

# **Perceptions of IT Students on Learning with Social Media: An Example of EMU**

**Isra Atia Saleh Lawgali**

Submitted to the  
Institute of Graduate Studies and Research  
in partial fulfillment of the requirements for the degree of

Master of Science  
in  
Information and Communication Technologies in Education

Eastern Mediterranean University  
September 2019  
Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

---

Prof. Dr. Ali Hakan Ulusoy  
Acting Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science in Information and Communication Technologies in Education.

---

Assoc. Prof. Dr. Ersun Iscioglu  
Acting Chair, Department of Computer  
Education and Instructional  
Technologies

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Science in Information and Communication Technologies in Education.

---

Prof. Dr. Mustafa Ilkan  
Supervisor

---

Examining Committee

1. Prof. Dr. Mustafa Ilkan

2. Assoc. Prof. Dr. Ersun Iscioglu

3. Asst. Prof. Dr. Fatma Tansu Hocanin

## **ABSTRACT**

This study aimed at determining the perceptions of Eastern Mediterranean University Information Technology students on learning with Social Media, particularly Facebook. The study involved 180 participants, 134 of them were males and 46 were females. The qualitative research method and a survey questionnaire were used to collect the data. Moreover, descriptive analysis, ANOVA test, t-test, frequency, and percentage were chosen for the analysis process.

The research found out that participants are divided into two groups according to their perceptions on Social Media, i.e. Facebook. Many of them support the idea of Facebook being an educational platform. However, many others see it as only a social platform. It was also found that gender plays a role in determining the participants' views. Females use Facebook more than males. Yet, the difference was not too big. Finally, it was revealed that younger ages are more attached to Facebook in their daily life. However, the older ages are more into using it for education.

**Keywords:** Social Media, Facebook, Students' perceptions.

## ÖZ

Bu çalışma, Doğu Akdeniz Üniversitesi Bilgi Teknolojileri öğrencilerinin Sosyal Medya ile öğrenme konusundaki algılarını belirlemeye yöneliktir. Çalışmaya 134'ü erkek, 46'sı kadın olmak üzere 180 kişi katılmıştır. Verilerin toplanmasında nitel araştırma yöntemi ve anket formu kullanılmıştır. Ayrıca analiz süreci için tanımlayıcı analiz, ANOVA testi, t-testi, frekans ve yüzde seçilmiştir.

Araştırma, katılımcıların Facebook hakkındaki algılarında iki gruba ayrıldığını tespit etti. Birçoğu Facebook'un bir eğitim platformu olduğu fikrini desteklerken, diğerleri onu sadece bir sosyal platform olarak görüyormektedir. Ayrıca cinsiyetin katılımcıların görüşlerini belirlemede rol oynadığı tespit edilmiştir. Kadınlar, Facebook'u erkeklerden daha fazla kullanmasına rağmen, fark çok büyük değildi. Son olarak, daha genç yaşların, günlük yaşamlarında Facebook'a daha fazla bağlı olduğu ortaya çıktı. Bununla birlikte, daha büyük yaşlar daha çok eğitim için kullanılıyor.

**Anahtar Kelimeler:** Sosyal Medya, Facebook, öğrencilerin algıları.

# **DEDICATION**

I dedicate this work to my beloved parents.

## **ACKNOWLEDGEMENT**

First and foremost, I would like to acknowledge that I finished my Master's degree by Allah's willing. It was not easy. However, He "Subhanhu wa taa'la" empowered me to finally make it to the final step of this degree.

I owe this work to my life-coaches, supporters, and motivators; my parents. Without their constant support, I would not have been able to continue and overcome the faced obstacles. To them I send all my love and appreciation.

I owe a special thanks to Mr. Ahmad Fawzi for being such an encouraging and supportive mentor. Also, I would like to thank my friends and classmates for always being there to help.

Finally, I would like to thank my professors; Mr. Ersun Iscioglu, Mrs. Damla Karagozlu, Mrs. Begum Cubukcuoglu , and supervisor Mr. Mustafa Ilkan for the help and guidance they offered throughout my journey.

# TABLE OF CONTENTS

ABSTRACT.....	iii
ÖZ .....	iv
DEDICATION .....	v
ACKNOWLEDGEMENT .....	vi
LIST OF TABLES .....	ix
1 INTRODUCTION .....	1
1.1 Problem Statement .....	2
1.2 Purpose of the Study .....	3
1.3 Research Questions .....	4
1.4 Significance of the Study .....	5
1.5 Limitation of the Study .....	5
1.6 Definitions of Keywords .....	6
2 LITERATURE REVIEW .....	7
2.1 Social Media Definitions.....	7
2.2 Potentials of Social Media .....	8
2.3 Negative Effects of Social Media on Academic Performance.....	10
2.4 Students' Perceptions and Attitudes towards Learning with Social Media .....	11
3 METHODOLOGY .....	16
3.1 Research Method.....	16
3.2 Participants .....	16
3.3 Data Collection Instrument .....	25
3.3.1 Questionnaire .....	25
3.4 Data Analysis .....	26

3.6 Validity and Reliability .....	26
4 RESEARCH FINDINGS .....	28
4.1 Eastern Mediterranean University Information Technology program students’ perceptions of learning with Social Media.....	28
4.2 Eastern Mediterranean University Information Technology Students’ Perception Differences according to their Age .....	41
4.3 Eastern Mediterranean University Information Technology Students’ Perception Differences according to their Gender .....	43
5 CONCLUSION.....	46
REFERENCES.....	50
APPENDICES .....	55
Appendix A: Questionnaire .....	56
Appendix B: Consent Form .....	62
Appendix C: Permission Letter to Conduct Research.....	64
Appendix D: Originality Report .....	65
Appendix E: Ethics Committee Approval Letter .....	66



## LIST OF TABLES

Table 1. Gender Distribution of the Participants.....	17
Table 2. Age Ranges of the Participants.....	17
Table 3. Participants' Academic Year of Study.....	18
Table 4. Participants' Great Point Average (GPA).....	18
Table 5. Hours Spent by Participants Studying.....	19
Table 6. Participants' Computer Usage.....	19
Table 7. Participants' Internet Usage Per Week.....	20
Table 8. Social Networks.....	21
Table 9. Social Media Platforms Used by Participants.....	21
Table 10. Participants' Number of Facebook Friends.....	22
Table 11. Participants' Time Spent on Facebook.....	23
Table 12. Using Facebook For Academic Purposes.....	24
Table 13. Facebook Impact on Academic Purposes.....	24
Table 14. Reliability Statistics.....	27
Table 15. Participants' Views of Facebook.....	28
Table 16. What Participants Share on Facebook.....	30
Table 17. Opinions on Using Facebook for Class.....	31
Table 18. Using Facebook for Classroom Activities .....	33
Table 19. Facebook Browsing while Engaging in Learning Activities.....	36
Table 20. Participants Academic Performance.....	38
Table 21. The Extent to which Participants are attached to Facebook.....	41
Table 22. Participants Views of Facebook in relation to their Learning Behavior....	42

Table 23. Participants Views on How Facebook Interferes with their Learning Activities at College .....	42
Table 24. Participants Views on their Academic Performance.....	43
Table 25. The Extent to which Participants are attached to Facebook.....	44
Table 26. Participants Views of Facebook in relation to their Learning Behavior.....	44
Table 27. Participants Views on How Facebook Interferes with their Learning Activities at College.....	45
Table 28. Participants Views on their Academic Performance.....	45

# Chapter 1

## INTRODUCTION

Technology is vital to all of us. It has become an integral part of our lives. University students are no exception to this rule. An example would be the internet. The internet is fundamental for all, world widely, particularly students (Amukune, 2013). As it has been noticed by the Lenhart, Simon, & Graziano, M. (2001) “It has become an increasingly important feature of the learning environment for teenagers”.

The majority of youths nowadays have access to the internet. They access the internet either from home, school, or cafes and restaurants. The purposes of using the internet differ among youths. However, most of them use the internet for study. According to Lenhart, Simon, & Graziano (2001), 94% from youth sample, aged 12-17 use the internet specifically for school research. Moreover, 71% of them see it as the main source regarding school reports and projects.

Using the internet, more specifically web 2.0, students are now accessing a wide range of different websites and tools. A dominant tool among today’s youths is social media. “Social Media refers to the use of web-based and mobile technologies to turn communication into an interactive dialogue that allow the creation and exchange of user-generated content (Amakune, 2013)”. It affects enormously all areas of people’s lives in different levels (Aleksandrova & Parusheva, 2019). According to Aleksanderova and Parusheva (2019), the young generations are the most affected

generation by social media. This might be because it offers numerous platforms for communication, content producing and sharing, and collaboration.

Moreover, one of the areas which have been affected by social media is higher education. Students are using social media in many different fields including university education. Additionally, it is being used by educators to get students participating in the act of creating and sharing knowledge and communicating (Aleksanderova & Parusheva, 2019).

An example of social media platforms is Facebook. Facebook was established in February 2004. It was founded by Mark Zuckerberg with Andrew McCollum and Eduardo Saverin assistance. This social media platform was first available only for Harvard University students. However, it has grown fast within a short time. Therefore, Facebook was made available for public all around the world in September 2006. In 2019, Facebook was ranked the most popular social network world wide. It has around 2.32 billion monthly active users (Statista, 2019).

Over the years the term Learning has been defined differently by different psychologists. Thamarasseri, 2016 defines learning as “any relatively permanent change in behaviour or behavioural potential produced by an experience”. Therefore, learning can be seen as a connection between behavior and change.

### **1.1 Problem Statement**

Technology is being increasingly used in education. Today, social media is particularly one of the most popular technologies used in the classroom. Teachers are extensively adopting positive perceptions towards social media integration. Moreover, they are regarding it as a complementary part to their teaching and

students' learning. However, students are also a part of the educational process. Furthermore, students are an essential part of any educational setting. Therefore, their perceptions towards social media, its use in learning, and how it affects the way they learn plays an important role. Therefore, this study is to fill this gap and give teachers a chance to find out more about what appears to be liked by students. Additionally, it allows teachers to know more about what does not appeal to students and affect their learning negatively. Therefore, educators would be able to work out the best social media practices to implement in the classroom. In its turn, this would hopefully help students' interest and motivation levels to increase. Consequently, this would hopefully help students' learning chances to increase.

Social media sites are being widely used by students and teachers. An example of such used sites is Facebook. Many agree that it is a useful educational tool (Buzetto, More, 2012; Shamsi et al. 2019) However, it is being criticized for being only a social tool by which communication is enhanced (Kistantas et al. 2016; Sanchez, Cortijo, Javed, 2013). Therefore, as can be seen, there is a clear gap between the claimed learning potential and the negative impacts of social media integration into education.

## **1.2 Purpose of the Study**

The aim of this study is to investigate Eastern Mediterranean University (EMU) Information technology (IT) students' perceptions on learning with social media, particularly Facebook.

### **1.3 Research Questions**

The following research questions are designed seeking detailed information about the Eastern Mediterranean University Information Technology students' perceptions toward learning with the usage of social media.

**1.** What are the Eastern Mediterranean University Information Technology program students' perceptions of learning with Social Media?

The first research question tended to examine the perceptions of the IT students at the EMU regarding the use of social media for the academic purposes. This question aims to figure out whether the IT students use social media in their education, such as studying, taking courses, checking schedules of exams or classes, etc. or not. It even aims to find out whether the use of social media has an effect, negative or positive, in their education.

**2.** Do EMU IT students' perceptions differ according to their gender?

The researcher aims in this question to find out the gender differences, if any, regarding the use of social media for education. The author intends to find out whether this chosen context in this study coincides or contradicts with the results in the literature about the use of social media for educational purposes.

**3.** Do EMU IT students' perceptions differ according to their age?

The researcher in this question aims to find out whether the use of social media varies due to the age of the participant or not. In other words, the participants with

younger ages may prefer the use of social media more than those of older ages. Therefore, the researcher divided the participants according to their age.

#### **1.4 Significance of the Study**

The study is significant in the sense of helping in future improvements in instructional usage of technology, specifically social media. The results from this research will contribute in expanding the body knowledge around the topic in general. It will draw educators' attention to the possible benefits of integrating such technologies in teaching. The final results will pose a major contribution in the understanding of learners' perceptions of social media usages in the educational settings. Hopefully, it will also spot the light on its impacts on students' academic performance, collaboration and cooperation, and interactions.

#### **1.5 Limitations of the Study**

This research study was limited to the Turkish Republic of Northern Cyprus, Eastern Mediterranean University, Information Technology students taking part in the spring 2018-2019 semester.

Additionally, this research was limited in time and resources. The researcher had only one semester to conduct the research. Moreover, she had only the final exams period to gather data from IT students.

This study is supposed to examine the perceptions of IT students at EMU about using social media for learning. Nevertheless, the study mainly focused on Facebook as a social media platform neglecting the other platforms.

Additionally, this study used a quantitative method. However, data was gathered only through a questionnaire. It was much preferred if the study supported its findings through interviews with some of the participants. This could have helped in getting deeper understanding of their views around the topic.

## **1.6 Definitions of Keywords**

**1. Social Media:** is to the use of web-based and mobile technologies to turn communication into an interactive dialogue that allow the creation and exchange of user-generated content (Amakune, 2013).

**2. Facebook:** Facebook represents a social institution that can be used by adolescents not only for sharing basic information and for connecting with others, but also as a platform for exploring and divulging information about their identities (Jordán-Conde, Mennecke, & Townsend, 2014).

**3. Students' Perceptoions:** Perception is man's primary form of cognitive contact with the world around him (Efron, 1969).



## **Chapter 2**

### **LITERATURE REVIEW**

This chapter discusses the relevant literature review regarding social media, potentials of social media, negative effects of social media on academic performance, and Students' Perceptions of Learning with Social Media and their Attitudes towards it.

#### **2.1 Social Media Definitions**

Social Media has several definitions. However, all definitions revolve around the same idea. While Lee and Mcloughlin (2010) defined social media as a group of web-based instruments and services used for a many different applications, Kietzmann, Hermkenz, MacCarthy, and Silvestre (2011) defined it as “Social media employ mobile and web-based technologies to create highly interactive platforms via which individuals and communities share, co-create, discuss, and modify user-generated content”.

Similarly, Paulsen and Taekke (2013) explain that “With new social media we mean Facebook, Twitter, Spotify, Youtube, Instagram, Skype, Google+ and various other sites on the web, where people can interact with each other, create weblogs and share information, knowledge and files”.

There are now a variety of Social Media sites. Their domain and operation diverge. Some are for general mass and others are more focused professional networks

(Kietzmann et al. 2011). For Liu (2010) examples of Social Media Sites are Facebook, Wiki, YouTube, Bulletin Board, LinkedIn, Blogs, Twitter, Podcasts, Virtual Worlds, RSS, StumbleUpon, Netlog, Delicious, Digg, Plurk, and Jaiku. “All social media involve some sort of digital platform, whether that be mobile or stationary (Manning, 2014)”.

## **2.2 Potentials of Social Media**

Tertiary education institutions are faced with ever expanding opportunities to integrate social media and technologies into teaching, learning and assessment. If employed in conjunction with appropriate strategies, learning technologies are capable of supporting and encouraging informal conversation, dialogue, collaborative content generation and the sharing of knowledge, thereby opening up access to a vast array of representations and ideas. (McLoughlin & Lee, 2010, p. 29).

Pualsen and Taekke (2013) described six potentials of Social Media. First, Social Media when integrated into teaching expands the chances for learners to collaborate, participate, find and share information, express themselves and learn from one another. Therefore, learning is enhanced. Second, it helps forming communities where friends making, maintaining, and knowledge sharing is possible. Third, Social Media enhances the study environment and makes connection and communication between students and school easier and more convenient. Fourth, through Social Media integration, learning becomes more realistic and opportunities to contact people all around the world and created. Fifth, learner motivation and commitment is increased through the use of Social Media Sites. Additionally, learning becomes more appealing and enjoyable. Moreover, Social Media diversify teaching and extend it beyond traditional classrooms. Finally, Social Media gets pupils ready for

today's world which is dominated by digital media. When used properly, students improve their IT and media skills.

Although Social Media emerged newly, it has invaded almost all fields. Education is no exception. It is now being used by both teachers and students. Examining a variety of its platforms, it has approved its capability of providing numerous educational advantages (Faizi, EL Faia & Chiheb, 2013).

For Faizi et al., those advantages can be divided into three categories. First, Social Media work as communication tools. The majority of its users are students. They use it to contact their friends, peers and family. Therefore, this can be exploited to enhance teacher-student communication. Moreover, it can be used as a student-student communication tool. For example, Facebook can be utilized as such. It can be used by all either within or between classes.

Second, social media work as engagement enhancer. Utilized by teachers, it can enhance students' engagement. Social Media platforms have the power of providing rich learning experiences. These learning experiences enable learners from learning from each other, collaborate and cooperate to construct their knowledge. Thus, Social Media is found to be beneficial for bored, shy and passive students. Social Media is attractive, relevant, interactive, and relevant to today's students. In addition, some sites provide a wide range of educational materials. Therefore, it enhances engagement and eventually the learning experiences.

Lastly, social media work as collaboration improving. In this sense, social media platforms enable learners to collect, discuss, and share ideas and information. Thus,

learners are to construct their own knowledge and collect from that of others. Working collaboratively in groups, learning is promoted and better retained. Therefore, with this functionality, learners become active in their own learning process.

### **2.3 Negative Effects of Social Media on Academic Performance**

As shown in the study of Morallo (2013), social networking sites (SNS) affect education negatively. It was found that students have more leisure time and less study time. They tend to use SNS for communication and entertainment. They do not use it for academic purposes. However, students still use SNS to discuss school work.

In their study, Abdullahi, Samadi, and Gharleghi (2014) concluded that SNS usage has a negative effect on students' academic performance. In other words, the more time students spent on SNS, the less time they spend studying. This supports the findings of Junco (2011). Junco (2011) found that learners' overall GPA is negatively affected by the time spent checking Facebook. Additionally, chatting on Facebook was revealed to impact studying time in a negative way. Furthermore, similar results were found by Kischner and Karpinski (2010). Kischner and Karpinski (2010) found that students who use Facebook acquainted spending less hours per studying per week and thus lower GPA than the students who do not use it. There were students reporting Facebook affecting academic performance. The majority of those revealed a negative effect. This effect is in the sense of making them more of procrastinators and thus lacking time management skills.

## **2.4 Students' Perceptions of Learning with Social Media and their Attitudes towards it**

In order to examine attitudes towards Facebook as an academic tool, Towner and Munoz (2011) conducted a research study at a private university in the U.S. on undergraduate and graduate students and instructors. The study found that Facebook connects students with others including peers and classmates. This helped students to get to know each other well. Moreover, it found out that students are mainly using SNS (Facebook) for informal learning reasons. Such reasons include interacting with classmates on non-required course related matters. However, it was found that 46% of the participants use Facebook for formal learning purposes. For example, interacting on course required components and activities.

Irwin, Ball & Desbrow (2012) conducted a research on Students' perceptions of using Facebook as an interactive learning resource at university. The study aimed at evaluating students' perceptions of using specific "Facebook pages". These Facebook pages were designed as a learning resource for some university courses. They were to provide students with information relevant to the courses. Moreover, they helped connecting students and teachers. Teachers posted 3-5 times a week on the pages. Posts were on notifying students about available course materials, time and location changes, reminders, etc. Since most of the students were using Facebook, the results showed that students liked being informed about the course on Facebook. They found it easier to follow than on a university website. Additionally, they liked it because of its availability on mobile devices. However, only half of the participants found it effective for their learning. This is thought to be because students were not receiving notifications since it was a Facebook page not a group.

This could also be due to the instructors' technology integration approaches. Moreover, the students in this study recommended Facebook for future courses. The findings indicate that Facebook enhances communication, interaction, and flexibility in course content delivery. Therefore, it is believed to be a beneficial learning tool.

Similarly, Jahan and Ahmed (2012) researched on students' perceptions of academic use of social networking sites in Dhaka University, Bangladesh. This study describes an empirical research on students use and perceptions of SNSs use in education in the perspective of a developing country. Results showed that students are interested in and enjoyed using Social Networking Sites in their studies. Furthermore, it has been found that these sites are supporting students in their education with the capacities and features they offer.

Contradicting with the previous study findings, Sanchez, Cortjo, and Javed (2013) found that students mainly are using Facebook to connect with people. Moreover, social relations were perceived as the most significant amongst the collected Facebook usage purposes. Also, the following factors influenced students' perceptions of Facebook as an educational tool; ease of use, usefulness, information exchange improvement, communication and collaboration. Another reason is Facebook's compatibility with students' needs, values and past experiences.

Ahmed and Tham (2011) conducted a similar research. The aim of their study was to examine social networking sites (SNS) usage and implications among college students. Ahmed et. Al surveyed a non-random sample of 445 college students. The survey was on students SNS use, perceptions of SNS communication and awareness

of SNS impacts on academic performance and personal development. It was revealed that:

- Female students spent more time on SNS.
- The time spent for both genders on SNS decreases as the age increases.
- Students perceived SNS usage influences on academic performance differently in terms of age. Younger students reported a greater number of negative perceptions.
- There has been found an important correlation between age and gender, and SNS influence on personal development.
- Furthermore, results indicated a significant relationship between users' class rank and field of study, and the influence of SNS.

According to a survey of 128 students conducted by Kitsantas et al. (2016), Social Networking (SN) perceived as helpful in three areas. These areas are: communication, information gathering, and academic work positive influence. Moreover, students of this study reported social Networking negative impacts on a number of areas. For example, SN had a negative impact on social interactions, emotional health, and work completion. Furthermore, SN was perceived as a privacy threat, addictive, and distractive. Interestingly, greater negative effects of SN were described by younger student participants.

In the same vein, another study examined Greek college students' perceptions of positive and negative effects of Social Networking use. The survey study was

conducted by Kitsantas, Chinnos, and Kitsantas (2016). It also aimed at revealing any gender and age differences in these perceptions. The survey was conducted on 258 undergraduate and graduate students. Females were about 75% while males were 25%. Findings indicated a positive effect of SN on communication. This in its turn supports the findings of the previously mentioned research. Moreover, SN was found to affect learning and motivation positively. However, on the negative side, students reported that Social Networking may cause a sense of isolation and concerns about academic performance. In support to the previous research, Greek college students perceived SN as a privacy threat. Finally, in terms of gender, females seemed to benefit more from Social Networking use than males.

An American study done by Buzzetto-More (2012) conducted on Social Networking in undergraduate education showed that students deemed Facebook as a valuable tool. They considered Facebook as an instrument by which students are engaged, interpersonal relationships are strengthened, and learning communities are built. In this investigation, Facebook was used in a number of courses offered either fully online or in a hybrid format. Students were obliged to participate and join the courses' Facebook groups.

Likewise, another study investigated Social Networking effects on learning according to the opinions of Italian university students. By a survey on 336 students, Persico et al. (2016) found that SN helps improving learning and connecting with peers. As in the last mentioned studies, students on this research revealed SN's negative impacts. Such impacts were experiencing negative emotions and losing concentrations. Surprisingly, Social Networking was seen as a prevention of engagement in extra academic activities. Finally, students reported that SN use can



be distracting and addictive. On the positive side, information access and peer collaborations were made easier through SN use. Noteworthy, Social Networking tools' advantages were appreciated more by students who already use them. However, these tools were feared by students who use them less.

## **Chapter 3**

### **METHODOLOGY**

This segment of the study elaborates the research methodology used while conducting the research, participants, and data collection instrument. Furthermore, it discusses the data analysis methods used in analyzing the collected data and the research reliability and validity.

#### **3.1 Research Method**

A questionnaire was used to gather data from participants. A questionnaire design provides a quantitative or numeric description of some fraction of the population - sample- through the data collection process of asking questions of people (Fowler, 1988). Therefore, the research findings can be generalized to the whole population. “Research Methods are the tools and techniques for doing research (Walliman, 2017)”. The quantitative research method was used to carry out this research. Quantitative methods are described by Leedy (1993) as research methods used to answer questions on relationships within measurable variables with an intention to explain, predict and control a phenomenon.

#### **3.2 Participants**

In this study, the involved participants were the Eastern Mediterranean University, school of Computing and Technology, Information Technology program students registered in the spring 2018-2019 semester.

The sample technique chosen for this research is the random technique. In this technique, all the population has the right to be selected and participate. Moreover, the sample size was 180 students. They were all accessed through the department.

Table 1. Gender Distribution of the Participants

Gender	Number	Percentage
Male	134	74.4%
Female	46	25.6%
Total	180	100%

180 Information Technology students have participated in this study. 134 of them were males and 46 were females. They were all of different ages, academic years and GPAs as shown in the tables below. Therefore, as illustrated in Table 1, the males formed (74.4%) of the participants and the females formed (25.6%).

Table 2. Age Ranges of the Participants

Age	Number	Percentage
18-21	75	41.7%
22-25	68	37.8%
26-29	23	12.8%
30+	14	7.8%
Total	180	100%

The participants were divided into four main age ranges. The first range was between 18 and 21 included 75 participants which represents 41.7% of the total participants.

The second range was between 22 and 25 with 68 participants representing 37%. The third range, 26-29, included 23 participants (12.8%) while the last range was more than 30 year old with 14 participants, which forms 7.8% of the total number of the participants as indicated in Table 2.

Table 3. Participants' Academic Year of Study

Year of Study	Number	Percentage
First year	41	22.8%
Second year	40	22.2%
Third year	47	26.1%
Fourth year	52	28.9%

As shown in Table 3, the research included 41 first year students (22.8%), 40 second year students (22.2%), 47 third year students (26.1%), and 57 fourth year students (28.9%).

Table 4. Participants' Great Point Average (GPA)

GPA	Number	Percentage
4.00 – 3.70	56	31.1%
3.30 – 3.00	57	31.7%
2.70 – 2.30	52	28.9%
2.00 – 1.00	15	8.3%

As illustrated in Table 4, the general average point GPA of the participants was as the following: 56 participants (31.1%) got 4.00 – 3.70, 57 participants (31.7%) got

3.30 – 3.00, 52 participants (28.9%) got 2.70 – 2.30, while only 15 participants (8.3%) got 2.00 – 1.00.

Table 5. Hours Spent by Participants Studying

Study Hours	Number	Percentage
Less than 3 hours	59	32.8%
4-7 hours	81	45.0%
8-11 hours	23	12.8%
12 or more hours	17	9.4%

59 of the participants study for less than 3 hours (32.8%), 81 participants study for 4 to 7 hours (45.0%), 23 study for 8 to 11 hours (12.8%) while only 17 study for 12 or more hours (9.4%) (Table 5).

Table 6. Participants' Computer Usage

Computer usage	Number	Percentage
1-5 years	36	20.0%
6-10 years	60	33.3%
11-15 years	84	46.7%

Computer usage was divided into six categories. 84 “46.7%” participants used computer for 11 to 15 years, 60 “33.3” used it for 6 to 10 years and 36 “20.0” for around 1 to 5 years as shown in Table 6.

Table 7. Participants' Internet Usage per Week

Duration	Number	Percentage
1-3 hours	6	3.3%
4-7 hours	25	13.9%
8-11 hours	28	15.6%
12-15 hours	25	13.9%
16-19 hours	21	11.7%
20 hours +	75	41.7%

In an attempt to determine participants' internet usage time per week, they were asked to choose their weekly usage hours from six different hour ranges. The majority of the participants (75) used the internet for 20 hours or more per week which forms 41.7% of the sample (Table 7).

28 participants used it for 8 to 11 hours, 25 participants used it for 4 to 7 hours, 25 participants used the internet for about 12 to 15 hours, 21 participants used it for around 16 to 19 while only 6 of the participants used the internet for 1 to 3 hours per week (Table 7).

Table 8. Social Networks

Answer	Number	Percentage
YES	153	85.0%
NO	27	15.0%

As indicated in Table 8, the participants were asked whether they use any social media platform. 153 (85.0%) responded with “Yes” whereas 27 (15.0%) responded with “No”.

Table 9. Social Media Platforms Used by Participants

Social Media	Number
Facebook	145
Twitter	46
My Space	6
Others	50

As clarified in Table 9, 145 participants use Facebook platform, 46 uses Twitter, 6 use My Space, while 50 use other platforms, which is mainly ‘Instagram’.

Table 10. Participants' Number of Facebook Friends

Participants' number of Facebook friends	Number	Percentage
1-10	10	6.7%
11-50	10	6.7%
51-100	21	14.1%
101-150	18	12.1%
151-200	11	7.4%
201-250	11	7.4%
251-300	8	5.4%
301-400	9	6.0%
400+	51	34.2%

Table 10 shows the number of Facebook friends participants have. Facebook friends were divided into 9 ranges. The first range was ten or less. It involved 10 participants which was around 6.7%. The second range was between 11 and 50 friends. This range involved 10 participants. From 51 and 100 Facebook friends involved 21 participants (14.1%).

The fourth range was between 101 and 150 and included 18 (12.1%). The fifth range was between 151 and 200 which involved 11 participants representing 7.4%. The Facebook friends range from 201 and 250 included 11 participants which represents around 7.4%. The seventh range between 251 and 300 included 5.4% of the participants, 8 participants. Finally, while the range between 301 and 400 involved 9



participants representing 6.0%, the range from 400 and more included the majority of the participants (34.2%) which is around 51 participants (Table 10).

**Table 11. Participants' Time Spent on Facebook**

Time	Number	Percentage
1-10 min	38	25.5%
11-20 min	32	21.5%
21-30 min	17	11.4%
31-40 min	13	8.7%
41-50 min	16	10.7%
51 +	33	22.1%

Table 11 illustrates participants' time spent on Facebook in the past week. 25.5% of the participants used it for 1 to 10 minutes, 21.5% participants used it for around 11 to 20 minutes, 11.4% are on Facebook for 21 to 30 minutes a day, and 8.7% were on it for 31 to 40 minutes. Finally, 10.7% of the participants were on Facebook for about 41 to 50 minutes whereas 22.1% of them used it for 51 and more minutes a day.

Table 12. Using Facebook for Academic Purposes

Answer	Percentage
Yes	45.6%
No	54.4%

As indicated in Table 12, 45.6% answered yes on using Facebook for academic purposes while 54.4% answered no.

Those who answered yes were asked to explain what the educational content they last shared on Facebook. The answers were mainly about two educational things: course requirements, such as assignments, and learning some courses, such as C++ and English language.

Table 13. Facebook Impact on Academic Performance

Answer	Percentage
Yes	34.9
No	65.1

Table 13 shows the participants answers on whether Facebook has an impact on academic performance. 65.1% said no, while only 34.9% said yes.

Then, participants were asked to clarify how Facebook has an impact and why it has not. For stating how Facebook has impacted students' academic performance, the answers mainly included three main points: getting knowledge, free online courses

and more engagement in class activities. For those who answered with No, the majority of the answers were due to time wasting or not using Facebook very often.

### **3.3 Data Collection Instrument**

To investigate this research, a quantitative design technique and survey method of research was applied with the aim of determining the students' perceptions. Quantitative research is defined as the systematic investigation of phenomena by gathering quantifiable data and performing statistical, mathematical or computational techniques. An intact instrument "survey" was used to gather data. An intact instrument refers to using tools developed by others. The survey that was applied belongs to Amukune (2013).

#### **3.3.1 Questionnaire**

The questionnaire comprised of six sections. Section A, collected the demographic characteristics of social network users. This section asked about participants' age, gender, year of study, grade point average, and hours spent per week by participants studying privately. Originally, section A contained 8 items. However, the items had been reduced to 5 items due to the study's purpose. Section B included 9 items. The purpose of these items was to collect information on users' experience of using the internet and their level of Facebook usage. Social Networking intensity was measured using five items. This measure included two self-reported assessments of Facebook behavior, designed to measure the extent to which the participants were actively engaged in Facebook activities: the number of Facebook "friends" as well as the amount of time spent on Facebook on a typical day. This measure also included a series of Likert-scale attitudinal questions designed to tap the extent to which the participants were emotionally connected to Facebook and the extent to which

Facebook was integrated into their daily activities. Facebook intensity was treated as a surrogate measure for individuals' Facebook browsing.

Section C contained 6 items. These items asked respondents about the educational content shared during Facebook browsing. Moreover, they asked about participants preference for Facebook. In section D, there was only 1 item. This item investigated the participants views of Facebook in relation to their learning behavior on Facebook that is Communication, collaboration and sharing of resources during Facebook browsing. Section E, involved 2 items. The two items investigated how Facebook interferes with the respondents' learning activities in the college. Lastly, section F which contained 2 items meant to collect data on self -efficacy for self -regulated learning of the students. The measure was used to compare students who browse Facebook for learning purposes and those who did not.

### **3.4 Data Analysis**

Collected data was analyzed using descriptive analysis technique, frequency, percentage, T-test and one-way ANOVA with the use of SPSS statistics 22.0 software. That is descriptive analysis and frequency were used to show the derived result in reference to each posed research question variable. T-test and ANOVA were used in order to analyze the data which deals with two variables which is included in the t-test while for more than two variables which are included in ANOVA.

### **3.5 Validity and Reliability**

The data collection tool was checked and evaluated by experts and approved to be valid and appropriate to be used for the aim of this research.

Reliability is defined as consistency and representation of the results of the population sample of the study (Golafshani, 2003). The reliability of a quantitative study aims to measure and analyze the relationships among the different variables (Deniz & Lincolen, 1998). The researcher adapted the questionnaire from (Amakune, 2013). The Cronbach alpha value from the findings of the Amakune (2013)'s research was determined as 0.87. For the current study, the reliability of the survey was tested through Cronbach alpha coefficient and was determined as 0.88 which is a significantly high value.

Table 14. Reliability Statistics

Cronbach's Alpha	No. of Items
0,887	39

As can be seen in Table 14, the author measured the Cronbach's Alpha of the study. 39 items were measured in this analysis, and the result shows that it is 0.88, which proves that it is reliable.

## Chapter 4

### RESEARCH FINDINGS

This chapter includes the research analysis. Descriptive data analysis was applied along with ANOVA tests for age differences and T-Test for gender differences. This chapter is divided into three sections. The first section is divided into 5 subsections: Facebook usage, academic use of Facebook, Facebook and classroom, Facebook browsing, and academic performance.

#### 4.1 Eastern Mediterranean University Information Technology program students' perceptions of learning with Social Media

Table 15. Participants' Views of Facebook

Item 9	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
Facebook is part of my everyday activity	25.5	21.5	18.8	21.5	12.8	2.74	1.38
I am proud to tell people I'm on Facebook	18.1	25.5	34.2	16.1	6	2.66	1.13
Facebook has become part of my daily routine	22.1	22.1	22.1	23.5	10.1	2.77	1.30
I feel out of touch when I have not logged onto Facebook for a while	30.2	22.1	22.8	18.8	6	2.49	1.26
I feel I am part of the Facebook community	22.8	23.5	28.9	22.8	2	2.58	1.13
I would be sorry if Facebook shut down	26.8	13.4	24.8	24.2	10.7	2.78	1.36

Section B of the questionnaire involved an item (N.9) including five likert-scale statements. This set of statements investigated participants' views of Facebook. Participants had to rate each statement from strongly disagree to strongly agree.

In the first statement 'Facebook is part of my everyday activity' of the ninth item in section B, 47% disagreed with this statement, while 34.3% agreed with and 18.8% were neutral in their answer. For the second statement 'I am proud to tell people I'm on Facebook' 43.6% disagreed, however; 22.1% agreed with it and 34% were neutral (Table 15).

44.2% of the participants disagreed with 'Facebook has become part of my daily routine', 33.6% agreed, and 22.1% were neutral. On feeling out of touch when not being on Facebook for some time, the majority of the participants (52.3%) disagreed, 24.8% agreed, and 22.8 neither agreed nor disagreed (Table 15).

According to the fifth statement of the ninth item in section B 'I feel I am part of the Facebook community', 46.3% disagreed, while 24.8% agreed and 28.9% were neutral. On the last statement 'I would be sorry if Facebook shut down', most of the respondents (40.2%) disagreed with it, 34.9% agreed while only 24.8% neither disagreed nor agreed (Table 15).

Therefore, as illustrated in the Table 15 above, the mean calculated regarding these Likert-scale items was as following, consecutively: 2.74, 2.66, 2.77, 2.49, 2.58, and 2.78.

Amakune (2013), who conducted a research study on the perceived effects of social media networking on learning behavior at Momba County, found similar results using the exact same Likert-scale items.

Table 16. What Participants Share on Facebook

	Subject Area	Frequency	Percent
	Educational	60	33.3%
	Job Search	16	8.9%
	Politics	32	17.8%
	Campus News	22	12.2%
Item 10	Sports	52	28.9%
	Social	69	38.3%
	Entertainment	58	32.2%
	Work Related	16	8.9%
	Pass Time	30	16.7%
	Others	10	5.6%

As it can be seen in Table 16, item 10 findings in section C demonstrate the subject area participants use Facebook for. The participants mainly share social, educational, entertainment, and sports subjects. As can be seen by the table above, the mostly chosen choice is social (38.3%). The second mostly chosen choice is educational (33.3%). Then entertainment (32.2%) followed by sports (28.9%), politics (17.8%), pass time (16.7%), campus news (12.2%), job search (8.9%) and work related (8.9%). Finally, the least chosen choice is others (5.6%) where participants mainly wrote “nothing”.



This agrees with Sanchez, Cortijo, and Javed (2013) who found that Facebook is mainly used for communication by students. The social part of it was perceived as the most important purpose of using it.

Table 17. Opinions on Using Facebook for Class

	Answers on using Facebook for class	Frequency	Percent
	It would be convenient	36	20.0%
	I would welcome the opportunity to connect with lecturers on Facebook	57	31.7%
Item 13	Facebook is personal/social – not for education!	29	16.1%
	My privacy would be invaded.	15	8.3%
	I do not care	52	28.9%
	Other	1	0.6%

Regarding the use of Facebook for class, the majority of the students were in favor of it when they chose ‘It would be convenient’ (20.0%) and ‘I would welcome the opportunity to connect with lecturers on Facebook (31.7%). A big proportion of the participants also didn’t care about the use of Facebook for class (28.9%) while some of them considered Facebook not for education (16.1%) and others were worried about their privacy (8.3%) as shown in Table 17.

Therefore, we can say that N: 93 of the participants accept using Facebook for class and N: 44 refuse using it while N: 53 are not sure and might be on either side.

Those findings agree with Amakune (2013)'s. He found out that the majority of the participants consented in using Facebook for class.

Moreover, respondents were expected to answer two other questions. The first was item 14, "What factors make Facebook convenient for them". Participants mainly talked about features like communication, privacy, and ease of use. The second question was item 15, "What feature(s) of Facebook would you like implemented in e-learning software". For this question, the answers mainly included sharing information like videos and communication like creating groups.

Table 18. Using Facebook for Classroom Activities

Item 1 Section D	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
I use Facebook to share change of class schedules with my course mates	20.9	24.3	20.3	26.4	8.1	2.75	1.27
I use Facebook to pass message to my course instructor	21.6	23.0	24.3	22.3	8.8	2.72	1.26
I use Facebook to facilitate a class discussion	18.9	20.9	29.7	20.3	10.1	2.8	1.24
I use Facebook to deliver homework or assignment	23.0	24.3	20.3	24.3	8.1	2.69	1.28
I use Facebook to inform colleagues of links and resources related to our course	15.5	18.9	29.7	27.0	8.8	2.93	1.2
I use Facebook to enroll to academic groups related to my course	16.9	19.6	29.1	27.7	6.8	2.87	1.18
I participate in group work activities via Facebook	16.2	21.6	28.4	27.7	6.1	2.85	1.17
I exchange ideas on class projects via Facebook	15.5	25.0	24.3	26.4	8.8	2.87	1.21
I exchange multimedia resources on Facebook with colleagues	16.2	22.3	29.7	25.0	6.8	2.83	1.17
I exchange visual materials related to my course on Facebook	12.8	29.1	25.0	25.0	8.1	2.86	1.17
I exchange academic videos on Facebook	18.2	24.3	26.4	23.6	7.4	2.77	1.21
I exchange academic documents on Facebook	14.2	22.3	27.7	28.4	7.4	2.92	1.17
Facebook has enabled me to become a better user of the computer	20.3	18.2	30.4	23.0	8.1	2.8	1.23

In section D, there was only one item. In this item there were 13 statements for which respondents rated from ‘Strongly Disagree’ to ‘Strongly Agree’. These statements were to determine what students use Facebook for in the classroom.

Regarding the first statement of this section “I use Facebook to share change of class schedules with my course mates”, 54.2% of the participants disagreed, while 34.5% agreed with the statement. In the second statement ‘I use Facebook to pass message to my course instructor’, 44.9% of the participants disagreed with it while 31.1% agreed and 24% were neutral (Table 18).

As shown in Table 18, ‘I use Facebook to facilitate a class discussion’ statement was disagreed by 39.8%, agreed by 30.4% and neither disagreed nor agreed by 29.7%. In addition, ‘I use Facebook to deliver homework or assignment’ was disagreed on by 47.3% and agreed on by 32.4% of the participants.

When asked about whether students share course related resources through Facebook, 34.4% disagreed, 35.8% agreed and 29.7% were neutral. Additionally, when asked ‘I use Facebook to enroll to academic groups related to my course’, 36% disagreed, 34.5% agreed while 29.1% were neutral. However, regarding participating in group activities through Facebook ‘I participate in group work activities via Facebook’, the majority of the participants disagreed (37.8%) while 33.8% agreed and 28.4% neither agreed nor disagreed as indicated above in Table 18.

Regarding exchanging ideas, multimedia and materials, 40.5% disagreed on ‘I exchange ideas on class projects via Facebook’ statement while 35.2% agreed on it. ‘I exchange multimedia resources on Facebook with colleagues’ statement was disagreed on by 38.5% and agreed on by 31.8%. 41.9% disagreed on exchanging class related visual materials ‘I exchange visual materials related to my course on Facebook’ and 33.1% agreed. While 36.5% disagreed on exchanging academic videos on Facebook ‘I exchange academic videos on Facebook’ and 35.8% agreed,

38.5% disagreed on exchanging academic documents on Facebook 'I exchange academic documents on Facebook' and 31.1% agreed on it as clarified in Table 18.

Amakune (2013) used the same Likert-scale and statement in his research. His findings were quite similar. The majority of the participants disagreed on most of the statements. However, they agreed on using Facebook to inform colleagues of links and resources related to our course, exchange ideas on class projects, exchange multimedia resources on Facebook with colleagues, and on Facebook enabling them to become better users of the computer.

This section shows that Facebook is not seen as an academic tool by the majority of the students. Students are not using it to exchange academic content and do not view it as a class work facilitator.

**Table 19. Facebook Browsing while Engaging in Learning Activities**

I browse Facebook while	Very frequently	Frequently	Somewhat frequently	Sometimes	Rarely	Never	Mean	Standard Deviation
Attending a class	10.1	12.2	14.2	20.9	24.3	18.2	3.93	1.58
In group discussion	6.8	16.9	15.5	27.0	16.9	16.9	3.82	1.5
Private reading in the hostel	8.1	16.2	18.2	23.0	15.5	18.9	3.8	1.55
Studying in the library	9.5	14.9	16.2	18.9	18.2	22.3	3.9	1.62
Internet search online	14.2	20.9	17.6	25.7	12.2	9.5	3.3	1.51
Project work	8.8	20.3	15.5	24.3	15.5	15.5	3.63	1.56
Doing an assignment	9.5	20.3	20.3	21.6	12.8	15.5	3.55	1.55
In your free time	26.4	25.0	18.2	16.9	8.1	5.4	2.72	1.48

In item 1 in section E participants were asked to determine how frequently they browse Facebook in 8 different situations. In each situation, they had to state how frequently they browse Facebook from very frequently to never.

10% said they browse Facebook while attending a class very frequently, 12.2% said they do so frequently, 14.2% somewhat frequently, 20.9% sometimes, 24.3% rarely, and 18.2% said they never do that in a class (Table 19).

6.8% of the participants browse Facebook in group discussions very frequently, 16.9% would browse it very frequently, 15.5% somewhat frequently, 23.0% sometimes, 15.5% rarely, while 16.9% would never check Facebook while being a group discussion. While privately reading in a hostel, only 8.1% of the participants check Facebook very frequently, 16.2% frequently, 18.2% said somewhat frequently, 23.0% sometimes, 15.5% rarely, and 18.9 said never (Table 19).

As indicated in Table 19, when participants were asked if they browse Facebook while studying in the library, 9.5% said they do that very frequently, 14.9% said frequently, 16.2% said somewhat frequently, 18.9% sometimes while 18.2% said rarely and 22.3% said never.

As shown in Table 19, 14.2% of the participants said they use Facebook while searching the internet very frequently, 20.9% said they check it frequently, 17.6% said somewhat frequently, 25.7% sometimes, 12.2% rarely and 9.5%. However, 8.8% reported browsing Facebook while working in a project very frequently, 20.3% reported doing so frequently, 15.5% somewhat frequently, 24.3% sometimes, 15.5% rarely and only 9.5% said never.

When working in an assignment, the majority of the participants said they browse Facebook somewhat frequently (21.6%), 20.3% said they do that frequently and somewhat frequently, 15.5% said never while only 9.5% said frequently (Table 19).

Table 19 shows that in their free time, most of the participants check Facebook very frequently (26.4%), 25.0% check it frequently, 18.2% somewhat frequently, 16.9% sometimes, 8.1% rarely and only 5.4% said they never use it in their free time.

Section E also contained an item which asked participants to state any effects of Facebook browsing that can affect learning of university students “positively and negatively”. For the positive effects, most of the answers involved: communication, information sharing, and socialization. For the negative effects, participants mentioned: distraction, time wasting, bullying, virtual crimes, and unsuitable content facing.

On the same vein, Amakune (2013) got similar results using the same scale. The majority of the participants never browse Facebook while attending a class neither while group discussions. They sometimes browse Facebook while reading privately in the hostel and frequently browse it while searching the internet. Additionally, participants rarely checked Facebook while doing assignments and group projects. Finally, Amakune (2013) found that participants browse Facebook very frequently in their free time.

Table 20. Participants Academic Performance

I can:	Very Weak	Weak	Strong	Very Strong	Mean	Standard Deviation
Finish homework assignments by deadlines	7.8	27.2	42.2	22.8	2.79	0.88
Study when there are other interesting things to do	10.0	39.4	38.3	12.2	2.52	0.83
Concentrate during class	8.3	28.3	47.8	15.6	2.70	0.83
Arrange a place where I can study without distractions	10.6	26.1	43.9	19.4	2.72	0.89
Use the library to get information for class assignments	12.2	25.6	45.0	17.2	2.47	0.99
Plan your schoolwork	9.4	26.1	46.7	17.8	2.72	0.86
Organize your schoolwork	12.2	25.6	45.0	17.2	2.67	0.90
Before I begin studying I think about the things I will need to do to learn.	4.4	32.8	45.0	17.8	2.75	0.79
Remember information presented in class and textbooks.	8.3	26.1	47.2	18.3	2.75	0.85
Participate in class discussions	10.6	33.3	39.4	16.7	2.62	0.88
Master the courses you are taking this semester	6.1	25.7	50.8	17.3	2.79	0.79
Do an excellent job on the problem and tasks assigned for the courses you are taking this semester.	7.8	27.4	49.2	15.6	2.72	0.81

The questionnaire's last section "Section F" included an item which contained a set of 12 can do statements. According to their ability, participants had to mark each statement as 'very weak', 'weak', 'strong', or 'very strong'.



Regarding finishing homework assignments by deadlines, 7.8% said very weak, 27.2% said weak, 42.2% said strong and 22.8% of the participants said very strong. 10% of the respondents reported being very on studying when there are other interesting things to do, 39.4% reported being weak, 38.3% said strong while 12.2% said very strong (Table 20).

As can be seen from Table 20, while participants reported being very weak at concentrating during class by 8.3% of them, being weak by 28.3%, being strong by 47.8% and 15.6% very strong, they reported being very weak at arranging a place where they can study without distractions by 10.6%, being weak by 26.1%, being strong by 43.9% and being very strong by 19.4.

12.2% of the participants said they are very weak at using the library to get information for class assignment. 25.6% said they are weak at that. However, 45% said strong and 17.2% said very strong. When asked about school work planning, only 9.4% reported being very weak whereas 26.1% said weak, 46.7% strong and 17.8% very strong as shown in Table 20 above.

Regarding the 'Before I begin studying I think about the things I will need to do to learn' statement, most of the participants can strongly do it (45%). Only 4.4% of them can very weakly do it while 25.6% can weakly do it and 17.2% can very strongly think of what to do to learn before studying (Table 20).

As shown in Table 20, participants were also asked about their ability to remember information presented in class and textbooks. Few of them said reported being very weak at this (4.4%). However, the majority reported being strong at that by 45%.

26.1% said weak and 18.3 said very strong. Additionally, participants were asked to rate their ability at participating in class discussions. 10.6% said very weak, 33.3% said weak, 39.4% said strong while 16.7% said very strong.

On whether participants can master the courses they are taking this semester, 10.6% said they very weakly can do that, 25.7% said weak, 50.8% said strong and 16.7% said they can very strongly master their currently taken courses. Finally, when asked about whether they can do an excellent job on the problem and tasks assigned for the courses they are taking this semester, the majority said strong (49.2%). However, 27.4% said weak, 15.6% said very strong and only 7.8% said very weak as illustrated in above in Table 20.

Furthermore, respondents were asked to mention any further comments regarding Facebook browsing and learning behavior of the students through item 2 in section F. The general theme of the answers was: Facebook can be used for educational purposes. However, it needs to be well planned for and under control.

Using the same items, Amakune (2013) found similar results. Participants believed strongly that they can do all the mentioned tasks. As a result, we can say that there is no difference between the participants who are Facebook users and the ones who are not.

## 4.2 Eastern Mediterranean University Information Technology Students' Perception Differences according to their age

ANOVA Test was used to answer the research question regarding age difference. This Analysis technique was applied on four parts of the questionnaire which were: item 9 in section B, section D, item 1 in section E and item 1 in section F. The results were as following:

Table 21. The Extent to which Participants are attached to Facebook

	Age range	N	Mean	Standard Deviation
Item 9	18-21	56	2.42	1.25
	22-25	60	2.69	1.26
	26-29	20	2.88	1.14
	30+	13	3.28	1.15

Item 9 in section B in the questionnaire included a Likert-scale to tap the extent to which participants are attached to Facebook as well as the extent to which it is integrated in their lives. The researcher implemented the ANOVA test to measure the responses of the participants based on their age group where 1 represents 'strongly disagree' while 5 represents 'strongly agree'. The results show that the mean of the age groups varies: 1.25, 1.26, 1.14, and 1.15 respectively (Table 21).

Table 22. Participants Views of Facebook in relation to their Learning Behavior

	Age range	N	Mean	Standard Deviation
Item 1	18-21	55	2.73	1.13
	22-25	60	2.72	1.06
	26-29	20	3.28	1.26
	30+	13	2.96	0.89

For section D item, ANOVA Test was again used to measure participants' responses according to their age group. The results indicate that the standard deviation of the age groups varies: 1.13, 1.06, 1.26, and 0.89 respectively as shown in Table 22.

Table 23. Participants Views on How Facebook Interferes with their Learning Activities at College

	Age range	N	Mean	Standard Deviation
Item 1	18-21	55	3.74	1.46
	22-25	60	3.5	1.5
	26-29	20	2.9	1.37
	30+	13	3.52	1.47

Applying ANOVA Test, the results of measuring item 1 in section E shows that the mean of the participants' age groups is: 3.74, 3.5, 2.9, and 3.52 (Table 23).

Table 24. Participants Views on their Academic Performance

	Age range	N	Mean	Standard Deviation
Item 1 Section F	18-21	75	2.59	0.73
	22-25	68	2.7	0.57
	26-29	23	2.97	0.69
	30+	14	2.61	0.71

As indicated in Table 24, for item 1 in the last section of the questionnaire “F”, ANOVA test measurements show that the mean of each group range as following: 2.59, 2.7, 2.97, and 2.61.

The findings of this section are similar of those of Ahmed et al. (2011)’s. That is the time spent on Facebook decreases when the age increases. Moreover, the younger students do not hold positive perceptions regarding Facebook.

### **4.3 Eastern Mediterranean University Information Technology Students’ Perception Differences according to their Gender**

T-Test was used to answer the research question regarding age difference. This Analysis technique was applied on four parts of the questionnaire which are: item 9 in section B, section D, item 1 in section E and item 1 in section F. The results were as following:

Table 25. The Extent to which Participants are attached to Facebook

	Age range	N	Mean	Standard Deviation
Item 9	Male	112	2.56	1.24
	Female	37	2.97	1.26

Item 9 in section B was answered by 112 males and 37 females. The mean of the male group is 2.56 while the standard deviation is 1.24. For the female participants, the mean is 2.97 and the standard deviation is 1.26 as can be seen in Table 25.

Table 26. Participants Views of Facebook in relation to their Learning Behavior

Age range	N	Mean	Standard Deviation
Male	111	2.71	1.2
Female	37	3.15	1.19

As shown in Table 26, section D was answered by 111 males and 37 females. Whereas the male's group mean is 2.71, the standard deviation is 1.2. For the female group, the mean is 3.15 and the standard deviation is 1.19.

Table 27. Participants Views on How Facebook Interferes with their Learning Activities at College

Age range	N	Mean	Standard Deviation
Male	111	3.61	1.55
Female	37	3.44	1.52

As shown in Table 27, item 1 in section E male group mean is 3.61, the standard deviation is 1.55 and the female group mean is 3.44 and the standard deviation is 1.52.

Table 28. Participants Views on their Academic Performance

Age range	N	Mean	Standard Deviation
Male	134	2.62	0.84
Female	46	2.86	0.85

The males in item 1 in the last section “F” were 134. Their mean is 2.62 and their standard deviation is 0.84. The females were 46. The mean score they got is 2.86 and their standard deviation is 0.85 as indicated in Table 28.

Therefore, we can conclude from the previous tables that females are more into using the social media platform, Facebook. This agrees with Ahmed and Tham (2011) who found that females tend to spend more time than males do. It also agrees with Kistantas et al. (2016) who discovered that females appear to take advantage from social networking sites than males.

## Chapter 5

### CONCLUSION

This study was conducted to examine the perceptions of EMU, IT students on learning with social media. It used the used the quantitative research method. A questionnaire was adapted from another study and used. Participants were EMU IT students. Moreover, descriptive analysis, ANOVA test, T-test, frequency, and percentage were used to analyze the gathered data. The participants of this research study were 180 IT students of which 134 were males and 46 were females.

The findings attained from this research indicate that students differ in their views about learning with Facebook. Some of them agreed on it being an educational platform while others disagreed and saw it as only a social platform. Therefore, it can be concluded that Facebook have a role in education for almost half of the participants. Nonetheless, Facebook can be used as a supporting feature rather than a main source of knowledge.

Regarding the gender differences, the study found that females are more in favor of using Facebook. However, the overall results do not indicate a big difference. In other words, the research concluded that the results show that there is a gender difference in view of the participants about the use of social media for academic purposes. It was mostly for the favor of the females. However, the difference is not that big, which makes the results nearly equal.



In regard to the age difference in students' perceptions on learning with social media, Facebook, the results show that the younger the ages are, the more connected to Facebook they are. It was also found that the younger ages are more in favor of using Facebook for their daily life. However, the age range (26-29) were the highest among the others in using Facebook for academic purposes. This could be due to their age as they have been using Facebook since its emergence to the extent that they use it in many fields of their lives including education. For the age group (22-25), it was found that this group is more frequent in using Facebook for different purposes than the other groups. Yet, the other groups were nearly the same, which means that all the groups of age are frequent in using Facebook for different purposes. Furthermore, the study discovered that (18-21) age group believed in their abilities to manage their time and do their classwork more than the other age ranges.

Therefore, it can be said that the younger ages are much in favor of using Facebook for daily life, while the older groups (26-29) are better at using Facebook for academic purposes.

## **5.1 Contribution and Implication**

### **5.1.1 Contribution**

Facebook is seen more as a social platform. Ease of use, communication, and information sharing are features influencing participants' perceptions. This agrees with Sanchez, Cortijo, and Javed (2013) who found that Facebook is mainly used for communication by students. The social part of it was perceived as the most important purpose of using it. It also agrees with Kistantas et al. (2016) whose participants find Facebook helpful in the areas of communication and information gathering. Additionally, the above mentioned features were also found to be liked by their

study's participants. Moreover, the researcher of this study found that the majority of students do not see Facebook as educational but a social tool. In contrary, Buzzetto-More (2012) and Shamsi et al (2019) found that students perceived social media, such as Facebook or WhatsApp, as a “valuable tool”. They regarded it as a mean of engaging students.

In terms of gender differences, the researcher revealed that females tend to be more into Social Media which agrees with Ahmed and Tham (2011) who found that females spend more time on Facebook. Kistantas et al. (2016) also found a similar result regarding gender. They found that females seem to benefit more from social networking sites than males.

Regarding age differences, it was found that using Facebook is more with younger ages rather than older ones. This collides with Ahmed et al. (2011) who found that as the age increases, the time spent Social Networking decreases. Additionally, the younger the students are the negative perceptions they have.

### **5.1.2 Implications**

This study examined the perceptions of IT students in learning through using social media. The study added a new context in the literature as it examined it at Eastern Mediterranean University. Thus, this study brought in a new study context to the field. This study even adds a proof to the recent literature about the superiority of females over males in using technology for academic purposes.

The older age ranges, who started using Facebook since it first spread among the people, are more in favor of using it for academic purposes rather than any other groups. However, the younger groups still use social media platforms. Yet, as they

grew up with other social media platforms that were more specialized in education (ex. YouTube), they may prefer to use Facebook for communication, and get their academic knowledge from other platforms that are more specialized in education.

### **5.1.3 Recommendations**

- For further research, it is recommended to carry out this research study for students under all faculties.
- It is also recommended to conduct this study to find out students' perception on learning with all social media platforms and not just Facebook.
- Conducting interviews along with the questionnaire is recommended in order to get a better understanding of students' perceptions.
- Finally, it is recommended to carry out such a study in a longer time frame.

## REFERENCES

- Abdulahi, A., Samadi, B., & Gharleghi, B. (2014). A study on the negative effects of social networking sites such as facebook among asia pacific university scholars in Malaysia. *International Journal of Business and Social Science*, 5(10).
- Ahmed, N. (2011). The usage and implications of social networking sites: A survey of college students.
- Aleksandrova, Y., & Parusheva, S. (2019). Social Media Usage Patterns in Higher Education Institutions-An Empirical Study. *International Journal of Emerging Technologies in Learning*, 14(5).
- Amukune, S. (2014). Perceived Effects of Social Networking on Learning Behaviour among Regular Undergraduate University Students in Mombasa County–Kenya. John, A. (2017). Student attitudes on social media and perception of instructor social media use. Published thesis. University of Louisville.
- Barot, H., & Pargi, R. L. (2017). *Teacher Education*. Lulu.com
- Buzzetto-More, N. A. (2012). Social networking in undergraduate education. *Interdisciplinary Journal of Information, Knowledge, and Management*, 7(1), 63-90.

- Denzin, N. K., & Lincoln, Y. S. (1998). The landscape of qualitative research: Theories and issues.
- Efron, R. (1969). What is perception?. In *Proceedings of the Boston Colloquium for the Philosophy of Science 1966/1968*(pp. 137-173). Springer, Dordrecht.
- Faizi, R., El Afia, A., & Chiheb, R. (2013). Exploring the potential benefits of using social media in education. *International Journal of Engineering Pedagogy (iJEP)*, 3(4), 50-53.
- Fowler, F.J (1988) *Survey Research Methods*. Beverly Hills, CA: Sage
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative*.
- Irwin, C., Ball, L., Desbrow, B., & Leveritt, M. (2012). Students' perceptions of using Facebook as an interactive learning resource at university. *Australasian Journal of Educational Technology*, 28(7).
- Jahan, I., & Ahmed, S. Z. (2012). Students' perceptions of academic use of social networking sites: a survey of university students in Bangladesh. *Information Development*, 28(3), 235-247.
- Jordán-Conde, Z., Mennecke, B., & Townsend, A. (2014). Late adolescent identity definition and intimate disclosure on Facebook. *Computers in Human Behavior*, 33, 356-366.

- Junco, R. (2012). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers in human behavior*, 28(1), 187-198.
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business horizons*, 54(3), 241-251.
- Kirschner, P. A., & Karpinski, A. C. (2010). Facebook® and academic performance. *Computers in human behavior*, 26(6), 1237-1245.
- Leedy, P. (1993). *Practical Research: Planning and Design. Fifth edition*. Macmillan Publishing Company, New York.
- Lenhart, A., Simon, M., & Graziano, M. (2001). *The Internet and Education: Findings of the Pew Internet & American Life Project*.
- Liu, Y. (2010). Social media tools as a learning resource. *Journal of Educational Technology Development and Exchange (JETDE)*, 3(1), 8.
- Manning, J. (2014). Definition and classes of Social Media. *K. Harvey, Encyclopedia of social media and politics*, 1158-1162.
- McLoughlin, C., & Lee, M. J. (2010). Personalised and self regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. *Australasian Journal of Educational Technology*, 26(1).

- Morallo, I. M. (2014). The effects of social networking sites on students' academic performance in Lyceum of the Philippines–Laguna. *Graduate School Research Journal*, 7(2), 16-28.
- Paulsen, M., & Tække, J. (2013). Social Media and Teaching: Education in the new media environment. In *Nordmedia 2013.report*, 8(4), 597-606.
- Sánchez, R. A., Cortijo, V., & Javed, U. (2014). Students' perceptions of Facebook for academic purposes. *Computers & Education*, 70, 138-149.
- Shamsi, A. F., Altaha, S., & Gilanlioglu, I. (2019). The Role of M-Learning in Decreasing Speaking Anxiety for EFL Learners. *Online Submission*, 2(1), 276-282.
- Thamarasserri, I. (2008). *Psychological Foundations of Education*. Kanishka Publishers.
- Towner, T., & Muñoz, C. (2012). Facebook vs. web courseware: A Comparison. *Transformation in teaching: Social media strategies in higher education*, 343-372.
- Walliman, N. (2017). *Research methods: The basics*. Routledge.

We Are Social, & DataReportal, & Hootsuite. (July 18, 2019). Distribution of Facebook users worldwide as of July 2019, by age and gender [Graph]. In Statista. Retrieved August 18, 2019, from <https://www.statista.com/statistics/376128/facebook-global-user-age-distribution/>

We Are Social, & Hootsuite, & DataReportal. (July 18, 2019). Most popular social networks worldwide as of July 2019, ranked by number of active users (in millions) [Graph]. In Statista. Retrieved August 18, 2019, from <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>



## **APPENDICES**

## Appendix A: Questionnaire

### Introduction

The purpose of this study is to find out whether Facebook browsing affects the learning behavior of University students. You have been randomly selected to participate in this study. Am kindly requesting your cooperation in filling this questionnaire. You need not sign the questionnaire and you are assured that your response will remain CONFIDENTIAL. Please answer all questions and remember there is no right or wrong answer. Thank you.

### Section A:

1. What is your age?
2. Gender: Female  Male
3. Please indicate the name of your college.....
4. (i) Indicate your faculty or school.....  
(ii) What course or degree programme have you enrolled for?  
.....
5. What year of your course or programme are you in.....
6. In your last semester how many units/courses did you register for?  
(a) 4-5 (b) 6-7 (c) 8-9 (d) 10-11  
(e) more than 12
7. What was your Average Grade or GPA in your last academic year?  
A B C D E F  
GPA (specify).....
8. How many hours per week do you engage in your private study  
(a) Less than 3 hours (b) 4-7 hours  
(c) 8-11 hours (d) 12 or more hours

**Section B:**

1. How many years have you been using computers(not only for internet access)
  - (a) 0-1 year
  - (b) 1-5 years
  - (c) 6-10 years
  - (d) 11 -15 years
  - (e) I do not use computers
  
2. What is your commonest mode of accessing the internet? (*Tick as many*)
  - (a) University cyber café
  - (b) Mobile phone
  - (c) Pay as you surf cyber café
  - (d) Personal computer
  - (e) Others (specify).....
  
3. What is the average time you spend on internet per week?
 

1 – 3 hrs	<input type="text"/>	4 – 7 hrs,	<input type="text"/>	8 – 11 hrs	<input type="text"/>
12 - 15 hrs	<input type="text"/>	16 - 19 hrs	<input type="text"/>	over 20 hrs	<input type="text"/>
  
4. Are you a user of any of the social networking software(s)?
 

Yes	<input type="text"/>	No	<input type="text"/>
-----	----------------------	----	----------------------
  
5. If yes above, which social network? (*If No go to Section F*)
  - (a) Facebook
  - (b) Twitter
  - (c) My Space
  - (d) Others (specify).....
  
6. About how many total Facebook friends do you have ?
 

Less than 10	<input type="text"/>	11-50	<input type="text"/>	51-100	<input type="text"/>
101-150	<input type="text"/>	151-200	<input type="text"/>	201-250	<input type="text"/>
251-300	<input type="text"/>	301-400	<input type="text"/>	More than 400	<input type="text"/>
  
8. In the past week, on average, approximately how many minutes per day have you spent on Facebook?
 

1 – 10 min	<input type="text"/>	11 – 20 min	<input type="text"/>	21 – 30 min	<input type="text"/>
31 - 40 min	<input type="text"/>	41 – 50 min	<input type="text"/>	over 51 min	<input type="text"/>
  
9. Please rate the following items based on your usage of Facebook  
 SD = Strongly Disagree D= Disagree N=Neutral A=Agree  
 SA = Strongly Agree

	ITEMS	SD	D	N	A	SA
i	Facebook is part of my everyday activity					
ii	I am proud to tell people I'm on Facebook					
iii	Facebook has become part of my daily routine					
iv	I feel out of touch when I have not logged onto Facebook for a while					

v	I feel I am part of the Facebook community					
vi	I would be sorry if Facebook shut down					

**Section C:**

10. On average what subject(s) areas do you share on Facebook (*Tick as*  
 Educational  job search  Politics   
 Campus news  Sports  social   
 Entertainment  work related  Pass time   
 Others (specify).....

10. Do you use Facebook for academic purposes?

Yes  No

11. If yes above, what is the educational content that you last shared on Facebook?.....  
 .....  
 .....

Has Facebook browsing had an impact in your academic performance?

Yes  No

If Yes, how?

.....  
 .....

If No, why not?

.....  
 .....

13. What are your feelings about using Facebook for class?(*You may choose more than one answer*)

- (a) It would be convenient
- (b) I would welcome the opportunity to connect with lecturers on Facebook
- (c) Facebook is personal/social – not for education!
- (d) My privacy would be invaded
- (e) I do not care
- (f) Others (please specify).....

14. What factors makes Facebook convenient for you?*(List as many as possible)*  
 .....  
 .....  
 .....  
 .....
15. What feature(s) of Facebook would you like implemented in e-learning software(s)  
 .....  
 .....  
 .....  
 .....

**Section D:**

Please rate the following items based on your learning activities during Facebook browsing

SD = strongly disagree      D= Disagree    N=Neutral    A=Agree

SA = strongly agree

	ITEM	SD	D	N	A	SA
i	I use Facebook to share change of class schedules with my course mates					
ii	I use Facebook to pass message to my course instructor					
iii	I use Facebook to facilitate a class discussion					
iv	I use Facebook to deliver homework or assignment					
v	I use Facebook to inform colleagues of links and resources related to our course					
vi	I use Facebook to enroll to academic groups related to my course					
vii	I participate in group work activities via Facebook					
viii	I exchange ideas on class projects via Facebook					
ix	I exchange multimedia resources on Facebook with colleagues					
x	I exchange visual materials related to my course on Facebook					
xi	I exchange academic videos on Facebook					
xii	I exchange academic documents on Facebook					
xiii	Facebook has enabled me to become a better user of the computer					

**Section E:**

1. How often do you browse Facebook while(*Tick which best explains your answer*)

		Very frequently	Frequently	Somewhat frequently	Sometimes	Rarely	Never
i	Attending a class						
ii	In group discussion						
iii	Private reading in the hostel						
iv	Studying in the library						
v	Internet search online						
vi	Project work						
vii	Doing an assignment						
viii	In your free time						

2. State any effects of Facebook browsing that can affect learning of university students

(a) Positively

- (i).....
- (ii).....
- (iii).....
- (iv).....
- (v).....

(b) Negatively

- (i).....
- (ii).....
- (iii).....
- (iv).....
- (v).....

**Section F:**

1. Please read each statement below carefully and indicate how strong your belief is that you could accomplish each of the following tasks by marking your answer according to the 4 point key below. Mark your answer by placing a tick on one and only one box on the answer sheet.

1 = Very Weak      2 = Weak      3 = Strong      4 = Very Strong

INDICATE THE STRENGTH OF YOUR BELIEF THAT YOU CAN:

	<b>Opinion</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
i	Finish homework assignments by deadlines				
ii	Study when there are other interesting things to do				
iii	Concentrate during class				
iv	Arrange a place where I can study without distractions				
v	Use the library to get information for class assignments?				
vi	Plan your schoolwork?				
vii	Organize your schoolwork?				
viii	Before I begin studying I think about the things I will need to do to learn.				
ix	Remember information presented in class and textbooks?				
x	Participate in class discussions?				
xi	Master the courses you are taking this semester?				
xii	Do an excellent job on the problems and tasks assigned for the courses you are taking this semester?				

2. Do you have any further comments regarding Facebook browsing and learning behaviour of University students?

.....  
 .....  
 .....  
 .....

**Thank you.**

## **Appendix B: Consent Form for Student Questionnaires**

Dear students,

I am an Information and Communication Technology master's student in Computer Education and Instructional Technology Department. I am currently working on my thesis on the Perceptions of IT Students on Learning with Social Media.

The aim of this thesis survey is to identify IT students' perceptions on Learning with Social Media. Therefore, the aim of my thesis is to answer the following questions:

- 1- What are the Eastern Mediterranean University Information Technology students' perceptions of learning with Social Media?
- 2- Do EMU IT students' perceptions differ according to their gender?
- 3- Do EMU IT students' perceptions differ according to their age?

The questionnaire consists of 6 sections. To answer them, it will take less than 20 minutes of your time. Please read the questions carefully and tick the most appropriate answer. The participation in this survey is voluntary. Therefore, you are free to withdraw at any time. All data provided by you will be kept confidentially and will only be used for this research. For further information or complaint, you can contact me without any hesitation. Therefore, if you agree to participate in this study, please fill and sign the appropriate fields below.



- The data which will be gathered through this questionnaire will be used only in determining your perceptions of and attitudes on learning with social media.
- Kindly, sincere answers are required. Additionally, it is very important for the researcher and thesis to fill all blank spaces and questions.

Thank you for your time and participation.

Isra Atia Saleh Lawgali  
Masters student  
ICTE program  
Computer Education  
And instructional Technology  
E-mail: [sarrora90210@gmail.com](mailto:sarrora90210@gmail.com)  
Phone: 0533 880 54 72

Prof. Dr. Mustafa Ilkan  
Thesis supervisor  
School of Computing  
E-mail: [Mustafa.ilkan@emu.edu.tr](mailto:Mustafa.ilkan@emu.edu.tr)  
Phone: 0932 630 1246

- I have read and understood this form. I have asked my questions and received their answers. Therefore, I voluntarily accept to participate in this survey.

Participant's Name-Surname:

Date:

Signature:

## **Appendix C: Permission Letter to Conduct Research**

To: The Head of Computer Education and Instructional Technologies Department

Assoc. Prof. Dr. Ersun Iscioglu

From: Isra Atia Saleh Lawgali

MSc Student

Subject: Permission for the application of my thesis research

Dear Prof. Ersun,

I would like to inform you that due to the nature of my research study, a questionnaire would need to be distributed. It would be distributed to the Eastern Mediterranean University Information Technology students who are registered in the 2018-2019 Spring semester. The survey questions have been attached for your consideration. I would appreciate if you consider my application in your earliest convenient time.

Thank you

## **Appendix D: Originality Report**

Turnitin Originality Report

Thesis\_V10 by Isra Thesis

From Isra\_L (SCHOOL OF COMPUTING AND TECHNOLOGY)

- Processed on 03-Oct-2019 10:31 +03
- ID: 1185177015
- Word Count: 11347

Similarity Index

18%

Similarity by Source

Internet Sources:

11%

Publications:

6%

Student Papers:

16%

## Appendix E: Ethics Committee Approval Letter



Etik Kurulu / Ethics Committee

Reference No: ETK00-2019-0142

23. 05.2019

Subject: Application for Ethics.

RE: Isra Atia Saleh Lawgali  
Faculty of Education

To Whom It May Concern:

On the date of **23.05.2019**, (Meeting number **2019/15-06**), EMU's Scientific Research and Publication Ethics Committee (BAYEK) has granted, Isra Atia Saleh Lawgali from the Faculty of Education to pursue with her MA thesis work "**Perceptions of IT students on learning with social media: An Example of EMU**" under the supervision of Prof. Dr. Mustafa İlkan. This decision has been taken by the majority of votes.

Regards,

  
Prof. Dr. Fatma Güven Lisaniler  
Director of Ethics Committee (V)

FGL/ns.

[www.emu.edu.tr](http://www.emu.edu.tr)