some wrote "che", some wrote "Chemical Eng" and some wrote "chemical engineering" or "CHEMICAL ENGINEERING" etc. We tried to fix it by trying to put them in the same form.

Although we wanted to examine many other questions by putting 5 options, we made the mistake of putting 4 options in the question "Are you satisfied with your grades?" and as a result, we examined the satisfaction of the students with their grades with less efficiency.

The likert function sorts the responses alphabetically, such as never, often or agree, disagree. Although this situation challenged us at first, we later solved that problem by adding numbers such as 1,2,3 to the beginning of the responses in our data.

METHODS AND MODELS OF ANALYSIS
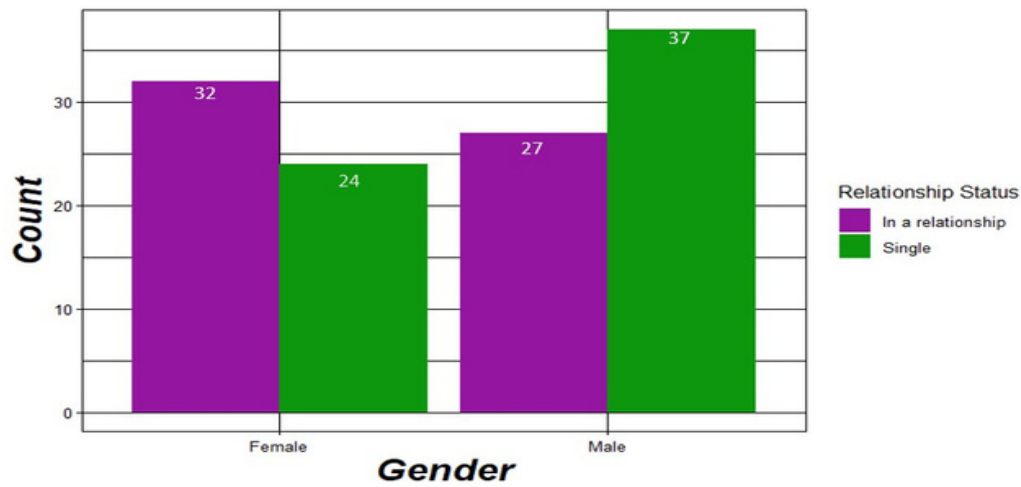
Table 1

As we can see in Table 1 above, when we analyze the respondents by categorizing their gender and relationship status, we see that the ratio of their relationship status varies. When we consider the relationship status of individuals, while 57% of women participating in the survey say they are in a relationship, this rate is expressed as 41% for men. We excluded the reason why there are 120 people in the table above, because there was only 1 person who did not reveal their gender in our survey, and this was very little data to examine.
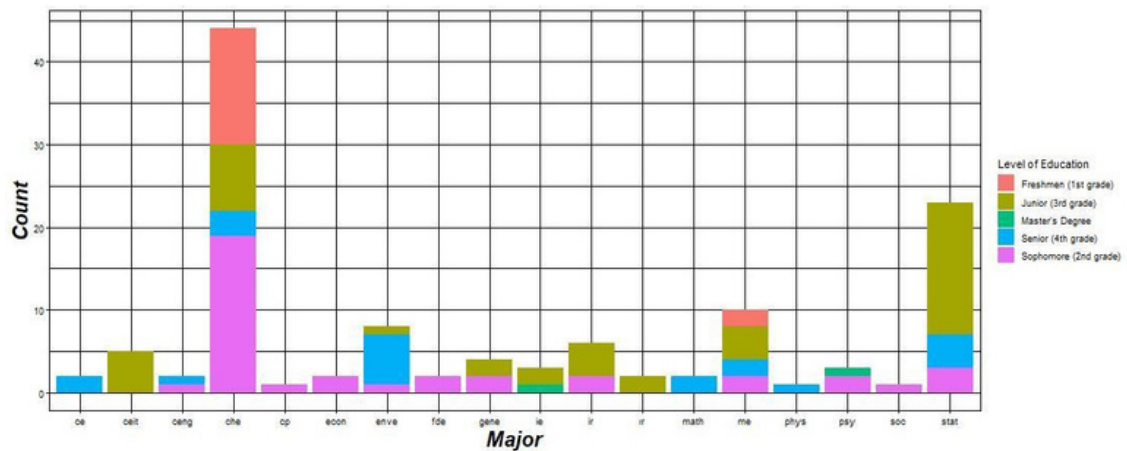
Table 2

When we look at Table 2, surprisingly, we saw that the majority of the respondents were chemical engineering and statistics department students. While the number of chemical engineers was 44, the number of statistics department students was 23.
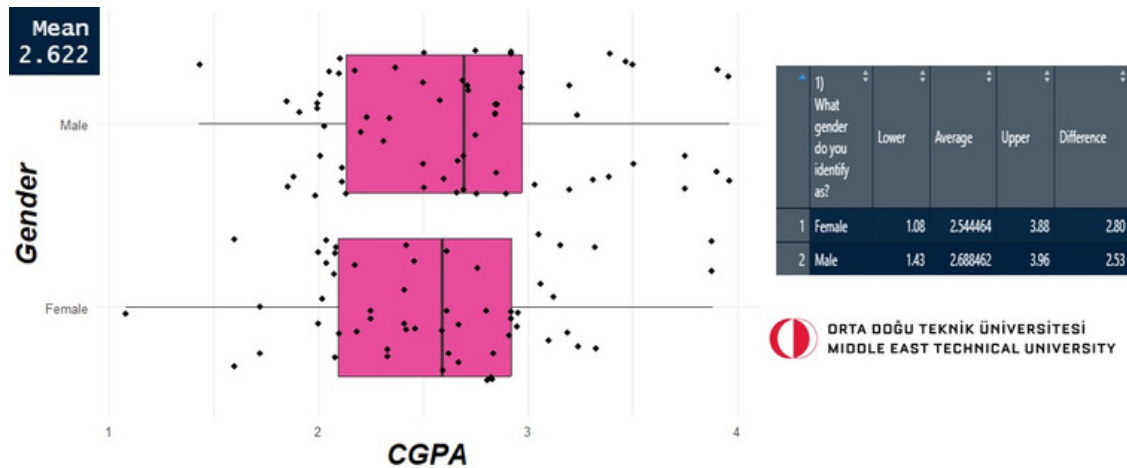
Mean 2.622

1) What gender do you identify as?	Lower	Average	Upper	Difference
1 Female	1.08	2.544464	3.88	2.80
2 Male	1.43	2.688462	3.96	2.53

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Table 3

When we examined the cGPA of the students participating in the survey, we calculated the average as 2.62. When we categorize the cumulative averages by gender, we found that the male average was slightly higher with a margin of 0.14 points.
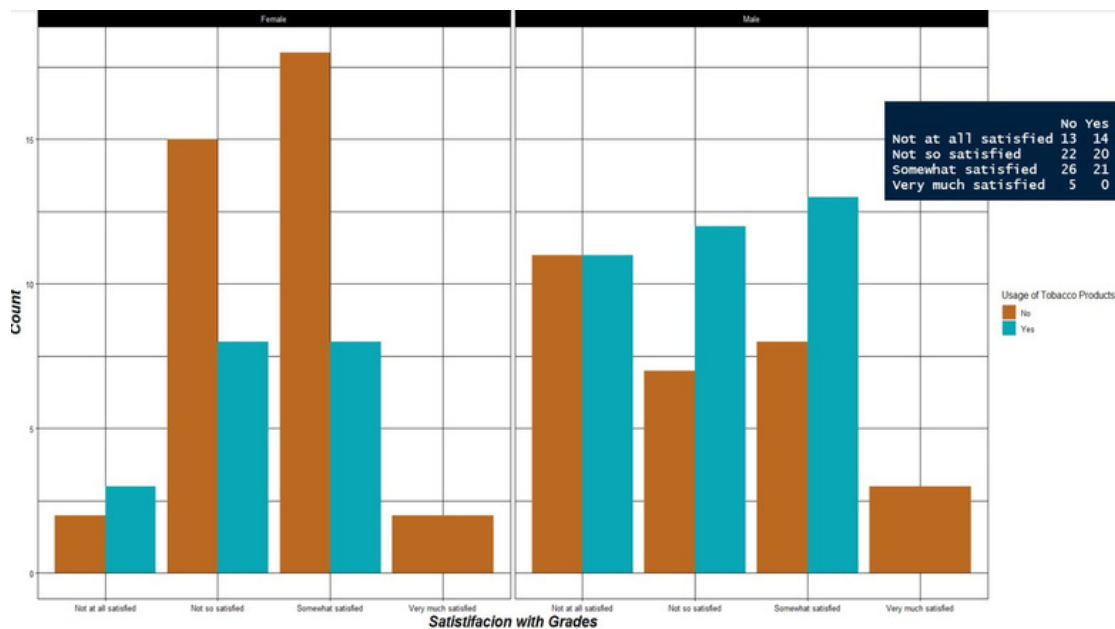

	No	Yes
Not at all satisfied	13	14
Not so satisfied	22	20
Somewhat satisfied	26	21
Very much satisfied	5	0

Usage of Tobacco Products
No
Yes

Table 4

When we bring together the satisfaction of students with their grades and their tobacco use, we can give information that 5 students who are very satisfied with their grades do not smoke in common. Additionally, among the individuals we looked at, males appear to smoke more frequently.
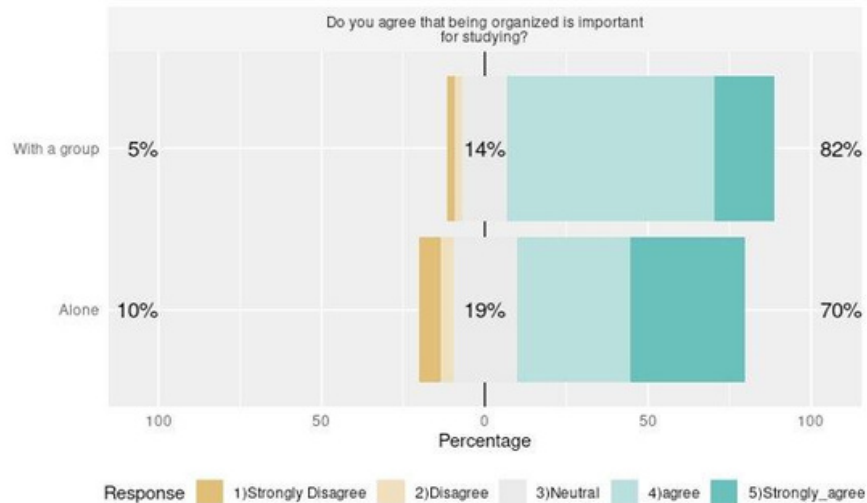
Do you agree that being organized is important for studying?

Table 5

In this graphic, we used likert to measure the importance of being organized for studying, by reducing the attitudes and opinions of the participants to one dimension by looking at whether they prefer to study alone or in groups. As we can see from this graph, those who prefer to work alone care less about being organized than those who prefer working in groups.
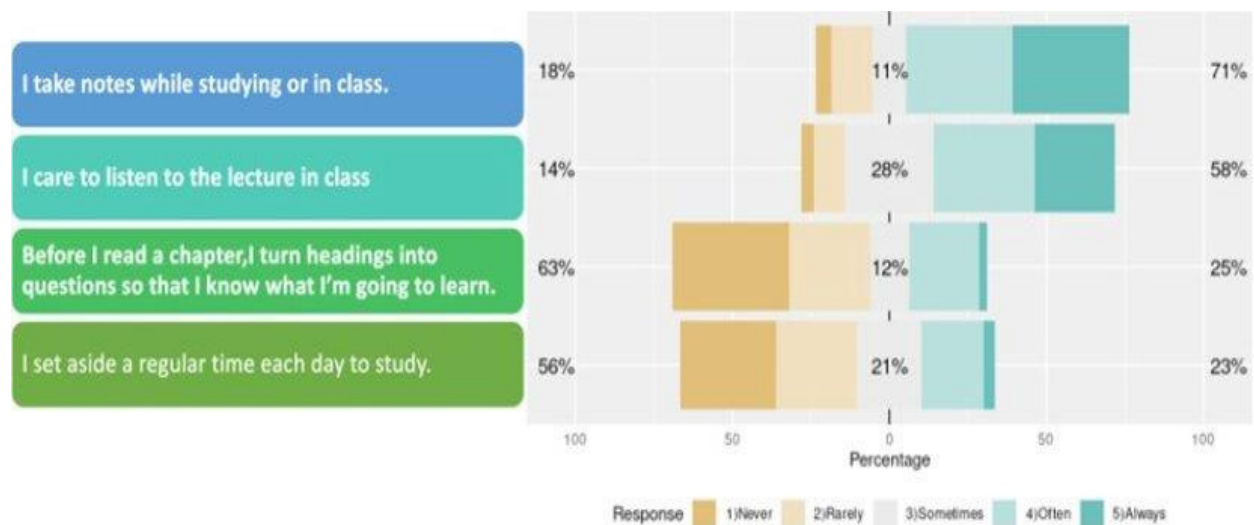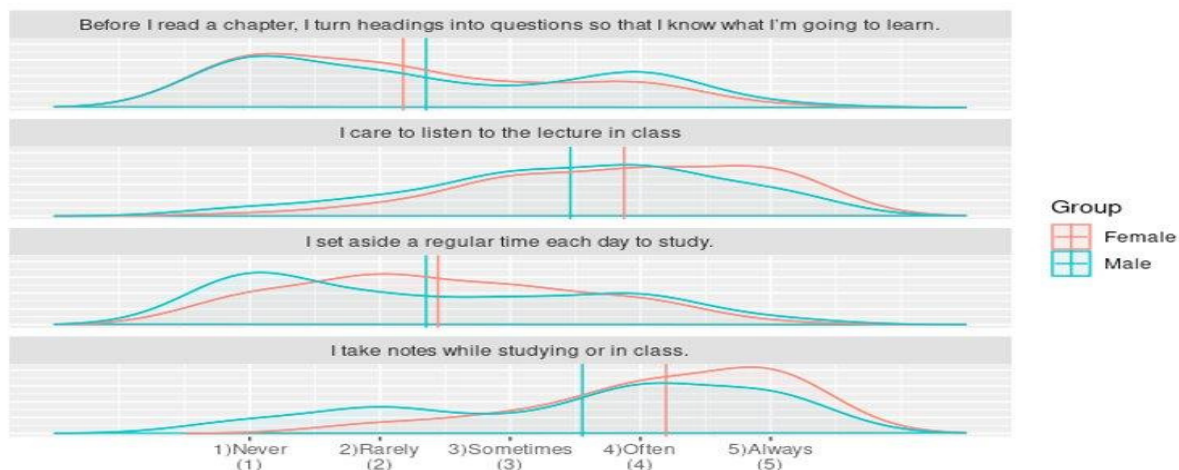

Table 6: Comparison of study habits in the class and before class on a bar likert scale

According to the answers we got, the study habits of most of the students during the lesson are more compared to the study habits they do before the lesson. For example, in response to whether they took notes in class 71% of METU students responded 'often' and 'always'. On the other hand, in response to whether they set aside a regular time each day to study 56% of METU students responded 'never' and 'rarely'.

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|	Mean (SD)	1)Never	2)Rarely	3)Sometimes	4)Often	5)Always
I care to listen to the lecture in class	3.65 (1.1)	4.1%	9.9%	28.1%	32.2%	25.6%
I take notes while studying or in class.	3.85 (1.2)	5.0%	13.2%	10.7%	33.9%	37.2%
Before I read a chapter, I turn headings into questions so that I know what I'm going to learn.	2.27 (1.2)	37.2%	25.6%	12.4%	22.3%	2.5%
I set aside a regular time each day to study.	2.40 (1.2)	30.6%	25.6%	20.7%	19.8%	3.3%

Table 7: Comparison of study habits in the class and before class on a heat likert scale

When we examine the previous graph in detail, we can see the proportion of each cell. In response to whether they took notes in class 37.2% of METU students responded 'always' and 5% of them responded 'never'. On the other hand, in response to whether they set aside a regular time each day to study 37.2% of METU students responded 'never' and 2.5% of them responded 'always'.


Table 8: Comparison of study habits in the class and before class by gender on a density likert scaleWhen we look at Table 8, we can see that in class, the female students listen to the lesson more carefully than male students and take more notes while studying. Before the lesson, the mean of the responses of each gender is close to each other.
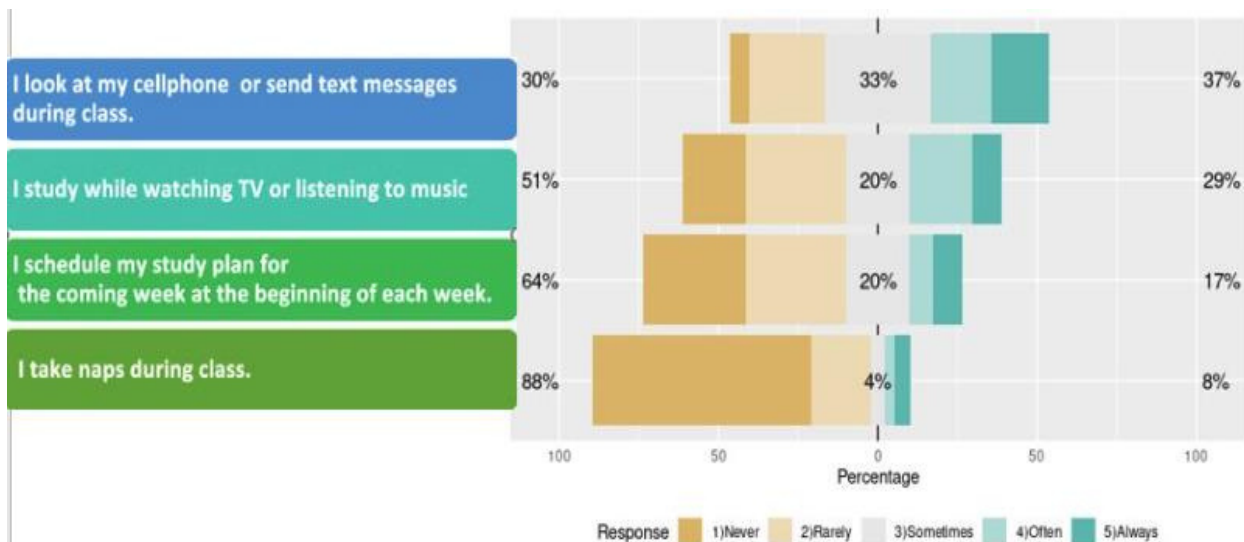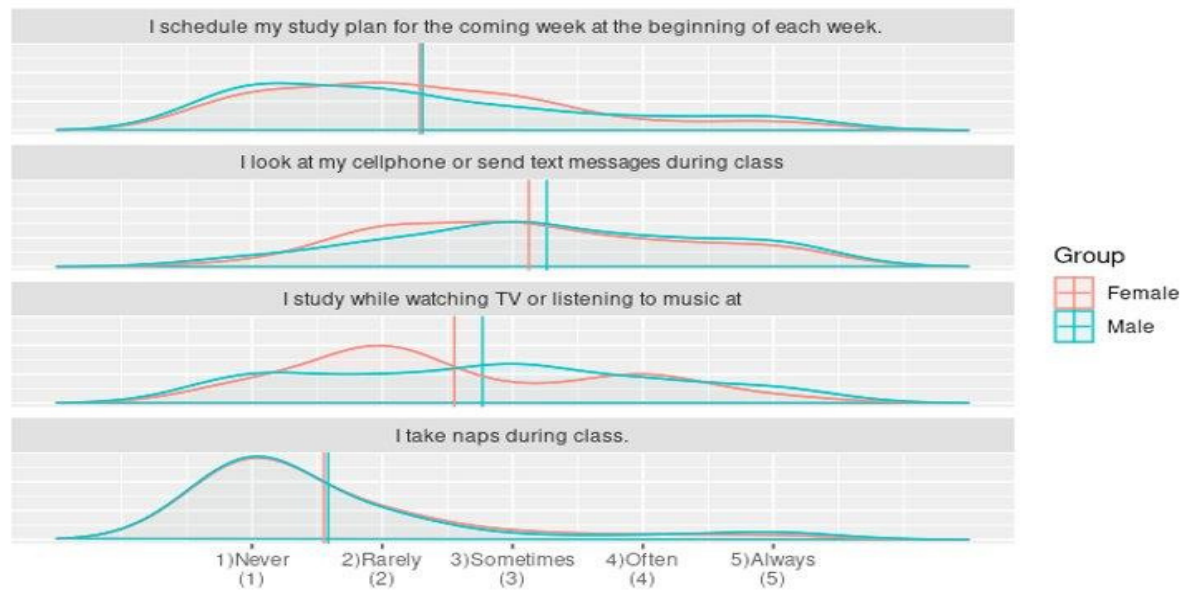
Table 9: Comparison of their behavior inside the classroom and their behavior outside the classroom on a bar likert scale

In response to whether they scheduled their study plan for the coming week at the beginning of each week 64% of METU students responded 'never' and 'rarely', 17% of them responded 'often' and 'always' the rest of them responded 'sometimes'. In response to whether they took naps during the lesson 88% of METU students responded 'never' and 'rarely'.
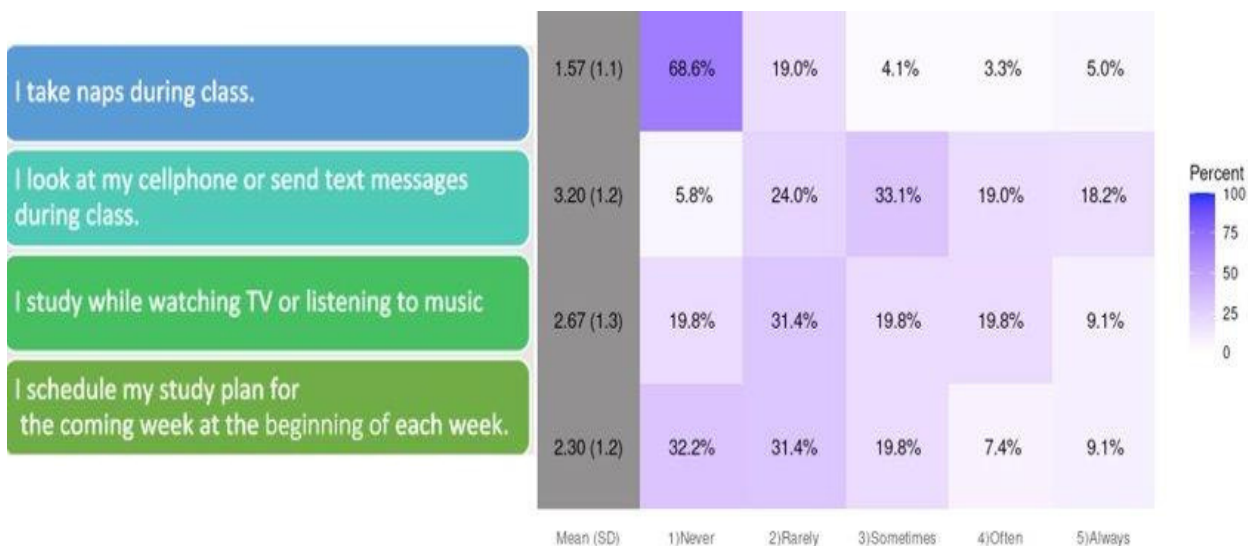
Table 10: Comparison of their behavior inside the classroom and their behavior outside the classroom on a heat likert scale

In response to whether they scheduled their study plan for the coming week at the beginning of each week 32.2% of METU students responded 'never' and 31.4% of them responded 'rarely'. In response to whether they took naps during the lesson 68.6% of METU students responded 'never' and 19% of them responded 'rarely'.

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I schedule my study plan for the coming week at the beginning of each week.

I look at my cellphone or send text messages during class

I study while watching TV or listening to music at

I take naps during class.

| 1)Never (1) | 2)Rarely (2) | 3)Sometimes (3) | 4)Often (4) | 5)Always (5) |

Group
Female
Male

Table 11: Comparison of their behavior inside the classroom and their behavior outside the classroom by gender on a density likert scale

When we look at the density graph of scheduling study plan, we can say that the

habit of
preparing for the lesson is less important for both female and male students. In
response to
whether they took naps during class, when we look at the ratios of the answers

of male and
female separately, their density is almost the same.

FREQUENCIES OF ANSWERS

Table of Genders of Participants

Male	Female
65 56	

Table of Age Range of Participants

Under 19	20-24 25-29		Over 30
11	102 7		1

Table of Faculty which Participants Enrolled in

Architecture	Arts and Sciences	Economic and Administrative Sciences	Education	Engineering
1 35 10 5 70				

Table of Level of Education of Participants

	1st Grade 2nd Grade 3rd Grade 4th Grade Master	
16 38 44 21 2		

Table of Marital Status of Participants

In a Relationship Single Married	
59 61 1	

Table of Accommodation Status of Participants

Dorm Family House Student House	
59 24 38	

Table Of Using Tobacco Products of Participants

Yes No	
55 66	

Table of Answers of "Did your family have an influence on choosing your major before you came to college?"

	Yes	No
	44	77

Table of Answers of "Does your family care about your grades in college?"

Never	Rarely	Neutral	Frequently	Very Frequently		
			8	29 35 38 11		

Table of Answers of "Does the environment you study in change or is it usually the same?"

I don't have a specific place to study.	I mostly study in the same environment.
56	65

Table of Answers of "Do you decide how, when and where you will work while making a study plan?"

	No Partially Yes	
	23 59 39	

Table of Answers of "How many minutes on average do you take breaks while studying?"

10-20 minutes	20-40 minutes More than 40 minutes	
	53 49 13	

Table of Answers of "How much time do you spend on social networks per day (Twitter, Instagram, etc.)"

I don't use social networks	30 min to 1 hour	1 to 2 hours	2 to 3 hours	More than 3 hours
		1 22 38 38 22		

Table of Answers of "How many hours of classes do you have per week on average?"

	Under 20 21-25 26-30 Over 31	
	55 46 10 10	

Table of Answers of "How often do you listen to music while studying?"

Never	Rarely Sometime Often Always		
	12 21 32 40 16		

Table of Answers of "Do you agree that being organized is important for studying?"

|	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6 4 21 55 35					

Table of Answers of "How do you feel about the content of what you learned at university?"

Very Poor	Poor	Good	Very Good	Barely Acceptable
9 12 38 48 14				

Table of Answers of "Are you satisfied with your grades? "

Not at all satisfied	Not so satisfied	Somewhat satisfied	Very much satisfied
27 42 47 5			

Density of cGPA
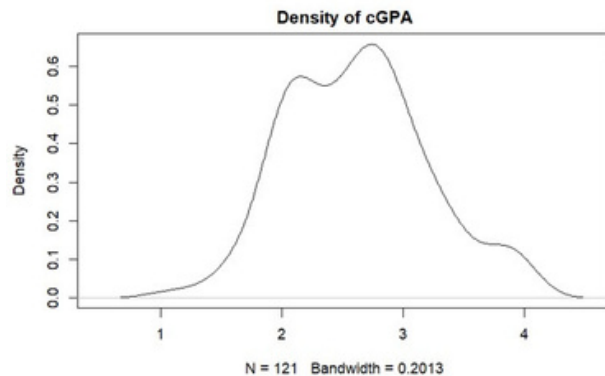
Shapiro-Wilk normality test

data: sh$`6) What is your CGPA?`
W = 0.98087, p-value = 0.08328

First of all, we applied the Shapiro-Wilk normality test to our cgpa, as our aim was to take the response from the 8 questions we asked before and examine the possible effects of study habits on cgpa. First of all, we applied the Shapiro-Wilk normality test to our cgpa, as our aim was to take the response from the 8 questions we asked before and examine the possible effects of study habits on cgpa.

We found our p-value 0.08328 as a result of the shapiro-wilk normality test.

Since this p-value is greater than 0.05, we can say that the distribution of our cgpa data set is normal.

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.438384	67.22%	39.61%	0.00%

When we applied our previously examined survey questions and satisfaction with general academic life to our cgpa dataset, which we found to be normally distributed, and conducted a multiple regression analysis, we found our R squared value of 67.22%, which is not a low value.

Regression Equation

6) What is your CGPA? = 1.811 + 0.2642 34) Can you rate your satisfact
+ 0.0 Please rate the statements be_1_1)Never
- 0.235 Please rate the statements be_1_2)Rarely
- 0.155 Please rate the statements be_1_3)Sometimes
- 0.048 Please rate the statements be_1_4)Often
- 0.052 Please rate the statements be_1_5)Always
+ 0.0 Please rate the statements be_2_1)Never
- 0.228 Please rate the statements be_2_2)Rarely
- 0.039 Please rate the statements be_2_3)Sometimes
+ 0.146 Please rate the statements be_2_4)Often
- 0.416 Please rate the statements be_2_5)Always
+ 0.0 Please rate the statements be_3_1)Never
+ 0.077 Please rate the statements be_3_2)Rarely
+ 0.145 Please rate the statements be_3_3)Sometimes
- 0.060 Please rate the statements be_3_4)Often
+ 1.086 Please rate the statements be_3_5)Always
+ 0.0 Please rate the statements be_4_1)Never
- 0.360 Please rate the statements be_4_2)Rarely
- 0.129 Please rate the statements be_4_3)Sometimes
- 0.531 Please rate the statements be_4_4)Often
- 0.530 Please rate the statements be_4_5)Always
+ 0.0 Please rate the statements be_5_1)Never
+ 0.837 Please rate the statements be_5_2)Rarely
+ 0.108 Please rate the statements be_5_3)Sometimes
+ 0.205 Please rate the statements be_5_4)Often
+ 0.423 Please rate the statements be_5_5)Always
+ 0.0 Please rate the statements be_6_1)Never
+ 0.137 Please rate the statements be_6_2)Rarely
+ 0.288 Please rate the statements be_6_3)Sometimes
+ 0.259 Please rate the statements be_6_4)Often
+ 0.231 Please rate the statements be_6_5)Always
+ 0.0 Please rate the statements be_7_1)Never
- 0.169 Please rate the statements be_7_2)Rarely
- 0.280 Please rate the statements be_7_3)Sometimes
- 0.076 Please rate the statements be_7_4)Often
- 0.068 Please rate the statements be_7_5)Always
+ 0.0 Please rate the statements be_8_1)Never
+ 0.062 Please rate the statements be_8_2)Rarely
- 0.259 Please rate the statements be_8_3)Sometimes
- 0.511 Please rate the statements be_8_4)Often

In the above regression equation, we see that the beta0 value is 1.811, and the next beta1(0.2642) value is multiplied by academic satisfaction, and the values that come after them are related to our 8 questions that we asked in the questionnaire, the purpose of which is to collect information about study habits. Our resulting regression equation is shown above.

CONCLUSION

In conclusion, this study examines the study habits of 121 METU students. These areas of study aimed primarily at examining things like demographics, study environment, family ethic, study style, length of study, and grades. While the majority of the students were careful to take notes and listen to the lesson while studying, the same majority reported that they did not study daily, which is a habit that the students studying in METU make jointly. The fact that activities such as listening to music, using social media, watching videos & TV while studying varied greatly among students, ensuring that these activities did not lead to any findings. When we wondered if there could be any relationship between cgpa and work habits, we found that the way to investigate this would be through regression analysis. In order to perform the regression analysis, we first applied the Shapiro-Wilk normality test to examine whether our response variable was normally distributed. We made multiple linear regressions to our cgpa dataset, whose p-value was greater than 0.05 and was considered normal, with our 8 study habits questions, which we explained earlier in the report, together with the satisfaction of academic life. As a result, we found the value of r-squared to be a remarkable value(67.22%), so we were able to say that there is a linear regression of cgpa with study habits, despite the fact that we do not have enough and realistic resources. This survey was to examine the similarities between the study habits of the students of our university, which is considered one of the best schools in Turkey, and to investigate whether these possible similarities affect our academic success. Determining that our generally similar study habits affect our cgpas in a linear way, even if at a low level, may perhaps guide students who want to study at this school in the future.

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