

**The Impacts of New Media Technologies on
Interpersonal Communication: A Case Study of
Teacher-Student Interactions at EMU during
COVID-19 Pandemic**

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ABSTRACT

In the 21st century, new media technologies have changed the way people communicate by offering technology-mediated communication. Moreover, it caused radical changes in most of the fields such as communication and education. Hence, in this thesis, a case study was conducted, which aimed at examining the impacts of new media technologies on interpersonal communication and teacher-student interactions within the scope of EMU. In doing so, the subject matter deeply investigated by focusing on the categories such as teacher-student roles in terms of accessibility, comprehension of information, self-esteem and motivation. Data gathered through an online questionnaire from both the students and faculty members from the following faculties which were the Faculty of Communication, Faculty of Education, Faculty of Engineering and Faculty of Business and Economics during the COVID-19 Pandemic. 465 data were obtained from 394 students and 71 faculty members from the aforementioned faculties. SPSS 22 Package program was employed to analyze the data. In this respect, a factor analysis, reliability tests and chi-square tests were performed for all the Likert Scale questions to obtain more comprehensive data. The reliability tests showed that the alpha coefficient value was 0,925, which can be considered as a highly reliable data. The findings indicated that the majority of participants claimed that the use of new media technologies increased interpersonal communication and face-to-face communication through technology, facilitated exchange of feelings, made it easier for people to start communication, eliminated the time and the distance issue in interpersonal communication, facilitated teacher-student interactions, increased accessibility of teachers, removed communication barriers among teachers and students, allowed both parties to communicate in or out of the

school settings and helped teachers and students to establish a warm and sincere relationship in their interactions.

Keywords: Interpersonal Communication, New Media Technologies, Social Media Platforms, Teacher-Student Interactions at Tertiary Education

ÖZ

21. yüzyılda yeni medya teknolojileri, teknoloji ile aracılanan bir iletişim fırsatı sunarak insanların iletişim şeklini değiştirmiştir. Buna ek olarak, yeni medya teknolojileri, iletişim ve eğitim gibi birçok alanda radikal değişikliklere sebep olmuştur. Bu nedenle tezde yeni medya teknolojilerinin COVID-19 pandemi döneminde kişilerarası iletişime ve öğretmen-öğrenci etkileşimlerine etkilerini incelemeye yönelik DAÜ kapsamında bir vaka çalışması yapılmıştır. Bu bağlamda, araştırmanın konusu, öğretmen-öğrenci rolleri, öğretmenlerin erişilebilirlikleri, bilgiyi kavrama, öğrencilerin özgüven ve motivasyonu gibi kategorilere odaklanılarak derinlemesine irdelenmiştir. Veriler, İletişim, Eğitim, Mühendislik ve İşletme ve Ekonomi fakültelerindeki öğrencilerden ve öğretim üyelerinden çevrimiçi anket yöntemiyle elde edilmiştir. Yukarıda belirtilen fakültelerden toplamda 465 katılımcıdan olmak üzere, 394 öğrenci ve 71 öğretim üyesinden veri elde edilmiştir. Verilerin analizi için SPSS 22 Paket programı kullanılmıştır. Bu bağlamda daha kapsamlı veriler elde etmek için tüm Likert Ölçeği sorularına faktör analizi, güvenilirlik testleri ve ki-kare testleri yapılmıştır. Güvenirlik testleri alfa katsayı değerinin 0,925 olduğunu göstermiştir ki bu da oldukça güvenilir bir veri olarak kabul edilebilir. Bulgular, katılımcıların büyük çoğunluğunun, yeni medya teknolojilerinin kullanımının kişilerarası iletişimi ve yüz yüze iletişimi artırdığını, duygu alışverişini kolaylaştırdığını, kişilerin iletişime başlamasını kolaylaştırdığını, kişilerarası iletişimde zaman ve mesafe sorununu ortadan kaldırdığını, öğretmen-öğrenci etkileşimlerini kolaylaştırdığını, öğretmenlerin erişilebilirliğini artırdığını, öğretmenler ve öğrenciler arasındaki iletişim engellerini kaldırdığını, öğretmenlerin ve

öğrencilerin hem okul ortamlarında hem de dışarıda iletişim kurmalarına izin vererek sıcak ve samimi bir ilişki kurmalarına yardımcı olduğunu belirtmektedir.

Anahtar Kelimeler: Kişilerarası İletişim, Yeni Medya Teknolojileri, Sosyal Medya Platformları, Yükseköğretimde Öğretmen-Öğrenci Etkileşimleri

To My Family...

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LIST OF ABBREVIATIONS

EMU	Eastern Mediterranean University
FCMS	Faculty of Communication and Media Studies
ICT	Internet and Computer Technologies
SNT	Social Network Theory
TRNC	Turkish Republic of Northern Cyprus
UGT	Uses and Gratifications Theory

Chapter 1

INTRODUCTION

This chapter provides a brief information regarding the essence of the study and consists of headings such as background of the study, motivation of the study, purpose of the study, research questions, significance of the study and limitations of the study.

1.1 Background of the Study

As Chung and Kim refer, at the end of the 18th century, which is the end of the Industrial Revolution, people began to be aware of the concept of mass production and made major changes in this direction. That is why, people shifted manufacturing system from manual production to mass production in order to make serial manufacture enough for the masses. This form of production brought technological innovations with it because the only way to produce enough products for the masses was to use a technological device. This irresistible need put technology into the center of both production and society (2016).

By the same token, Madsen and Mikkelsen's study point out that knowledge has become the most important power throughout the world with technological advancements. Access to information has become much easier and faster, due to the developments in new media technologies. Hence, powerful effects of digital technologies become an important topic that has been discussed and researched by communication scholars since the day it emerged. Looking at the current consumption of technology, it can be said that these conveniences might have great influences over

the entire society (2017). Hence, in the present study, it was aimed to examine the impacts of new media technologies on the interpersonal communication and teacher-student interactions at EMU.

As Kaya and Bicen's paper illustrate, people live in an ever changing world. It is worth stating the fact that the new media technologies have enriched humans' life in so many aspects. In technology and information age, people have had new forms of communication and interaction. It is a well-known fact that the modern technology caused more social interaction than ever. Thus, communication tools have changed along with the technological advancements (2016). For instance, as Cerit, Bilgin and Ak report in their study, smartphones invented in the 20th century as a communication tool. The features and capabilities of the smartphones have expanded due to the expectations of people and advancements in new media technologies. Undoubtedly, smartphones have become the most important tool for people, who seek communication, socialization and entertainment. Pursuing this further, technological innovations managed to enter into people's pockets. Recently, several social media apps where people can socialize with other people have emerged. WhatsApp, Viber, Messenger, Facebook and Instagram are the most frequently used social media applications among people in order to pursue their communication and interactions with other people. Moreover, most public spheres such as hospitals, schools, streets or houses are equipped with the extension of technology (2018).

Chugh and Ruhi note that technological improvements, which are the most indispensable tools for popular culture, have been entered in the education sector as well. Undoubtedly, modern technologies cause radical changes in the education system by providing more efficient and effective classroom environments in school settings. In connection with the previous sentence, tertiary education sector has

reshaped their pedagogical, social and personal approaches due to the developments in modern technology. Initially, those changes might seem challenging for teachers to adopt their ways of teaching/instructions into the latest products of new media technologies. Therefore, blending education with new media technologies depends on educators and learners (2019). As it indicated by Manca and Ranieri adaptation of pedagogical approaches with technological innovations may cause some radical changes for academic institutions (2016).

In addition to this, Chugh and Ruhi state that the adaptation of modern innovations with instructional techniques cause some difficulties for traditionalist teachers because majority of today's students demand technology as part of their teaching and learning processes (2017). Hanlon (2018) argues that even today some teachers teach according to traditional approaches¹.

According to Gruzd, Haythornthwaite, Paulin, Gilbert and Valle, the new media technologies take significant roles in education sector due to the expansion and advancements in new media. The vital role of teacher-student interactions has been discussed in several studies for years. Apparently, the teachers are whom students communicate and interact the most in school settings. Interactions between teachers and students are one of the fundamental elements of education and instruction process. Hence, establishing effective interactions between teachers and students is crucial in order to increase performance of both parties inside and outside of the classroom settings. It is relevant to consider the fact that the new media technologies allow teachers and students to carry on their interactions through online platforms outside of the classroom environments as well. In other words, students can be able to carry on their learning activities regardless of traditional school settings (2016).

¹ Teacher-centred education approach where the student is passive.

Given these points, the present study was intended to investigate the impacts of new media technologies on interpersonal communication and teacher-student interactions at EMU. The impacts of new media technologies on teacher-student roles in terms of accessibility, comprehension of information, self-esteem and motivation were particularly investigated in this study.

1.2 Motivation of the Study

At the beginning of the research, a gap between communication and education has been detected by the researcher. Considering the fact that only few studies handled the impacts of modern technologies at tertiary education regarding interpersonal communication and teacher and student interactions, it was an encouragement for the researcher to conduct this interdisciplinary study. Also, tertiary education as an inseparable part of communication, is one of the most significant fields, which adapted new media technologies into their systems.

Another motivation for conducting this research was the promising future of digital media technologies. It can be said that young generations recently witnessed the formation and increase of modern technologies. It appears that the increase will go on forever. Therefore, studies like this seem quite valuable for the academia, literature and society.

Lastly, while the researcher was studying in the Public Relations and Advertising department, course materials (e.g., books) were all about the usage of digital innovations by integrating them into the fields such as public relations, marketing and advertising and as well as their positive and negative effects on society. As it was observed by the researcher, new media technologies were always used as motivating and inspiring tools for majority of students. Assignments and projects were

supported and enriched by benefiting from the modern technology. That is why, the researcher decided taking a step to conduct this study.

1.3 Purpose of the Study

The present study attempts to investigate how the interpersonal communication and interactions among teachers and students have changed at tertiary education due to the developments in digital technologies. All data were collected from faculty members and students who study/work at any of the following faculties which are the Faculty of Communication and Media Studies, Faculty of Education, Faculty of Engineering and Faculty of Business and Economics at EMU during the Spring 2019-2020 academic period.

Around the year 2000s, digital technologies started changing with breakthrough of the Internet. Internet did not only modified communication forms but it also changed the education system. New innovations led to other changes in education (e.g., teaching-learning approaches). The ultimate purpose of the researcher is to combine communication, the field where change begins, with the education field, which is one of the most affected areas. That is why the researcher thought it is worth researching this topic and thus such an interdisciplinary study was carried out.

Lastly, this study aims at examining teacher-student interactions more deeply by focusing on specific categories such as teacher-student roles, accessibility of teachers, comprehension of information, students' self-esteem and motivation. These categories have been carefully selected because it was wondered how much impacts do new media technologies have on aforementioned educational categories. It is worth stating at this point that there are only few similar studies available in the literature. Therefore, this study will be unique and it will contribute to the fields of communication and education.

1.4 Research Questions

This study sets out to explore the teacher-student interactions at the EMU, in 2019-2020 Spring Semester. First two questions addressed to measure the general perception regarding the new media technologies and interpersonal communication, the rest set to explore the impacts of new media technologies at school-settings concerning the interpersonal communication. The research questions addressed in the present study are as follows;

1. Do new media technologies have changed the interpersonal communication among people?
2. Do new media technologies have improved the interpersonal communication between teachers and students at tertiary education?
3. Do new media technologies have changed teacher-student roles in terms of accessibility, comprehension of information, self-esteem and motivation?
4. Do new media technologies have changed teaching-learning process at tertiary education?
5. With the emergence of new media technologies, what problems do teachers and students face in their interactions at tertiary education?
6. With the emergence of new media technologies, what opportunities do teachers and students face in their interactions at tertiary education?

1.5 Significance of the Study

This research seeks to raise awareness regarding the impacts of new media technologies on interpersonal communication and teacher-student interactions at EMU during the COVID-19 pandemic. The study is very valuable concerning the following aspects:

1. It is an interdisciplinary research, which consists of fields of communication and education. Admittedly, these two fields cannot exist independently of each other because teachers need to have effective verbal and nonverbal communication skills in order to deliver the course material in a way that the learners can be able to comprehend it. Occasionally, major misunderstandings among people may occur due to the miscommunication. The reason is, communication have decisive influence on human interactions, especially on teacher-student interactions.
2. While the majority of recent scientific studies' focal point were mostly the usage, benefits and contributions of new media technologies on students or education sector, very few comprehensive studies have focused on the changes in interactions between teachers and students at tertiary education regarding new media technologies. It is valuable to investigate the impacts of new media technologies on interpersonal communication and teacher-student interactions because education and communication fields are interconnected to each other. Moreover, formation of the framework with both communication and education fields seem significant in such study in terms of setting a common ground for both disciplines.
3. Investigating this subject matter at the Eastern Mediterranean University is very precious because it provides a broad perspective to the topic with diverse population. EMU is currently hosting students from over 100 different countries, which offers a multicultural environment (<https://www.emu.edu.tr/north-cyprus-universities>). Holding a multicultural environment ensure better understanding about a global phenomenon.

4. At the same time, it is believed that the study will suggest ideas and concepts to the further studies by enlightening teachers and students regarding how new media technologies reshape their interactions in or out of the school settings. Moreover, this study will be unique and useful for the literature and the academia concerning such fields as communication and education because it will enrich the current data available and literature on the subjects. Thus, researchers or students will be able to use it as a comprehensive interdisciplinary resource for their academic progresses.
5. This study may have a mission of guiding both teachers and students at tertiary education in arranging and renewing their interpersonal communication skills.
6. The data is significant because the data collection process and the pandemic were began simultaneously. During such pandemic times, people were not allowed to establish physical interactions. The usage and the demand in new media technologies were high. Therefore, the data reflect the genuine ideas and perceptions of the participants regarding the usage of new media technologies during this pandemic.

1.6 Limitations of the Study

The limitations of this study are as follows:

1. The research is limited with 2019-2020 Spring Semester only and the sample is drawn from Eastern Mediterranean University. Hence, the findings of this research are not open for generalization to other tertiary education institutions apart from EMU.
2. The study is limited with the students and instructors who study or teach at the Faculty of Communication and Media Studies, Faculty of Education, Faculty of Business and Economics and Faculty of Engineering in EMU.

3. Even though it was planned to employ traditional questionnaire, the researcher had to collect data through web-based survey in present study due to the pandemic surrounding the whole world.

Chapter 2

LITERATURE REVIEW

Recent advances in modern technology have enabled people to interact and communicate through digital media platforms. Furthermore, numerous attempts to improve the communication tools such as new media platforms, have increased the scientific attempts regarding the digital media platforms. Present chapter consists of several headings such as the definition of communication, interpersonal communication, types and models of interpersonal communication, digital media and their impacts on society and tertiary education.

2.1 Communication

Lustig and Koester state that the communication can be considered as a process where individuals create common meanings and exchange feelings through symbols. In doing so, receivers decode messages come from the sender during the communication process to produce meanings out of it (1996):

Symbols are central to the communication process because they represent the shared meanings that are communicated. A symbol is a word, action, or object that stands for or represents a unit of meaning. Meaning, in turn, is a perception, thought, or feeling that a person experiences and might want to communicate to others (Lustig and Koester, 1996, p.29).

“The word communicate is historically related to the word common. It comes from the Latin verb *communicare*, which means ‘to share’, ‘to make common’ and which in turn is related to the Latin word for common; *communis*” (Rosengren, 2000, p.1). As social animals, human-beings always need socialization and interaction.

People satisfy their needs by engaging in communication with other people.

Individuals exchange information, ideas and express their feelings with each other during the process of communication.

As a fundamental need for humanity, communication has always been the first priority from the past to the present. As Rosengren reports, communication is not new, it is as old as the humanity. Communication itself contains many signs and symbols that people decode when they interact. Also, the ways people perceive, decode and interpret the codes of language during the communication process, can be changed from person to person because each individual send unique messages that are received in a unique way by the receivers (2000, p.30).

People become the part of life by communicating and interacting with other humans in daily life. People's ability to communicate has led to the formation of today's societies, cultures, states, institutions etc along with the innovations in communication technologies. Changes in the ways of communication from early ages to the present day have enabled people to reach not only a few people but the whole World. Humans as a social entity, are in need of socialization and interaction in every stage of their lives. As Shabir, Safdar, Jamil and Bano remark, the people have witnessed many major technological innovations since the beginning of the twenty-first century. For instance, the flow of information across countries has expanded rapidly and people have begun to communicate with each other through social media platforms. Furthermore, increasingly developing and changing new media technologies have become an extension of individuals and this makes such advancements even more indispensable for humans. Especially with the introduction of the new media technologies into our daily lives, new communication channels and environments have emerged. Basically, social media platforms (e.g.,WhatsApp,

Facebook) connect people together, enhance interpersonal communication and increase people's freedom of expression (2015).

Furthermore, good communication is very vital in every social relationship. Problems, conflicts and troubles in relationships are mostly addressed as lack of communication. Good and effective communication leads better understanding among individuals. People have always tried to find ways to improve communication tools even before the technological evolutions. It cannot be denied that the globalization led some changes and improvements in the way of communication. Admittedly, globalization created the need for socialization as well as encouraging people to reshape all the communication tools. Here, the term 'global village' stands out, which belongs to one of the most important communication scholars called Marshall McLuhan. As McLuhan emphasizes, the new media technologies connect people across the world and create a community. As it is stated in the previous sentence, today's world become a global village where people recognize each other regardless of physical contact in real life. Formerly, people only meet other people from their own circle. However, nowadays, new media technologies form environments for people to expand their scope of socialization. For instance, people whom we do not meet in real life are as knowledgeable as our neighbors because the social media technologies allow individuals to know each other via online platforms. Obviously, such platforms have given the chance to the people to get to know each other even if they are living in different countries (1994). Therefore, it is significant to note that the new media technologies make the world a smaller place by bringing people together.

2.2 Interpersonal Communication

Interpersonal communication has been defined by many communication scholars in variety of different ways. DeVito, defines interpersonal communication as

an interactive process where two or more people exchange their feelings, information or ideas (2012). In this regard, it can be said that interpersonal communication occurs when two or more people start a conversation. Based on what mentioned previously, people are always in need to share their ideas, information and express their feelings to the others. By doing so, they engage in interpersonal communication.

In 2010, Hanson explains interpersonal communication as:

(T)he intentional or accidental transmission of information through verbal or nonverbal message systems to another human being. Interpersonal communication can be a conversation with a friend or a hug that tells your mother you love her (p.9).

Interpersonal communication is a very crucial part of the social life, which happens when individuals begin to communicate with each other. While many researchers and scholars describe interpersonal communication with the number of individuals present in the communication, Wood argues that the interpersonal communication can be described when people focus on the actions and conversation between people that are communicating with other people. Since it occurs between at least two people, it can be said that this kind of communication provides two-way communication for human-beings, which enable them to react and give feedback to the person they communicate with instantly (2014, p.37). In other words, people have mutual and direct influence on one and another during the process of communication.

In line with the communication and interaction needs of people, Hanson indicates that the interpersonal communication occurs when individuals express themselves, share their ideas, thoughts and knowledge with other people. There are millions of human beings in the world with different personalities, ideas and point of views. Every single individual is unique, so is interpersonal communication (2010). For instance, when a group of people come together, they have tendency to share secrets as well as information regarding their personal and private lives. Since every

individual has different characteristics, shared information varies from person to person. Thus, all of these features make interpersonal communication unique.

Segrin and Flora outline that the good interpersonal communication skills are not only helping people at building better social relationships and connections in daily life with other people but also help individuals to fight against the life problems such as stress, personal and social problems. In short, people who have effective interpersonal communication abilities, can easily cope with major conflicts such as depression. There are many ways to maintain good interpersonal communication with people (2000).

According to Apodaca, following tips can be acquired to compose a healthy and solid interpersonal relationships with people:

- **Willingness to Talk:** Any strong relationship can be formed with people who are eager to share their feelings and ideas regarding any subject. When an individual is willing to talk, it means that the person cares about this interaction. It also creates desire to build closer relationships with other people.
- **Empathy:** Empathy can be defined as a person putting himself/herself in someone else's shoes, looking at the cases from his/her point of view and sensing that person's feelings. Empathy can be considered as an essential element for better relationships among humans because it enables people to understand other people's feelings. When an individual show empathy towards someone, that person most probably feels to be understood, loved and cared.
- **Respect:** All living beings deserve to be respected by others. Every people have unique characteristics, lifestyles and opinions. People need to be respectful to one another in order to maintain mutual understanding as well as better relationships with other people. Being respectful for someone's efforts,

works, sentiments, ideas and different point of views, characteristics, feelings and attitudes are some of the key subjects that matters in two-way communication process. Good communication can be maintained as long as people pay attention to these issues in communication.

- **Donating the Time:** Especially these days, time has a great importance on everyone's life. Hence, spending quality time with loved ones is one of the most valuable gift for that person because generally people care about someone's presence. For instance, when a friend got sick, it is valuable to be with him/her because being available there in that situation demonstrates that this person cares enough to spend their time with a friend.
- **Building the Boundaries:** In the interpersonal communication, personal boundaries are significant for better relationships. People establish boundaries based on their lifestyles, beliefs, opinions and limits. Boundaries encourage people to show respect to others' privacy, personal differences etc. Maintaining boundaries help people to separate their own feelings and ideas from others' feelings and ideas. So, it makes it easier for people to create mutual understanding.
- **Active Listening:** Listening to someone is crucial for a healthy communication because communication occurs when listening activity starts. In a conversation with a friend, both sides should actively listen to each other. Otherwise, both parties might feel offended, ignored and unhappy because close relationships require empathy, respect and mutual understanding. Also, active listening reduces misunderstandings and arguments in any social relationship (2019).

As it is mentioned in detail above, two-way communication has numerous importance over people's life. However, as Sun proposes, increasing the use of social media applications have changed the written language used among teenagers. Undoubtedly, written language has reached in a different dimension due to the high engagement into virtual world with online platforms. For instance, social media users have developed a new language in virtual world with abbreviations. Social media users write some part of the word instead of writing full version of it such as 'BTW' is an acronym for by the way or 'thx' is a short version of saying thank you. In addition to this, these abbreviations can only be understood by people who are aware of the online environment. All things considered, it is worth stating at this point that the perception of language is changing along with written language as well (2019).

2.2.1 Verbal Communication

Communication takes place in many different ways. Each type has unique vehicles to convey the messages. Whitcomb and Whitcomb present the arguments to emphasize that the verbal communication is an integral part of the interpersonal communication. Language and words are the most powerful weapon in verbal communication. Humans use power of the spoken language to express themselves to other individuals amongst other living beings. In verbal communication process, there should be a sender who transmits the message and a recipient who reads and interprets the message. In short, verbal communication is based on a dialogue that require two-way interaction among people. Therefore, both parties (the sender and the recipient) are equally vital and necessary in verbal communication (2013).

According to Conrad and Newberry, effective verbal communication is fundamental in business world as well. In any organization or the company, people are expected to be good at communicating verbally as part of their duties, they might be

involved in meetings, presentations and etc. Verbal communication is also critical at building proper face-to-face communication and mutual understanding among people in social life (2011).

As Bulut remarks, providing an effective and rich educational content is directly correlated with the teachers' competence in the verbal communication. Language that is vital in expressing ideas and emotions, is extremely necessary for verbal communication. Capabilities like reflecting ideas and sentiments or teaching knowledge by the language belong to the humans only. To provide better understanding or avoid misunderstandings, language should be used properly. As determinants of quality of education, teachers should be equipped with effective verbal communication skills. It was revealed from one of the researches that the educators' communication abilities have definite and determinative impact over the quality of education (2016).

Pielmeier, Huber and Seidel claim that the significance of verbal communication at the classroom is twofold. First, it is vital for teachers in terms of conveying information to the learners. In this regard, selection of words are extremely substantial for the learners to get the intended message sent from the educators. Second, verbal communication is vital for the learners to express themselves in the classroom. Students are often expected to state themselves in the classroom by using proper verbal language. This can be either written or oral. When learners are required to build their own meanings out of what they have learnt in the classroom, words should be used to do so. Therefore, if students are capable enough to use effective verbal communication skills, they express themselves in a proper way (2018).

2.2.2 Nonverbal Communication

Nonverbal communication is an extremely substantial element for interpersonal communication. DeVito argues that when people engaged in the nonverbal communication they use their body language, gestures and facial expressions. Nonverbal communication helps individuals to monitor speaker's behaviours such as body posture to produce meanings regarding what speaker want to say. In short, it is a form of communication that occurs without using words (2012). In addition to this, Bonaccio, O'Reilly, O'Sullivan and Chiochio define the non-verbal communication as a type of communication that people share their ideas, thoughts and express their feelings without using words. In light of the previous sentence, it can be said that the nonverbal communication is not linguistic (2016).

Hartley states that nonverbal communication is a process where people try to create meanings from other individuals' body signals such as facial expressions, gaze, appearance or nonverbal vocalizations. As it is stated in prior sentences, verbal and nonverbal communication contain symbols that people use and attach various meanings in the communication process (1993). Moreover, as Bonaccio et al. report, both types of communication share some rules that are set and accepted by the society. For instance, if a person smiles, it can be interpreted as happiness. Further, verbal and nonverbal communication can be controlled and shaped by individuals. For instance, when people have a job interview, they are more likely to be careful at choosing their clothes to create a positive impression on the employer. Besides, verbal and nonverbal communication can be carried some sort of signs and influences that are given by the society (2016). For instance, as Alias discusses, although the handshake is the most common behaviour in greetings in such countries as America, it is not commonly used

in some countries such as Japan and China. For instance, Japanese people use bowing at greetings instead of handshaking (2018).

Additionally, as Cramer, Juan and Tetreault indicate, increasing use of emojis among teenagers in texting as nonverbal communication, might have changed the way people communicate. Today people can express themselves (e.g., their feelings, ideas and wishes) to other people regardless of words by using emojis. Emojis are graphical and pictorial representations that reflect people's ideas and feelings with very realistic faces' or objects' icons. For instance, in a conversation on WhatsApp, the sense of embarrassment can be expressed by sending a red-faced emoji without using words to explain it. Thus, communicators feel more comfortable and get the intended messages through emojis (2019). According to Lin, gestures, which are extremely important in interpersonal relationships, are necessary nonverbal language that help individuals in terms of comprehending and interpreting the message comes from the sender. In this regard, recently emojis started being used by people to express their feelings because these icons help people to attach different meanings and sentiments within the text (2016).

In addition to this, non-verbal communication is vital in the classroom as well. Zeki argues that the students highly pay attention to their teachers' non-verbal communication behaviours such as eye contact. For instance, when educators managed to build eye contact with the learners in the classroom, they most likely to feel more involved, motivated, focused and comfortable towards the courses because the students perceive this communication as a form of encouragement. Thus, classroom atmosphere become warmer which ensure students to be an active participant as well as more confident in the classroom (2009).

2.3 Models of Interpersonal Communication

As Gamble and Gamble claim, interpersonal communication has advanced throughout the years. Interpersonal communication models generally reflect how communication activity is handled by people (2014). Interpersonal communication models are as follows, respectively:

2.3.1 Linear Model

“Linear model” is the first known interpersonal communication model that propounded by Harold Lasswell. As he proposes, this model offers one-way communication which is not allowed receivers to actively participate to the process of communication. In other words, there is no feedback in this model. Communication in TV and in radio can be given as examples regarding linear model because both of them provide one-way communication and audience cannot response (1953).

As Lasswell remarks, exploring answers to those five questions will help to explain communication in a good manner: “Who?”, “Says What?”, “Through Which Channel?”, “To Whom?” and “With What Effect?” These questions also known as 5W’s in communication studies (1953).

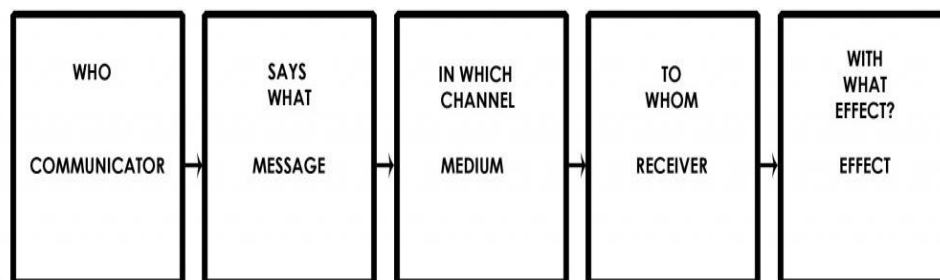


Figure 1: Lasswell's Linear Model (<http://communicationtheory.org/lasswells-model/comment-page-1/>)

According to Konjin, Utz, Tanis and Barnes, linear model was useful and effective at propaganda setting and convincing or manipulating the audience before,

because it was aiming at getting intended outcomes from the audiences. Conversely, linear model does not provide full continuity in communication due to the lack of feedback in the system. Moreover, the sender may not know whether the message was received in an intended way by the receiver (2009).

2.3.2 Transactional Model

Gamble and Gamble posit that the transactional model is the most appropriate model used for interpersonal communication which accommodates all features of communication and previous models. Transactional model of interpersonal communication allows more than two people in the process of communication. In this case, the roles of the sender and the receiver may change time to time and the receiver might be the sender and the sender might be the receiver (2014).

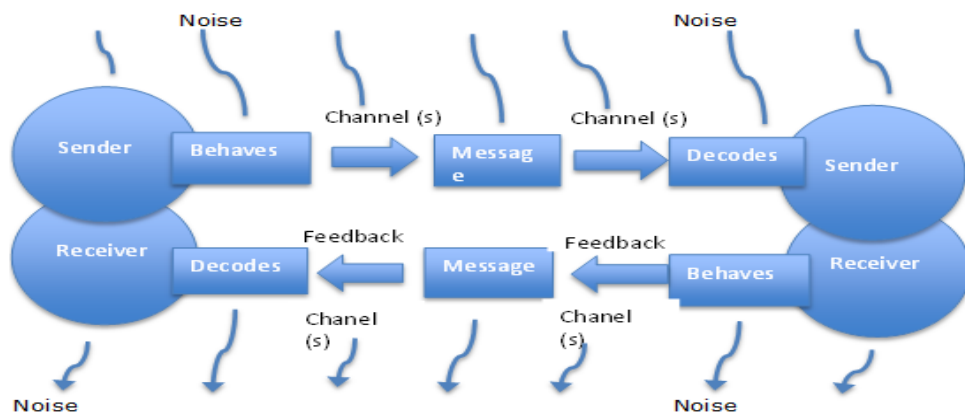


Figure 2: Transactional Model
<https://www.businessstopia.net/communication/transactional-model-communication>

For instance, Z. claims, everyday conversations can be categorized under this model because the communicators can be involved in two-way communication, which contains verbal and nonverbal communication through transactional model. Communication and interaction between two people who know each other is more efficient because they share the same social environment and norms. Further, communication can be sustained for a long time by the communicators because every

feedback lead to a new topic to talk. The receiver can get the message as intended by the sender because this model gives the opportunity to clarify misunderstandings and other problems in interpersonal communication by providing feedback (2019).

2.3.3 Interactive or Convergence Model

As it has been underlined in previous part, the linear model has no feedback. As Konjin, Utz, Tanis and Barnes argue, contrary to the first model, interactive/convergence model provides feedback to the communicators which allow people to involve in two-way communication. For instance, when two people communicate, they can respond to each other's messages immediately. In this case, mutual understanding between the parties is provided and a better communication is maintained. Social media platforms can be the best example regarding interactive communication because most social media applications allow users to engage in two-way communication with other people (2009).

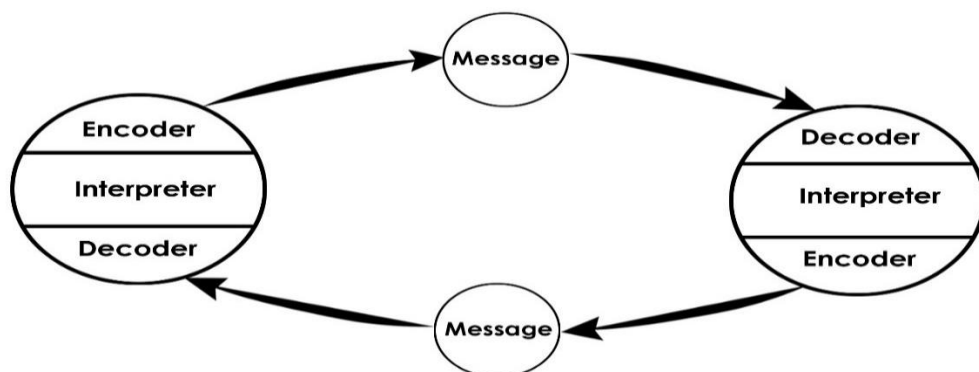


Figure 3: Interactive Model (<http://communicationtheory.org/lasswells-model/comment-page-1/>)

According to Wood, this model can be considered as an advancement on Linear Model. However, both Linear and Interactive Model provide sequential communication between sender and the receiver (2014, p. 21). For example, in the

classroom, first the teacher asks a question and when an answer is received, communication proceeds in form of a dialogue between teacher and students.

2.4 Societal Perspective: Communication Technologies as Mediators

According to Naikoo, Thakur, Guroo and Lone, any alteration, evolution and invention made for the sake of people have undeniable impacts over the entire society. Unforeseen and uncontrollable rise in the Internet and Computer Technologies (ICT) have led to a worldwide trend of utilizing digital innovations in societies. New media technologies have reshaped the ways/forms of communication by offering new communication environments such as virtual world. It enables people to communicate and interact with each other without concerning about the time or the distance. It is to say that the new media technologies act as a bridge in society. Yet, the new media technologies have some negativities as well. For instance, due to the advancements in new media technologies, people tend to prefer online communication rather than face-to-face communication in real life because online platforms offer faster and easier communication. That is why people are eager to utilize social media platforms for communication (2018). The new media technologies have great influences on people. As Skoric, Zhu, Goh and Pang assert the modern technologies encourage people in terms of being more open-minded to the new ideas, feeling more comfortable to try new things and being a part of broad communities in the society. For instance, activists can be organized through online platforms such as Facebook, to make protests or fight against some sort of problems (e.g., human rights). As Kuruç-Kutoglu and Opiyo state, social media platforms provide new environments for such campaigns, where people share their concerns and opinions with other people. Moreover, social media platforms allow users to convey instant messages to the masses (2020).

However, high engagement in new media technologies have changed the way that people perceive the privacy issues. Before the technological reforms, people paid more attention to their private lives. For instance, people would not eager to share their personal information with people they did not know. Nevertheless, today, people appreciate the conveniences of the new technologies as well as they are pleased to have technology-oriented innovations. New media technologies are extensively and increasingly used by individuals to facilitate their social interactions and engagements. That is why people are more willing to communicate through online platforms such as Facebook and Messenger (2016). In addition to this, Papsdorf points out that people prefer to communicate and interact with each other online because new media technologies play a significant role in mediating, facilitating and extending areas of human communication. Indeed, such platforms emerged due to the need of the society (2015).

Lately, it can be seen that the advancements in the new media technologies started taking control over human-beings. The ease and accessibility of these technologies are constantly promoted by technology pioneers throughout the society. According to Yengin (2016), people's growing need for communication and interactions are caused by the developments in new media technologies. As Roberts and David indicate, high engagement in virtual world create powerful stimulations over people in terms of utilizing social media platforms. Pursuing this further, people experience anxiety of being offline in these platforms. In short, hunger for communication and interaction in the virtual world and desire to stay connected all the time is called FOMO- Fear of Missing Out (2020).

As Younes and Zoubi argue, online apps make human life easier than ever. Also, emergence of new media technologies led to radical changes in society. For

instance, today people have opportunity to share their thoughts and exchange information freely in the platforms that are a production of the new technologies (e.g., Social Media Apps). All these improvements encourage online communication and socialization yet, they decline face-to-face communication among individuals. Since humans are social entities, the dominance of the new media technologies over the society is expected to continue to rise day by day. Consequently, in order to preserve structure of the society, people need to pursue their interactions outside the online environment as well (2015).

2.5 Group Communication-Classroom Interactions

Guzzo and Dickson indicate that the groups consist of more than two individuals who perform tasks/works for the same purposes and commitments. Each group member share their capabilities, abilities and skills with each other just for the sake of the group. When people are a member of any group, they are dependent on each other and obligated to follow some shared rules, which make them a group in the first place. In addition, group dynamics change due to the ideologies, personalities and number of the members. Generally, groups allow users to come together with people who share the similar purposes, ideologies or norms (1996).

Hanson reported that the group communication occurs when one person communicate or interact with two or even more people at the same time. Shared rules among people are the main requirement of the group communication (2010). Moreover, as Pandey and Karve outline, the good communication is an integral part of group dynamics. Therefore, good communication guide people to manage and set shared thoughts, ideas, beliefs and meanings within the group (2018).

In addition to this, Trespalacios argues that if people come together as a group, they are more likely to produce better outcomes because of the collaboration and the

power sharing among members. For instance, when students engaged in a peer work in the classroom for a project, are more likely to produce better outcomes. The reason might be related with the person's self-awareness and respect. In other words, people are required to collaborate and contribute with their peers as much as they can to achieve certain goals within that group (2017).

Pursuing this further, Burke asserts that communication and interactions between teachers and students constitute the group into the classroom-settings. Classrooms are places where formal learning and instruction occur among the educators and learners. Classrooms are often host peer-group interactions. Communication begins when the teacher communicate with their students verbally or nonverbally. In other words, classrooms are kind of groups that are created through interactions of teachers and students, team works, group projects etc. Few students can form a group if they have mutual influence over one and another. When the educators communicate with the entire class, it means that the group communication is occurred because the teacher have direct and strong influence on their students as well as students have influences over their classmates. Therefore, classrooms are kind of small groups (2011).

Despite the fact that a group and an organization have much in common, Harris and Sherblom reveal several distinctions between these two. For instance, a group consists of people who know each other and share informal rules and norms to fulfil set goals (e.g., classroom environment). Even in the multicultural classrooms there are some shared rules like respecting the teacher. On the other hand, an organization can be formed by individuals who do not know each other in real life. Also, an organization have stricter rules compared to the groups. As a summary, groups can be formed regardless of the environment, as long as there are more than two people available in

the same place for the similar purposes (2018). As it is listed below, in daily life, there are many types of formations, which are considered as groups.

2.5.1 Categories of Groups

Ludlow and Pantan propounded four types of groups where people communicate in social life:

- 1. Formal Groups** are created by any management and members come together to perform certain tasks for that institution. Members of the formal groups pursue their interpersonal relationships mostly in the professional level with other group members and are expected to obey some rules set by the management/institution (e.g., students in the classroom or employees in any company).
- 2. Informal Groups** are created spontaneously by individuals who share similar interests with each other. This kinds of groups are not created by any company or organization. Unlike formal groups, members are not required to follow any rules or regulations in this group. In other words, informal groups are more relaxed and based on casual conversations. Therefore, signs of sincere interpersonal communication can be found within this group type.
- 3. Primary Groups** mean small groups where all members have intimate and close relationships with other group members (e.g., family and school friendships). In this type of groups, each group member might have great influence over others because they spend most of their times together. That is why, primary groups cannot be existed regardless of good communication, mutual understanding and respect.
- 4. Secondary Groups** refer to small formal groups which contain the combination of individuals who came together to fulfil particular purposes such

as political groups and military groups. Just like formal groups, there are some shared rules and obligations that the members must follow (1992).

2.6 Integral Component of Interpersonal Communication: Listening

As an integral part of interpersonal communication, listening is a vital activity in the process of communication. Adelman claims that the listening is a process of hearing and receiving the message and constructing a meaning with it and when it makes a sense to individuals, verbal or nonverbal responds can be provided to the sender. In this respect, listening activity requires both hearing and a response (2012). In the line with what has mentioned in previous sentence, as Stewart and Arnold indicate, the nature of listening can be described as a unique and dynamic activity, which varies from person to person because the listener's intention and motivation are different and unpredictable. In addition to this, all listening activities requires high engagement and its degree can be measured by looking responsiveness of the receiver (2018).

According to Adelman, people can be observed by the sender during the communication process and as a consequence of this monitoring, it may be revealed whether the receiver is actively listening or not. For instance, classroom environments are suitable for assessment of listening effectiveness because when the instructor asks a question in the classroom, it can be observed whether the students listen to their teacher or not (2012).

As human interactions increase day by day, the significance of active listening is also increasing. According to Ludlow and Pantan, active listening occurs when individuals pay careful and high attention to the speaker. Hence, it requires listeners' commitment and devotion. For instance, if the listener provide feedback by asking questions or reflect their feelings during the conversation, it means that active listening

occurred. In addition to this, people tend to engage in active listening when the topic attracts them or beneficial for them. For instance, if people hear information that they care or useful for them, they most likely to think worthy to listen carefully. Particularly in this age of communication and information, listening is vital for everyone in almost every part of their lives. People spend most of their times by listening in schools and universities. Listening cannot be explained regardless of mentioning hearing because it is vital to comprehend the differences between listening and hearing (1992).

As Lucas states, everyone with healthy ears can hear or perceive sounds waves, which can be called hearing activity. On the other hand, listening requires extra effort and attention to focus, comprehend and grasp the subject that delivered by the speaker. It is worth stating at this point that the listening requires effort whereas hearing occurs naturally as long as anyone has healthy ears (2015, p.48). According to Andujar and Hussein, listening activity might be interrupted due to the several reasons. One of the most common causes for communication disruption at interpersonal communication is fake listening. The receiver may pretend like listening to the sender in two-way communication. The reason for acting as if listening to someone is courtesy. Occasionally, actual listening cannot be ensured due to the thoughtfulness, distractibility, personal problems or conflicts of the listener, and lack of interest regarding the topic. Furthermore, it is a common fact that the smartphones started creating distraction due to the increasing usage of people. For instance, presence of smartphones in the classroom is a cause of distraction for students because they tend to check their notifications very frequently. Moreover, this desire causes people to do multitasking in their daily lives. For instance, students may both attend their classes and stay connected to the virtual world at the same time. However, learners cannot fully comprehend the course by doing multitasking (2019).

2.6.1 Types of Listening

Lucas propounded the following kinds of listening:

1. **Appreciative Listening:** It is a form of listening where the listener does not necessarily focus on the message. The main purpose here is to satisfy personal needs. For example: when an individual listens music, he or she does this just for his or her enjoyment.
2. **Empathic Listening:** It is a type of listening that contains emotions. A person do not focus on the message only because motivations, feelings and emotions are needed and important in empathic listening. For example, when two friends have an interaction, emotions and feelings are involved in the process because as friends, they tend to give support and empathy to each other.
3. **Comprehensive Listening:** It involves interpreting and understanding the given message (e.g., listening at classroom-settings). When a person engaged in comprehensive listening, he or she should pay more attention to understand and interpret speaker's main point. Attending a conference and a lecture might be examples for that type of listening because both activities require comprehension as well as careful listening activity.
4. **Critical Listening:** It is a form of listening that occurs when a person criticise or analyse what she or he is saying. The listener decides whether to accept the message or reject it. For instance, when a person seeks for a candidate to vote during election period, involved in critical listening by evaluating and analysing the speech of a political candidate on media or other platforms (2015).

2.7 Educational Perspective: Before the Implementation of New Media Technologies

As Juvova, Chudy, Neumeister, Plischke and Kvintova argue, family as the first and fundamental step of the education plays a critical role on the learners' development because education starts at home. That is why the term family should be taken into account when measuring and evaluating teaching techniques and strategies. At this point, the teacher acts as a bridge between learners and families. It can be seen that there are lots of changes in education when today's educational approaches compared with the traditional education approaches (2015). Akpınar (2010) states that the traditional educational approaches aims to teach with high rules such as obedience replaced with modern education approaches that focuses on comprehension of curriculum, pluralism and originality in works of students. In addition to this, Krahenbuhl (2016) argues that the contemporary teachers who embrace innovative education approaches take advantage of constructivist approach² in their teaching. As Akpınar and Aydın's study report, the USA and Europe began shifting their education system from traditionalist approaches to modernist approaches, whereas traditionalist approaches are still implementing in Middle East countries, such as TRNC and Turkey. It appears that such changes are only possible with the cooperation and willingness of teachers. In addition to this, Turkey's Ministry of Education have begun integrating constructivist approaches and modernity into education system in order to provide student-centred education as well as improving students' performances (2007). Ministry of Education in TRNC is working parallel with the YOK which means that every decision and action is valid for TRNC's education as well. In other words, the

² Learning based on student's efforts on building their own knowledge.

education systems of Turkey and TRNC are almost the same and similar education approaches are being implemented in both countries.

Comparatively, as Hanson (2010) states, teaching practices in the past were teacher-centred, where students learn in the sedentary behavior³. Mostly, learners are not as active as the teacher. Substantially, the traditional approach is more teacher-centered where the instructor decides everything such as way of teaching and assignments (2018). Moreover, Stukalenko, Zhakhina, Kukubaeva, Smagulova and Kazhibaeva state that the modern technology do not include students' interactivity in classroom or student-centered approaches. Generally learners are passive even in classroom activities because according to the traditional education approaches, teachers were considered as the only source and ultimate authority in the classroom. As it is mentioned before, traditional education aims to develop learners' cognitive skills only. By doing so, the curriculum is strictly implemented and students' differences are not taken into consideration. Learning occurs through learners' memorization and repetition. Consequently, learners never learn criticizing given course material or creating new ideas for the lesson (2016).

As Anikina and Yakimenko's study underline, before the advancements of Information and Computer Technology (ICT) education process required to take place in formal environments like schools. Process and techniques of education have changed with the rapid developments in the new technology. For instance, people's cognitive, affective and emotional skills can be developed with or without the support of school. The reason is that the digital platforms offer extensive amount of information and computer abilities to people and also help to increase creativity of individuals. In this respect, it can be said that the perception and boundaries of

³ Physical status of being-seated.

education are changing rapidly with the growth of new media technologies. Thus, the technology oriented advancements in education started being more obvious than ever (2015).

Stukalenko et al., state that before the adaptation of technological innovations with learning and instruction processes, teacher was the one who is managing the teaching and learning processes because students were only passive recipients. Eventually, people began to understand that the real education cannot exist without equal efforts of both learners and teachers. Today's education systems are more strong with the new technology because it encouraged teachers to abandon traditional approaches in education and thus to create modern approaches (2016). Juvova et al. argue that modern approaches enable learners to be more active in classroom, allows mutual communication between teacher and students which ensure teachers to be aware of students' need and implement strategies accordingly. In this way, educators can be able to recognise and follow their students' mental and academic developments (2015).

2.8 Features of Communication Environments: Social Media Platforms

As Sobaih, Moustafa, Grandforoush and Khan indicate, 21st century have witnessed the unforeseen raise in social media usage. Increasing use of social media sites among people have conceived new medium for communication and interaction. Social media world satisfy people who seek for entertainment, interaction, information and etc. However, high usage of social media platforms caused enormous consumption regarding virtual contents (e.g., YouTube videos). The reason might be interrelated with the popularity of such platforms as Facebook, Instagram, etc. (2016).

2.8.1 WhatsApp, Viber, Facebook, Messenger, Instagram as Interaction Enablers

Hamid, Ishak and Yazam report that the new media should be redefined because the growing demand and advancements in ICT changed the perception of people towards innovative media technologies in society. Fast development of new media technologies have currently become a significant debate among communication scholars. Nowadays, people use social media platforms (e.g., Facebook, WhatsApp, Viber etc.) for various purposes such as communication, education, entertainment, socialization, interaction, reaching information/knowledge, expressing ideas and feelings and also for cooperation (2015).

To begin with, as Southren indicates, new media was invented after the social media. It can be said that the new media technologies are more general and include all the platforms that are online, such as: WhatsApp, Facebook, Blogs (2019). As Selders's paper illustrates, all these terms refer to an interactive communication and user-generated contents. In short, new media technologies offer higher and broader digital engagement to the users than social media. New media and social media does not cover any type of traditional media (e.g., TV, radio, newspaper) because both of them require the Internet connection, a digital device, interactivity and feedback (2019).

As Montag, Błaszkiwicz, Sariyska, Lachmann, Andone, Trendafilov, Eibes and Markowetz discuss, breakthrough of smartphones enable people to communicate and interact faster, easier and from almost everywhere. Smartphones provide the Internet access which direct people to reach limitless data/information and use social media platforms such as WhatsApp. Apparently, WhatsApp is dominating in the digital platforms' market currently by offering quality and simple services. Some researchers describe WhatsApp as an online messenger application that facilitates

communication between people by ensuring exchange of data such as; images, documents, videos, text messages, voice or video records and calls as long as the Internet connection is available. When people download the app from the App Store (Apple) or the Play Store (Android), all these online activities and facilities mentioned above can be used for free (2015). According to Sutikno, Handayani, Stiawan, Riyadi and Subroto, WhatsApp is the most popular and used online instant messaging application throughout the world because of its huge number of users. Pursuing this further, the user number of WhatsApp exceeded 1 billion people after 2016. Even though it was developed few years after Viber, WhatsApp become the first app in its format that hit this record. Just like WhatsApp, Viber offers free voice/video calls, sharing of documents, pictures, videos etc. Due to being the pioneer regarding free call services, unfortunately Viber failed at maintaining its success and keeping their customers as users. For instance, users are not happy with Viber's colours which is hard purple (2016).

On top of all, Chugh and Ruhi report that the Facebook is the most known, used successful and popular online application so far, which enable users to socialize through online profiles. Facebook allow users to create contents, share photos and videos on their online accounts (2017). As Nieborg and Helmond indicate, creators of Facebook launched Facebook Messenger which enable users to involve in voice and video calls and provide instant texting with other users. It is a fact that the usage number and the popularity of Facebook have raised by Messenger App because both of the application are integrated to each other (2018). Hamid et al. illustrate the fact that after few years of Facebook, people started using Instagram which provide both similar and new features as Facebook such as sharing photos/videos. In addition to Facebook, Instagram offers their users to engage in short-term photo or video sharing

that is called stories and lasts 24 hours. Further, Facebook and Instagram are not only increasing human socialization and interaction but also rising people’s extraversion level which refers to social and confident people (2015).

Since social media is a new phenomenon, usage of online applications are increasing day by day. Over time, new versions and characteristics are continuing to be installed into to the apps that rise the percentage of downloads of these applications in Google Play Store and Apple Store. One of the biggest application analytic and mobile data company App Anie reported the most downloaded social media platforms worldwide between the years of 2010 and 2019 in iOS and Android. Following figure demonstrates the percentages of most downloaded social media apps in this decade.

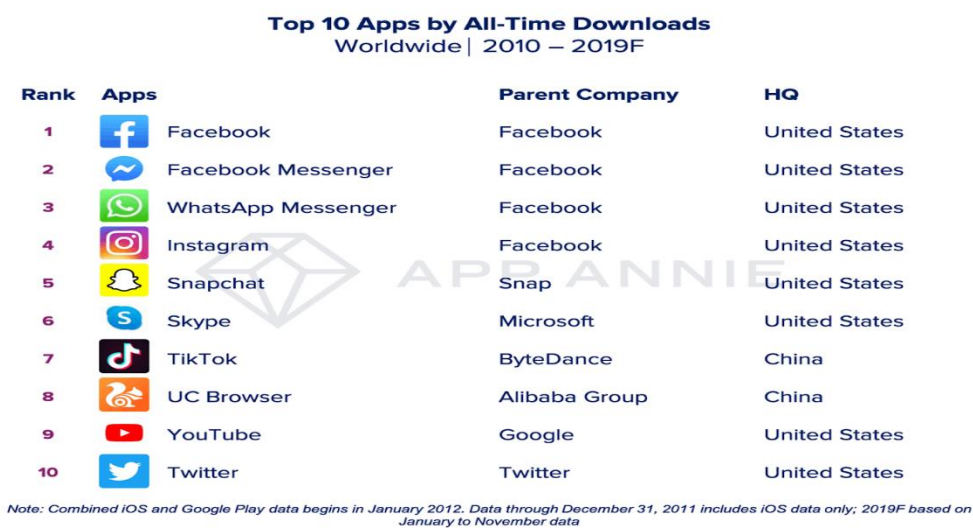


Figure 4: Top 10 Apps by All-Time Downloads in This Decade
(<https://www.appannie.com/en/insights/market-data/a-look-back-at-the-top-apps-games-of-the-decade/>)

The chart illustrates that the Facebook, Messenger, WhatsApp and Instagram were the most preferred applications within this decade. All these applications allow users to engage in a social environment by creating online profiles and contents. Features of aforementioned apps are increasing day by day due to the expectations of people.

2.9 Bridging Education with the New Media Technologies

Zhu argues that developments in new technologies have influenced education directly and indirectly. Admittedly, every change in education sector is strictly related to the changes in the new media technologies. History has shown that the innovations in the new media technologies have been very effective on education world specifically. For instance, emergence of the print media, computers and the advent of the Internet dramatically changed and improved education. Obviously, all innovations in new technologies has expanded the scope of the education (2018). Kämpfen and Maurer point out that the improvements in new technologies have been connected to the changes in humanity. New media technologies are facilitating individual's needs such as exchange of information, thereby, it help individuals to improve their performances. Use of new media technologies in education process change the way of reaching and reinforcing information (2018).

According to Büyükbaykal, fast developments in the new media and information technologies reshaped the teaching and learning processes in tertiary education. Due to the new media technologies, learners are no longer dependent on their teachers because education can be pursued through new media platforms outside the school settings as well. Former studies have shown that the students at tertiary education appreciate the role of new media technologies into their learning process (2015). As Zhu argues, learners can reach knowledge much easier than ever by using new media technologies because new media technologies contain wide, specific and deep information, as well as visuals that help students (2018). Smith's study emphasizes that the new media technologies provide environments for teachers and students to maintain their communication and interactions beyond facilitating students' access to information. Undoubtedly, teacher and student interactions are vital

and essential part of the university experience which should be carried on outside the school settings as well. It is worth stating at this point that the new media technologies provide an opportunity to both teachers and learners to pursue their interactions and teaching/learning activities in and out of the school settings. Besides, learners who communicate with their teachers online outside the school settings, are more likely to start an interaction in the classroom much easier (2015). As Kiran mentions, online interaction with teacher enables students to be more confident in the classroom, as well as encourage them to ask questions freely whenever they need. Pursuing this further, education should not be limited in school settings, learning activities should pursue outside the school as well. However, schools have a special power on learning activities because the ultimate goal is to educate people. After home, students spend most of their times in school. That is why teaching and learning activities should be supported by the technological improvements for effective learning or development. Further, it is obvious that the physical features of the classroom, teaching methods or use of recent technologies have enormous influence on student's academic success (2012).

In the line with what mentioned above, Greenhow and Lewin remark that utilizing digital innovations within learning/instruction processes created new ways of learning, social interactions, peer work and cooperation between the learners which ensure positive academic, social, cognitive and emotional developments, which equals to the success. In addition to this, today's learning activities in new media technologies can be exemplified through formal, non-formal and informal. Thus, strong connections between these three is provided by new media technologies. Unfortunately, very few young learners utilize digital opportunities in order for their educational purposes

whereas majority of them use it for non-academic purposes such as socialization (2015).

2.10 Positive Impacts of New Media Technologies at Tertiary Education

According to Ahn, people are social entities who live in social environment within an order. Humans need socialization and interaction with other people in order to survive because this strong instinct comes from the roots of human-beings. In other words, people are in intense desire to communicate with other individuals throughout their lives. People have always found ways and vehicles to communicate with other people. In 21st century people started using new media platforms to communicate and interact (2011). Lynch argues that the inclusion of digital tools in education become a topic that studied by many scholars for decades. Current literature demonstrates that the modern technology may boost student's self-esteem and their comprehension of information when it integrated in education. The reason might be related with the creation of new environments for learning (2017).

According to Domingo and Bradley, majority of the students at any stage of the education are stimulated and motivated by modern technology because it has created a new form of medium for learning-instruction of students and teachers by providing digital educational platforms (e.g., online libraries). Also, technology can be considered as a motivational tool for students because when modern technology embedded into education, learners may perceive it as a sort of motivation for studying. The reason is learners can enrich their course materials and reinforce their knowledge through innovative technology (2018).

Greenhow and Lewin argue that particular platforms in social media like Facebook allow users to build interconnectivity with other people through online

profiles. Individuals can create user-generated contents and share photos, videos and information through social media technologies (e.g., Instagram). For instance, Facebook particularly increases students' interaction, sense of unity, knowledge and develops their thinking skills (2015).

As Chugh and Ruhi indicate, the online social media platforms (e.g. Facebook and Instagram) are trusted and useful enough in disseminating knowledge and accessing educational content. Since students spend lots of their times on online platforms, it is wisely to take advantage of online platforms at tertiary education (2019). As Selwyn and Stirling's research report, people started adapting modern technology into the education field. As it is mentioned earlier, current teaching methods have expanded due to the advancements in new media technologies. It is worth stating at this point that the new media technologies caused a reform in education sector. Teaching and learning strategies, techniques and materials have enriched with the technological apparatus such as Electronic Whiteboards. Besides, technologic innovations and schools are in cooperation for years. People used to perceive schools as serious places where real education takes place and people obey series of rules. Nowadays, educators, learners and learners' parents seek for technology-oriented education. Including digital media technologies within the learning and instruction processes, ensure several opportunities to both teachers and students (2016).

In line with what mentioned above, Halverson, Kallio, Hackett and Halverson remark that students had chance to reinforce and extend the scope of their knowledge with the integration of new media technologies into teaching/learning processes. Today, many teachers request technology-based researches or assignments in order to strengthen learner's technology skills, expand the course content and also assemble

technology and education. This also encourages students to be more involved to the courses. This involvement is extremely crucial in education process because learning occurs when two-way communication between teacher and students is ensured (2018). Moreover, as Küçükahmet proposes, teachers started offering online class groups on Facebook or WhatsApp which increase cooperation between learners and educators. By doing so, teachers can easily monitor their student's performance. In this regard, teachers decide together with their students what to teach and how to teach considering learner's needs and wants. That is why cooperation between teacher and student is vital in learning and instruction process. All these advancements in education led to the shift from teacher-centred education to student-centred education (200, p.24). In line with what mentioned previously, Anikina and Yakimenko claim that the use of new media technologies into teaching and learning processes promise independent learning to the learners. Independent learning allow students to be more active in decision-making process. Thus, student satisfaction is ensured by giving them a chance to choose how to improve themselves. In other words, new media technologies allow learners to teach themselves on their own with their methods, systems and approaches (2015).

Above all, Ahn advocates the fact that the new media technologies are strengthening the teachers and students by providing excessive amount of information. Besides, after the emergence of new technologies into education, teachers had a chance to get in touch with their students outside the school settings. For instance, teachers encourage students to create a Facebook group in order to monitor students' performances, share extra information, keep them active and connected. All these actions help to ensure sincere, warm and supportive class environment. In doing so,

teachers can be able to implement more specific and personalized teaching methods for each student, which help them to produce efficient outcomes (2011).

Apart from what has mentioned above, He reports that the new media technologies are embedded into the distance education and it facilitates the educational activities in crisis periods. Recently, the world is going through a difficult process due to the uncontrollable pandemic called COVID-19 (coronavirus). Online education has started being used all over the world to pursue educational activities. In such difficult times, modern technology provides various benefits in terms of maintaining education. Latest advancements in the technology allow teachers to perform simultaneous and interactive classes with their students. Further, participation can be controlled, materials can be uploaded, questions can be asked/answered during the course and projects can be assigned to the students via online platforms just like in the formal education. Thus, energy and paper consumption can be significantly reduced (2020).

During the pandemic process, YOK's and YODAK's decisions started being implemented by TRNC universities. For instance, in line with the instructions given by YODAK to EMU, education shifted from face-to-face education to online education within two weeks. This was a hard process for both students and teachers in this regard. Although EMU has a sufficient technical infrastructure, such a crisis has never been experienced before. The teachers adapted their teaching approaches to the Microsoft Teams application provided by EMU in a short time. This application allows users to establish a two-way interaction and allow them to upload lecture notes, PowerPoint slides and let teachers to take attendance through the application. During this crisis period, teachers and students were able to maintain effective interpersonal communication. Microsoft Teams application was very much helpful in this respect by providing video/voice call opportunities, instant messaging options etc.

2.11 Negative Impacts of New Media Technologies at Tertiary Education

In this age of communication, the usage in the new media technologies constantly grow. This leads to the over dependence upon social media platforms as well as high consumption regarding online contents. Up-to-date researches demonstrate that the new media technologies have numerous negative impacts along with its benefits.

To begin with, as Lange and Costley argue, in the 21st century, people have witnessed educational reform throughout the world due to the new improvements and progresses in the modern technologies. These developments are currently and extensively used in such fields as communication and education. Hence, new learning and instruction methods have emerged (e.g., personalized learning) due to these improvements. Even though reaching information become much easier and faster now, the new media technologies made people lazier regarding access to the information. Furthermore, the new media technologies are declining the critical thinking and criticising abilities of the learner. For instance, learners can reach out the knowledge as long as the Internet connection is available in their environments. When reached data is considered as enough to complete their tasks, people would not involve digging deeper to find out further information. The reason is that the people got used to the ready knowledge (2019).

As Halverson and colleagues propose, the integration of digital innovations into education created a huge gap between formal learning environments (e.g., schools) and informal learning environments (e.g., new media). While teaching and learning occur only at schools for years, today new media technologies have created new forms of learning and teaching environments by supplying all the necessary

knowledge that teachers present at schools (2018). As Siddiqui and Singh indicate, the Internet environment become a sort of store that contains millions of information and data, which are both useful and useless. The students may face difficulties in the process of seeking data that are right and useful. In this respect, learners are wasting lots of their time to separate useful information among the useless ones (2016). In addition to this, Akram and Kumar report that people are experiencing cyberbullying in the virtual world. Since users create online identities/profiles on social media, it appears that it is easy for bullies to reach out anyone in the Internet world. Also, bullies are well-aware of the fact that they can hide themselves without being caught. That is why, people may be terrorized or threaten by others on social media. It cannot be denied that being bullied causes long-term psychological damages such as anxiety and depression, which also require long healing process (2017).

In addition, as Mihelj, Leguina, and Downey remark, even though 21st century considered as information and communication age, there are some countries where the modern technology have not reached yet. This causes inequality in terms of utilizing and accessing the technology. Above all, populations in undeveloped countries may experience inequalities to improve their knowledge, technical skills, communication abilities or the educational materials/contents due to the social, political, economic or geographic occasions. This is called digital divide. It is a well-known fact that the

Internet offers so much facilities such as online education, web-searching, socialization, internet-banking etc. Unfortunately, sometimes people are deprived of using the benefits of modern technology in countries with technology-oriented inequalities (2019).

2.12 Teacher-Student Interactions

Kiran advocates the view that school as a traditional and significant socialization environment plays a vital role in formation and acquirement of communication skills for students. Especially in the early ages, students tend to take their teachers as role models. The type/form of communication used by teachers in the classroom has decisive influence on students' determination of their own type/form of communication. Hence, teachers should have a good and effective communication skills. To maintain and reinforce good teacher/student interactions, experiences should be shared in the classroom to further build a common ground and connection between teachers and students. For instance, when a teacher shared his or her experiences in class, students tend to create bond with their teachers. Thus, since the experience reflects the real life, students feel closer and more attached to their teacher and feel more comfortable in the classroom (2012).

According to Downer, Stuhlman, Schweig, Martinez and Ruzek, the presence of a warm atmosphere in the classroom represent a good and supportive interpersonal communication patterns between teachers and students. When the teacher is aware of the learner's social, personal, emotional and academic needs and expectations, it helps to build mutual understanding with their students. Besides, learner's academic success, self-esteem and motivation are interconnected with the positive classroom environment. Besides, teachers are not professionals who provide course content only.

Teacher-student interactions are as vital as teaching information in the classroom (2015). According to Hafen, Ruzek, Gergory, Allen and Mikami teachers-students dynamics in interactions have direct and indirect influence over students' educational/academic development. For instance, when a teacher build proper communication atmosphere in the classroom, he/she can be able to detect students who

demonstrate problematic behaviours in the class. As professionals, educators can develop ways to reach out that students to replace their problematic behaviours with more appropriate actions. Thus, students can overcome their challenges and problems easily with the help of the teacher. In this regard, students' personality, learning and behavioral differences should be taken into consideration in the teaching and learning context (2015). In addition to this, Izadinia argues that teachers as mentors should be aware of learners' perceptions and purposes to form an attitude towards students. In short, teachers mostly tend to behave in a way their students approach them. Further, communication based problems in the classroom caused by inadequate recognition of student and conflicting personalities of learners and teacher. Learners do not tend to communicate when they sense oppressive and tense class environment. On the other hand, positive, kind and supportive behaviours of teachers encourage students to communicate more in the classroom (2015).

In line with what mentioned above, Sun and Wu state that good teacher-student communication is significant because it plays a vital role in students' learning processes apart from interactions between students and their classmates. For instance, when students have challenges regarding their lessons, teacher should be the one who detects and guides students to overcome his or her problems. By doing so, the teacher needs to be aware of students' capacity and personality. Therefore, teacher-student interactions should be taken seriously by both parties (2016). In the light of all this information above, Pal, Halder and Guha discuss that the teacher as a source of knowledge should be maintaining and reinforcing proper classroom communication. Since the teacher is expected to be more dominant in classroom, he or she should create good interactions with their students. If the teachers manage to set proper communication in the classroom, they can easily perceive students' need and

implement suitable teaching methods accordingly. Apparently, teacher-student interactions and students' learning activities are directly related (2016).

2.13 Shifting Roles of Teachers and Students with New Media Technologies

Biesta, Priestley and Robinson's study report that the needs and expectations of the students and learning/instruction environments have been modified with the emergence and inclusion of innovative media technologies in 21st century. In this popular culture, learners have begun taking active roles in their education process. This makes students more confident who ask questions, criticise and extend the presented information and are beyond being passive receivers. New media technologies give chance to the students in terms of accessing the knowledge fast and easy. Besides, today's students can choose their learning ways, methods and environments. Thus, students have started taking the control of their learning process (2015).

As the discussions grow regarding the roles of educators, Elledge, Elledge, Newgent, Cavell's study revealed that the new media technologies have started to be a part of the teaching and learning processes. Apart from the changes in teaching, teacher-student roles also have been modified. Teachers' roles are changing according to the advancements that the digital age brought. Educators are not the only source that are injecting lots of knowledge into learners' brains. On the contrary, they become facilitators and guide in their students' learning paths (2015).

According to Lai, Yeung and Hu, educators have various roles such as teaching, recommending resources regarding the lectures, building warm and supportive environment in the classroom, encouraging learners to achieve their goals and being role model, mentor and guide to the students (2015). Moreover, as Skrypnyk, Joksimovic, Kovanovic, Gasevic and Dawson state, learners become less dependent

on their teachers because they use affordances of new media to facilitate their learning activities by creating their own unique learning surroundings. As facilitators, teachers need to help learners to explore how to use modern technology for educational purposes such as helping to recognise the right information (2015).

As Person proposes, the most known duty of the teacher is to teach (provide knowledge to the learners) by following the given curriculum. Each teacher's method for teaching is unique. For instance, educators most commonly use such ways in teaching and learning processes as lecturing, presentations, class/group activities, research projects and observations. Teachers also take significant roles on building a proper learning environment in the classroom. When a teacher manage to create friendly, supportive and positive atmosphere in the classroom, learners most likely to feel more eager to be an active participant of the course. In addition to this, educators are taken by the learners as role models. This is quite understandable given the fact that they spend most of their time at school with their teachers. Thus, teachers are highly respected professionals in the society (2015).

According to Lai et al, student's expectations change due the modernization in education world. In the past, students were passive recipients who just listen to their teacher without participating the lesson. However, today, learners are no longer willing to sit and listen to their teachers. On the contrary, learners are eager to be more involved in teaching and learning processes. Further, students look for teachers who guide and encourage them to achieve their goals besides providing knowledge. Also, today, educators should not be seen as the only source that brings information to the students because the Internet provide limitless information to the learners. Hence, students have opportunity to reach out the knowledge any time they want by using new media technologies. In this respect, teachers become facilitators and guide for students.

The only job of teacher is not only to provide information to the learners, but also to guide them in the learning process (2016).

Hunter's research reports that the educators become facilitators who guide learners to accomplish their goals and dreams. Teachers as undoubtedly the most influential figures on the learners, are no longer to be the only authority or source of knowledge in the classroom, but to be a guide (2007). When teachers are facilitating a group of students' learning, they need to allow students as much as possible to take an active part in the decision-making processes, in order to develop sense of responsibility as well as self-esteem (Thomas, 2010).

After the World Health Organization (WHO) officially reported that a new virus called COVID-19 reproduced in the world, the governments began suggesting solutions to the fields of health, tourism and education especially. This crisis followed by a ban on the physical contact among people and a partial curfew in TRNC. The government decided to pursue teaching and learning activities through an alternative pathway. Hence, online platforms started being used for distance education. New education system was designed to minimize the potential losses. Demand for and engagement in online technologies dramatically increased in this phrase due to the high usage. The learners have had the opportunity to improve their technical, research and communication skills. As observed, online materials such as online books, PowerPoint presentations and educational/informative videos has been used to proceed educational activities from where it left of with the minimum damage. Even though this crisis was new and unusual, students adapted themselves into distance education very quickly because new generation tend to like new media technologies. However, the learners needed to support both academically and psychologically because lots of new changes was going on in the world. In this regard, Zeki declares that the pandemic

phase has caused some changes in terms of teacher-student roles. It was addressed on her personal Facebook account that the teachers and students may lose their enthusiasm and willingness due to the change in their teaching-learning environments. Admittedly, teachers' roles are more critical than ever. Even though it is hard to provide motivation to students regarding the courses, educators need to identify students with low concentration and reluctance and involve them into teaching and learning by interfering (2020).

2.14 Related Communication Theories

This chapter contains two related communication theories from various scholars, which are related to the main subject of this research. Theoretical framework of the study was established by Uses and Gratifications Theory and Social Network Theory. It is believed that with the careful implementation of aforementioned theories in this study, a broad viewpoint and better understanding will be acquired regarding the subject matter. Also, constructing the theoretical foundation on these theories will be beneficial concerning the course of the study.

2.14.1 Uses and Gratifications Theory

Uses and Gratifications Theory is one of the most frequently used mass communication theory that was propounded by Blumler and Katz in 1900s. As Katz, Haas and Gurevitch indicate, this approach help to investigate the mass communication from the audiences' perspectives. Hence, it can be said that it is an audience-centered model. Further, Uses and Gratifications Theory can be described as an effort for appraising the real motives behind people's desires to gratify their needs by benefiting from the media. In other words, this theory focuses on how media satisfy audiences' needs and what are the consequences caused by the media on people (1973).

As Mehrad and Tajer report, communication theorists mostly made researches concerning the impacts of media over the society rather than the media usage and gratifications between the years of 1940s and 1950s. Therefore, attempts in the development of Uses and Gratifications Theory brought new perspectives in terms of understanding both the audience and the media. Initially, theorists of this approach aimed at examining some variables such as psychological, from the audiences' side because such variables differ person to person and it is worth to put fair efforts on the media usage (2016).

According to Dux, Uses and Gratifications Theory underlines the interactivity among media and the audience who consumes and interprets the messages comes from the media. Further, this model of mass communication argues that the people choose particular medium to gratify their psychological, social or personal needs. In short, engagement in media is to satisfy certain needs of audience. Although the most mass communication theories consider audience as passive receivers, U> claims that recipients are not passive, on the contrary, they can control or decide what to consume and how to consume it to gratify certain needs (2018).

Above all, Leung and Wei discuss that today people are heavily attached to the new media technologies, especially to the social media platforms. It is a well-known fact that the users prefer such platforms to gratify their entertainment, social, educational or psychological needs. It appears that people's needs and ways of satisfaction have changed due to the increasing usage of these technology oriented innovations. Comparatively, most functions of this theory are suitable for the present study in terms of examining the reasons behind this obvious consumption and engagement in new media technologies (2000).

2.14.2 Social Network Theory (SNT)

As Tunçay and Özer's research shows, networks are available in every stage of humans' life. Personal networks help individuals to navigate daily relationships and interactions with other individuals who are close to them. Social interactions are the core and integral part of the humanity. Considering people as social entities help to produce logical explanations concerning the need for socialization. The instinct of constructing social connections with other people make it possible to form friendships, neighbourhoods or family relations (2017).

According to Kadushin, the Internet have raised the volume of creating social networks due to the emergence of social media platforms. Thus, people started to go beyond their personal boundaries and extent their social networks by socializing with other people. Recently, people tend to build the Internet-oriented social relationships because social media platforms facilitate and encourage all kinds of online social interactions. Nowadays, people have the opportunity to constitute broader networks through social media platforms. Such platforms as Facebook have expanded the scope of communication networks that people engage in (2012). As Jamali and Abolhassan's study report, Social Network Theory is an approach to identify and investigate all sort of formal and informal social connections and interpersonal relations among people. The theory puts efforts on explaining how individuals socialize with other humans who are in their social networks. According to the theory, close social relations may represent the strong bonds among people. The proximity in the interpersonal relationship, the time individuals spend together and the mutual effort and respect they give to each other are indicators of the strong bond (2006). In line with what mentioned above, Butts claims that revealing the correlations between human interactions and their behaviours are the ultimate goal of this theory. By studying social networks

among people, this theory aims at enlightening the communication structures that humans establish and maintain. It is believed by the Social Network theorists that when people engage in social interactions with other individuals, their way of thinking, behaviours or attitudes are influenced by the people they interact with (2008).

In addition to this, Papsdorf states that people started to come together more often than ever due to the advancements in modern technology. The reason might be related with the fact that the social media platforms create enormous demand for socialisation and in turn, provide virtual environments for people to gratify such needs (2015). Social Network Theory will be employed in this study to set the theoretical base. It is believed that this theory will be very useful for revealing the impacts of new media on interpersonal communication and teacher-student interactions for this study.

Chapter 3

METHODOLOGY

This section of the study contains all the research based activities that are undertaken to construct the study. Present study aims at investigating the impacts of new media technologies on interpersonal communication and teacher-student interactions at Eastern Mediterranean University. Quantitative research method was adapted in this study and a questionnaire was used to obtain data. Hence, this part of the study consists of research methodology, research design, research population and sample, data collection procedures, data collection instrument and reliability and validity of the study.

3.1 Research Methodology

The major intention of the study is to examine the impacts of new media technologies on the interpersonal communication and teacher-student interactions at EMU. Therefore, the present study employed the quantitative research methodology. As Grey, Grove and Sutherland argue, quantitative methodology is one of the most commonly used methods in scientific researches, which enables researchers to obtain numerical data through an organized and systematic way (2017). Grey et al. indicates that the statistical and numerical approaches/methods are the integral part of quantitative research, which help to construct unique meanings by analysing the variables and obtained data. Quantitative data can be considered as empirical data, which can be counted, observed and measured in a rational way. In other words, quantitative methodology put efforts on explaining or even measuring quantities.

Outcomes of quantitative research methodology mostly deals with the following three issues: frequency, linkage between two variables and reason- result relationships (2017).

As Sloan and Zhou report, quantitative research stresses reaching as wide information as possible and demonstrating gathered data in numerical system. Moreover, quantitative research is well organized, planned and structured than the other research methods. Also, as it was aforementioned, research methodology allows researchers to obtain wider, narrower, specific and measurable data from the respondents (2015).

According to Goertz and Mahony, researchers mostly aim at revealing a rather comprehensive and descriptive numerical data by conducting quantitative research. Seeking the meaning and distinctions between independent variables is a foremost duty of the researchers. However, generalizing the findings solicited from only a portion of a population to the whole population may not always be sufficient for every case. Nevertheless, quantitative research methods allow researchers to obtain data that are unobservable (2012). This study aims at exploring the impacts of new media technologies on the interpersonal communication and teacher-student interactions and seeks to provide answers to the following research questions:

1. Do new media technologies have changed the interpersonal communication among people?
2. Do new media technologies have improved the interpersonal communication between teachers and students at tertiary education?
3. Do new media technologies have changed teacher-student roles in terms of accessibility, comprehension of information, self-esteem and motivation?

4. Do new media technologies have changed teaching-learning process at tertiary education?
5. With the emergence of new media technologies, what problems do teachers and students face in their interactions at tertiary education?
6. With the emergence of new media technologies, what opportunities do teachers and students face in their interactions at tertiary education?

3.2 Research Design

This part demonstrates the structure of the research design employed in this study. A case study was administrated for present study at Eastern Mediterranean University. Research was conducted in 2019-2020 Spring semester. This study was employed the quantitative method through a survey research to get the primary data from the respondents. Apart from primary data, secondary data was collected by reviewing the literature of both communication and education fields. Books, magazines, journal articles, conference proceedings, internet sources (websites), master and doctoral dissertations were utilized to obtain secondary data for the present research.

As Yin mentions, case study can be considered as an in-depth research which focuses on a specific problem. Therefore, case studies help researchers to limit the wide fields of investigation. Case studies can be carried out with a single person or a group of people within a particular time period. This type of design primarily describes the variables after the data collection phase which also reveals broad understanding concerning research problem (2014).

On top of all, as Vissak argues, case study can guide researchers in terms of deciding how and where the data will be collected for the research. Carrying out case study helps to obtain ideal knowledge regarding the certain case to be studied. In other

words, case study provide opportunities to carry on more concentrated and specific research for a particular aim. For a case study, each act is unique, so it is carried out, assessed and measured once. Researchers who prefer case studies usually conduct a pilot study formerly. Pilot research provide opportunities to detect errors before the main research is carried out (2010).

3.3 Overview of the Pilot Study Phase

Vissak argues that conducting a pilot study is a significant step in a research study. It can be defined as a pre-study to test data gathering tools such as questionnaires. By and large, pilot study help to eliminate problematic parts and weaknesses in the study (2010). In fact, the pilot study was inevitable for this study because the data collection process was simultaneously began with the pandemic process, where the physical and social interactions were restricted. People have become impatient during the COVID-19 pandemic. Since people were experiencing this kind of crisis for the first time and their patience was limited, testing the data collection instrument was vital in that sense. Therefore, it was vital to test some balances of the survey such as comprehensibility, fluency and number/content of the questions before delivering the questionnaire to the participants.

Initially, a pilot study was conducted for this study to reduce the errors and check whether the designed questionnaire serves the purpose of the research or not. In doing so, 8 participants (2 students and 1 research assistant from Faculty of Communication and Media Studies, 2 students and 1 faculty member from Faculty of Business & Economics and 2 students from Faculty of Education) were reached from the researcher's environment to complete and test the survey before the actual data collection phase began. The main aim was to get feedback from the participants regarding questions, to obstruct misunderstandings, wording/language problems and

misinterpretations of questions. At the end of the pilot study, results revealed that the survey had only few technical problems such as repetition and unclear questions, which were fixed after the pilot study. This phase helped the researcher to take a closer look at the survey questions and fixed the problematic ones.

3.4 Research Population and Sampling Procedure

Eastern Mediterranean University's following faculties that are Communication, Education, Engineering and Business and Economics constitute the population of this study. The ultimate purpose of choosing these faculties is to explore the preferences, perceptions, similarities and differences in communication forms of participants from the positive sciences and the social sciences. Undergraduate and postgraduate students as well as faculty members (both full time and part time) from aforementioned faculties at EMU compose the sample of the present research. The total number of participants is 465. All the data collected through an online survey due to the unforeseen pandemic. As the government and health department stated, people are not allowed to have physical contact with other people until they find out the cure for the disease, hence, an online environment is preferred for gathering the data for this study.

As the present study's universe, EMU hosts 17.500 students from more than 100 countries and 1.100 instructors from over 35 countries around the world in 2019-20 Spring semester (<https://www.emu.edu.tr/north-cyprus-universities>). Faculties listed above were chosen due to the high number of students. Current student number of the aforementioned faculties is total 5.808 in 2019-20 spring semester. It was planned to reach at least 7% of this population which is approximately 400 students. Since the data collection process began simultaneously with the unexpected pandemic COVID-19, the researcher could manage to reach 394 students in total. Total number

of instructors including both full time and part time faculty members at these faculties listed above was 283 in 2019-20 Spring semester. As planned, 25% of the population, approximately 71 instructors were reached at the end of research. The number of participants are as follows: 107 students and 20 faculty members from the Faculty of Communication and Media Studies, 75 students and 15 faculty members from the Faculty of Business and Economics, 137 students and 20 instructors from the Faculty of Education and 75 students and 16 instructors from the Faculty of Engineering. Hence the representative sample of the aforementioned faculties was obtained as 465 in total.

Participants were selected through convenience sampling, under the non-as part sampling methodology, which was reported by Etikan, Musa and Alkassim as a process of deciding participants who will represent a population. Convenience sampling is one of the procedures widely used by researchers due to the reasons such as affordability, accessibility of the participants and geographical advantages. Also it is relatively easier and safer than the other sampling methods. Furthermore, convenience sampling mostly consists of participants from the same environment who shares some sort of similarities such as occupation (2016). Convenience sampling was selected for this study primarily due to the COVID-19 pandemic process. It was the best, safest and fastest way possible to reach out faculty members and students through a web-based survey in such hard times like this.

3.5 Data Collection Procedures

The data were solicited from the students and faculty members from the following faculties which are Education, Business and Economics, Engineering and Communication and Media Studies at EMU. Survey questions were prepared to obtain data from both the faculty members and students. A questionnaire was developed after

the literature was scrutinized regarding the fields of communication and education. Online questionnaire was employed to obtain primary data due to the unexpected pandemic surrounding the entire world. Physical intimacy and contact were restrained by the government during this pandemic. That is why online data collection method have been favoured to gather data. Questionnaire was prepared by using google forms. Survey was prepared both in English and in Turkish in order to reach out the Turkish and international students and faculty members at the same time. Besides, the survey was constructed in a way that is in connection with the identified research questions.

All the questions were inspected by the supervisor and the ethics committee board of the EMU. Considering the fact that the data aimed to gather from students and faculty members at EMU, there were some required permissions that must be obtained from the ethics committee and deans of the aforementioned faculties. Foremost, all procedures have been carried out by the researcher. Participants were informed about the purpose and the scope of the research. A statement was provided to the participants in the voluntary consent form and the first page of survey, stating that the participation is completely voluntary and collected data will be kept anonymous.

3.6 Instrument of Primary Data Collection

Data gathering is the major part in the research. Instrument should be well-thought in order to serve best to the essence of the study. In the present research, an online survey utilized as a tool for data collection. The questionnaire for the online survey is designed by the researcher with the guidance of the supervisor. Due to the pandemic COVID-19, a web-based survey has been prepared in order to reach target people in the shortest possible time and to easily collect data from them. As soon as the permission from EMU's Research and Publication Ethics Board was obtained, the

link was sent to the deans of the faculties to be shared with the faculty members. It was more difficult than the normal time to reach out the students during the pandemic. With the help of department chairs and student representatives, the link of the survey was conveyed to large groups of students. Fortunately, representatives of the aforementioned faculties had extensive connections with other students. Besides representatives, most faculty members have shared the link of the survey in their online education platform called Microsoft Teams to attain as much participants as possible.

Data were collected by administering a web-based questionnaire. Conceived questionnaire consists of two main parts. The initial part of the questionnaire comprises 16 multiple choice questions whereas the second part includes a five-point Likert Scale by ratings ranging from 5 to 1 (5: Strongly Agree, 1: Strongly Disagree). On the other hand, the present questionnaire were separated into 5 subsections. First section aims at collecting demographic information from the participants, second section includes questions concerning the use of technology, third section have questions regarding classroom interactions, fourth section contains questions related with the usage of digital platforms within the interpersonal communication and last section prepared to investigate questions concerning the utilization modern technology into interpersonal communication at tertiary education. In total, the questionnaire consists of 42 questions.

3.7 Validity and Reliability Tests of the Data Collection Instrument

This research adapted quantitative methodology and the data were gathered through web-based survey, which is widely employed procedure in researches. Validity of data collection instrument has been proven by the researchers, who studied similar topics. Besides, a pilot study was conducted for this study to get pure feedbacks from both students and faculty members at EMU. In total, 8 participants (2 students

and 1 research assistant from the Faculty of Communication and Media Studies, 2 students and 1 faculty member from the Faculty of Business & Economics and 2 students from the Faculty of Education) were participated in the study.

In addition to this, the questionnaire was activated after certain procedures were fulfilled by the researcher. Foremost, the questionnaire was sent to the sub-ethics committee, where the researcher was affiliated. After the necessary permission was obtained, the questionnaire was delivered to the EMU’s Research and Publication Ethics Board to acquire the last permission before the survey was activated. After the necessary steps were successfully passed by researcher, the deans and department heads were informed via e-mail with permit report received from the ethics board, regarding data collection in their faculties and permission was acquired.

Moreover, after the main research done, a factor analysis was administered through the questions presented into the Scale, which are 27 in total. As it is illustrated below, the Alpha coefficient of the pilot study was found to be 0.868 whereas the main research’s Alpha coefficient was found to be 0.925. According to Tavakol and Dennick, Cronbach’s Alpha indicates trustworthiness and consistency of the scale. For the studies in social sciences, the Alpha coefficient value (reliability) recommended to be between 0.7 and 0.95 (2011). In accordance with the previous sentence, alpha coefficient of both the pilot study and the main research can be considered as highly reliable.

Table 1: Reliability Statistics of Pilot Study

		N	%
Cases	Valid	8	100.0
	Excluded ^a	0	.0
	Total	8	100.0

a. Listwise deletion based on all variables in the procedure.

Table 2: Cronbach's Alpha

Cronbach's Alpha	N of Items
.868	27

Table 3: Reliability Statistics of Main Study

		N	%
Cases	Valid	465	99.8
	Excluded ^a	1	.2
	Total	466	100.0

a. Listwise deletion based on all variables in the procedure.

Table 4: Cronbach's Alpha

Cronbach's Alpha	N of Items
.925	27

Chapter 4

DATA FINDINGS AND ANALYSIS

This chapter presents the gathered data from the respondents through a web-based survey. Analysis of the data constituted by the researcher's interpretations of the findings. Data were collected from students (undergraduate/graduate students) and faculty members (full-time/part-time) from the Faculties of Education, Business and Economics, Engineering and Communication and Media Studies at Eastern Mediterranean University. At the end of research, 394 students and 71 faculty members were reached. Gathered data were analysed through IBM SPSS Statistics 22 (Statistical Package for Social Sciences). The analyses comprise of all the questions addressed in the survey. As it is exhibited below, the findings are demonstrated with numbers and percentages (%) in tables.

4.1 Demographic Characteristics of the Respondents

This part consists of descriptive statistics regarding the demographic information obtained from the respondents through the online questionnaire. As the total number of participants was found to be 394 in students and 71 in faculty members the rates were shown with the approximate equality sign “ \cong ” because the obtained values cannot be combined to get exact percentages by the computer.

As indicated in table below, among the 394 students, 196 (\cong 49.7%) of them were male, 195 (\cong 49.4%) of them were female, 2 (\cong 0.5%) of them were non-binary and 1 (\cong 0.2%) of them was trans gender. On the other hand, out of the 71 faculty members, 39 (\cong 54.9%) of them were male and 32 (\cong 45%) of them were female.

To sum up, the findings have affirmed that amongst the 465 respondents, 235 ($\cong 50.5\%$) of them identified themselves as males, which makes up the majority.

Table 5: Participants' Gender

Gender	Position at EMU		Total
	Faculty Member (Instructor)	Student	
Male	39	196	235
Female	32	195	227
Non-binary	0	2	2
Trans Woman	0	1	1
Total	71	394	465

Considering the solicited data from the 394 students, predominance of students' belongs to the age group of 18 and 23 with total 259 ($\cong 65.73\%$) students. Ages between 24-29 was found to be the second most chosen category among the students with 114 participants ($\cong 28.9\%$) ratio while 30-35 age category selected by 15 ($\cong 3.8\%$) students. Respondents between the ages 36-41 revealed as the minority among the other age categories of students with 5 ($\cong 1.2\%$) students. The age 41 and above was selected only by 1 ($\cong 0.2\%$) student.

Looking at the age group of faculty members, it could be seen that the majority of faculty members' age revealed to be 41 and above with 43 ($\cong 60.5\%$) faculty members. 36-41 age range became the second most selected age range with 12 ($\cong 16.9\%$) faculty members and 30-35 age category became the third most chosen age category with 11 ($\cong 15.4\%$) instructors. 24-29 age group chosen by 5 ($\cong 7\%$) instructors while 18-23 age range was not selected by instructors.

In summary, the majority of students ($\cong 65.7\%$) belong to the age group of 18-23 whereas the majority of faculty members ($\cong 60.5\%$) were from 41 and above age category.

Table 6: Participants' Age Range

	Position at EMU			Total
	Faculty Member (Instructor)	Student		
Age				
	18-23	0	259	259
	24-29	5	114	119
	30-35	11	15	26
	36-41	12	5	17
	41+	43	1	44
Total	71	394		465

As table 7 demonstrates below, out of the 394 students, 151 ($\cong 38.3\%$) of them were Turkish whereas 141 ($\cong 35.7\%$) of them were Turkish Cypriots. The rates proceeded with 31 ($\cong 7.8\%$) students from Nigeria and 18 ($\cong 4.5\%$) students from Iran. Considering the multiculturalism of EMU, 11 ($\cong 2.7\%$) Palestinian, 8 ($\cong 2\%$) Jordanian, 5 ($\cong 1.2\%$) Lebanese, 5 ($\cong 1.2\%$) Egyptian, 5 ($\cong 1.2\%$) Pakistani, 4 ($\cong 1\%$) Ukrainian, 4 ($\cong 1\%$) Moroccan, 3 ($\cong 0.7\%$) Zambian, 3 ($\cong 0.7\%$) Sudanese, 3 ($\cong 0.7\%$) Syrian and 2 ($\cong 0.5\%$) Somalian students were joined in the questionnaire.

The findings have affirmed that the Turkish Cypriot and Turkish people composed the majority among students with 292 ($\cong 74.1\%$) participants in total. The rest of the ratio was formed by international students with 102 ($\cong 25.8\%$).

On the faculty members' side, out of the 71, 47 ($\cong 66.1\%$) faculty members were Turkish Cypriots which composes the majority, 18 ($\cong 25.3\%$) of them were Turkish, 4 ($\cong 5.6\%$) of them were Iranian, 1 ($\cong 1.4\%$) of them was Nigerian and 1 ($\cong 1.4\%$) of them was Kenyan.

The findings have shown that the Turkish Cypriot and Turkish participants made up the majority among the faculty members with 65 ($\cong 91.5\%$). On the other hand, 6 ($\cong 8.4\%$) instructors were international, which formed the minority among the faculty members.

It could be said that all these percentages and numbers reflected the characteristics of the sample at the chosen faculties.

Table 7: Nationality Distribution of Participants

Nationality	Position at EMU		Total
	Faculty Member (Instructor)	Student	
Turkish Cypriot	47	141	188
Turkish	18	151	169
Iranian	4	18	22
Nigerian	1	31	32
Palestinian	0	11	11
Jordanian	0	8	8
Lebanon	0	5	5
Egyptian	0	5	5
Pakistani	0	5	5
Ukrainian	0	4	4
Moroccan	0	4	4
Zambian	0	3	3
Sudanese	0	3	3
Syria	0	3	3
Somali	0	2	2
Kenyan	1	0	1
Total	71	394	465

As shown in table 8 below, 295 ($\cong 63.4\%$) of the participants were undergraduate students, 99 ($\cong 21.2\%$) of them were graduate students and 71 ($\cong 15.2\%$) of them were faculty members. Amongst the total number of respondents (465), 127 ($\cong 27.3\%$) of them were from the FCMS and out of the 127 ($\cong 27.3\%$) respondents, 67 ($\cong 52.7\%$) of them were undergraduate students, 40 ($\cong 31.4\%$) of them were graduate students and 20 ($\cong 15.7\%$) of them were faculty members. From the Faculty of Business and Economics, a total of 90 ($\cong 19.3\%$) respondents participated in this survey and out of the 90 participants, 44 ($\cong 48.8\%$) of them were undergraduate students, 31 (34.44%) of them were graduate students and 15 ($\cong 16.6\%$) of them were instructors. Faculty of Education provided the most participants with 137 ($\cong 29.4\%$)

respondents. Among the 137 ($\cong 29.4\%$) respondents, 125 ($\cong 91.2\%$) of them were undergraduate students, 12 ($\cong 8.7\%$) of them were Masters & PhD students and 20 ($\cong 14.5\%$) of them were faculty members. In the Faculty of Engineering, a total 91 ($\cong 19.5\%$) responses were obtained, out of the 91 ($\cong 19.5\%$) participants, 59 ($\cong 64.8\%$) of them were undergraduate students, 16 ($\cong 17.5\%$) of them were graduate students and 16 ($\cong 17.5\%$) of them were faculty members.

The results indicated that the majority of the students were undergraduate students with 295 ($\cong 63.4\%$) participants.

Table 8: Faculty-based Distribution of Participants

	Participants			Total
	Undergraduate Students	Graduate Students	Faculty Members	
Faculties				
Faculty of Communication and Media Studies	67	40	20	127
Faculty of Business & Economics	44	31	15	90
Faculty of Education	125	12	20	157
Faculty of Engineering	59	16	16	91
Total	295	99	71	465

As statistics in table 9 below illustrates, among the 465 participants, 295 ($\cong 63.4\%$) of them were undergraduate students and out of the 295 ($\cong 63.4\%$), 65 ($\cong 22\%$) of them were freshman year students and 12 ($\cong 18.4\%$) of them were from FCMS, 12 ($\cong 18.4\%$) of them were participating from Business and Economics, 13 ($\cong 20\%$) of them were studying at Education Faculty and 28 ($\cong 43\%$) of them were from Faculty of Engineering. Followed by 68 (23.05%) sophomore year students, 22 ($\cong 32.3\%$) of them were participating from FCMS, 10 ($\cong 14.7\%$) of them were from Faculty of Business and Economics, 27 ($\cong 39.7\%$) of them were from Faculty of

Education and 9 ($\cong 13.2\%$) of them were from Faculty of Engineering. Junior year students were found to be 77 ($\cong 26.1\%$) and 25 ($\cong 32.4\%$) of them were coming from FCMS 12 ($\cong 15.5\%$) of them were from Faculty of Business and Economics, 30 ($\cong 38.9\%$) of them were from Faculty of Education and 10 ($\cong 12.9\%$) of them were from Faculty of Engineering. The ratio proceeded with 85 ($\cong 28.8\%$) senior year students. Amongst the 85 ($\cong 28.8\%$) senior year students, 8 ($\cong 9.4\%$) of them were participating from FCMS, 10 ($\cong 11.7\%$) of them were from Faculty of Business and Economics, 55 ($\cong 64.7\%$) of them were from Faculty of Education and 12 ($\cong 14.1\%$) of them were from Faculty of Engineering.

The findings revealed that the majority were senior year undergraduate students with 85 ($\cong 28.8\%$) respondents.

Table 9: Undergraduate Students' Study Years

	Faculties				Total
	Faculty of Communication and Media Studies	Faculty of Business & Economics	Faculty of Education	Faculty of Engineering	
Year of the study					
Freshman	12	12	13	28	65
Sophomore	22	10	27	9	68
Junior	25	12	30	10	77
Senior	8	10	55	12	85
Total	67	44	125	59	295

It can be seen in table 10 below that the graduate students were relatively few, in comparison with undergraduates. In this respect, amongst the 394 ($\cong 84.7\%$) students, 99 ($\cong 25.1\%$) graduate students were participated in this study. Out of the 99 ($\cong 25.1\%$) graduate students, Masters students were found to be 62 ($\cong 62.6\%$) and 25 ($\cong 25.2\%$) of them were from FCMS, 12 ($\cong 12.1\%$) of them were from Faculty of

Business and Economics, 10 ($\cong 10.1\%$) of them were from Faculty of Education and 15 ($\cong 15.1\%$) of them were from Faculty of Engineering. Followed by 37 ($\cong 37.3\%$) doctorate students, 15 ($\cong 15.1\%$) were from FCMS, 19 ($\cong 19.1\%$) of them were from Faculty of Business and Economics, 2 ($\cong 2.0\%$) of them were from Faculty of Education and 1 ($\cong 1.0\%$) of them were from Faculty of Engineering.

The findings have affirmed that the majority of graduate students were master's students ($\cong 62.6\%$).

Table 10: Graduate Students' Education Level

		Faculties				Total
		Faculty of Communication and Media Studies	Faculty of Business & Economics	Faculty of Education	Faculty of Engineering	
Level of the study	Masters	25	12	10	15	62
	Ph.D.	15	19	2	1	37
Total		40	31	12	16	99

4.2 Descriptive Statistics of Items on Questions Concerning the Use of Technology

This section of the study made up to represent the descriptive analysis on respondents' inputs on technology usage.

According to the answers given to the question “when did you have your first personal computer?”, out of the 394 students, 174 ($\cong 44.1\%$) of them stated that they got their first computer among the years 2008-2015 whereas 137 ($\cong 35.7\%$) students declared that they obtained their first personal computer among the years 2000-2007. 67 ($\cong 17\%$) students expressed that they got their first personal computer after the year

2015, 14 ($\cong 3.5\%$) of them got their first personal computer in late 1990s and 2 ($\cong 0.5\%$) of them had their first personal computer in early 1990s.

The findings have revealed that the majority of students obtained their first personal computer among years 2008-2015 with 174 ($\cong 44.1\%$).

Looking at the answers of faculty members, the majority of instructors declared that they had their first personal computer in the late 1990s with 29 ($\cong 40.8\%$) faculty members. The ratio continued with 23 ($\cong 32.3\%$) faculty member who reported that they had it in the early 1990s. While 16 ($\cong 22.5\%$) faculty members stated that they had their first computer between the years 2000-2007, 3 ($\cong 4.2\%$) instructors had it between the years 2008-2015. Based on the findings, none of the faculty members had their first computer after the year 2015.

Based on the results, the majority of the instructors declared that they had their first personal computer in the late 1990s with 29 ($\cong 40.8\%$) faculty members.

Table 11: Descriptive Statistics of the Participants towards the Question “When Did You Have Your First Personal Computer?”

	Position at EMU		
	Faculty Member (Instructor)	Student	Total
When did you have your first personal computer?			
Early 1990's	23	2	25
late 1990's	29	14	43
between the years 2000-2007	16	137	153
between the years 2008-2015	3	174	177
after the year 2015	0	67	67
Total	71	394	465

According to table 12 below, 188 ($\cong 47.7\%$) students started using the Internet for the first time between the years 2008-2015, followed by 169 ($\cong 42.8\%$) students who started using the Internet between the years 2000-2007. While 22 ($\cong 5.5\%$) students expressed that they first started using the Internet after the year 2015, 13 ($\cong 3.2\%$) students began using the Internet in the late 1990s. As minority, 2 ($\cong 0.5\%$) students recorded that they started to use the Internet in the early 1990s.

Looking at the statistics gathered from faculty members, it can be seen that the 34 ($\cong 47.8\%$) instructors started to use the Internet in the late 1990s. While 23 ($\cong 32.3\%$) faculty members declared that they began using the Internet between the years 2000-2007, 13 ($\cong 18.3\%$) instructors started in the early 1990s. 1 ($\cong 1.4\%$) faculty member only started using the Internet between the years 2008-2015. Based on the statistics below, none of the faculty members began using the Internet after the year 2015.

The findings showed that the majority of students stated that they began to use the Internet for the first time between the years 2008-2015 with 188 ($\cong 47.7\%$) students whereas 34 ($\cong 47.8\%$) faculty members declared that they started to use the Internet in the late 1990s.

Table 12: Descriptive Statistics of the Participants towards the Question “When Did You First Start Using the Internet?”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
When did you first start using the Internet?			
Early 1990’s	13	2	15
late 1990’s	34	13	47
between the years 2000-2007	23	169	192
between the years 2008-2015	1	188	189
after the year 2015	0	22	22
Total	71	394	465

With respect to the answers to the question asked in table 13, out of the 394 participants, 189 ($\cong 47.9\%$) students preferred to communicate one-to-one in person whereas 177 ($\cong 44.9\%$) students opted to communicate via social media platforms such as WhatsApp or Facebook. The ratios proceeded with 24 ($\cong 6.1\%$) students who preferred to communicate on phone and followed by 4 ($\cong 1\%$) students who opted to communicate through e-mail.

Considering the 71 data obtained from faculty members, 42 ($\cong 59.1\%$) instructors preferred to establish face-to-face communication while 16 ($\cong 22.5\%$) instructors opted to communicate through social media platforms. The ratio continues with 8 ($\cong 11.2\%$) faculty members who preferred to communicate via e-mail whereas 5 ($\cong 7\%$) instructors opted to communicate on phone.

To summarize, 231 ($\cong 49.7\%$) of the respondents including both the students and faculty members preferred to communicate one-to-one in person, which made up the majority.

Table 13: Descriptive Statistics of the Participants towards the Question “When You Communicate Which One of The Following Do You Prefer the Most?”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
When you communicate which one of the following do you prefer the most?			
Communicating through social media platforms (e.g., WhatsApp, Facebook etc.)	16	177	193
Communicating one-to-one in-person (face-to-face communication)	42	189	231
Communicating on phone	5	24	29
Communicating through e-mail	8	4	12
Total	71	394	465

Based on the data in table 14, out of the 394 students, 320 ($\cong 81.2\%$) of them asserted that the digital platforms improved interpersonal communication, whereas 74 ($\cong 18.7\%$) respondents stated just the opposite of it.

Considering the 71 faculty members, 58 ($\cong 81.6\%$) of them stated that the new media technologies improved interpersonal communication whereas 13 ($\cong 18.3\%$) of them claimed that the new media technologies did not improve interpersonal communication.

In summary, out of the 465 participants, 378 ($\cong 81.2\%$) of them reported that the new media technologies improved interpersonal communication.

Table 14: Descriptive Statistics of the Participants towards the Question “Do You Think That New Media Technologies Improve Interpersonal Communication?”

Count		Do you think that new media technologies improve interpersonal communication		
		Yes	No	Total
Position at EMU	Faculty Member (Instructor)	58	13	71
	Student	320	74	394
Total		378	87	465

Based on the responses in table 15 to the question whether social media platforms improved interpersonal communication, out of the 394 students, 309 ($\cong 78.4\%$) of them claimed that social media platforms improved interpersonal communication, whereas 85 ($\cong 21.5\%$) of them did not agree with the idea that social media platforms improved interpersonal communication.

The ratios proceeded with 57 ($\cong 80.2\%$) faculty members who reported that social media platforms improved interpersonal communication while 14 ($\cong 19.7\%$) of them did not claim that social media platforms improved interpersonal communication.

To sum up, the majority, among the 465 participants including both the faculty members and students, 366 ($\cong 78.7\%$) of them claimed that social media platforms improved interpersonal communication.

Table 15: Descriptive Statistics of the Participants towards the Question “Do You Think That Social Media Platforms Improve Interpersonal Communication?”

		Do you think that social media platforms improve interpersonal communication?		
		Yes	No	Total
Position at EMU	Faculty Member (Instructor)	57	14	71
	Student	309	85	394
Total		366	99	465

Based on the statistics in table 16 below, amongst the 394 students, 222 ($\cong 56.3\%$) of them mostly utilized WhatsApp for their interpersonal communication. Statistics proceeded with 115 ($\cong 29.1\%$) students who preferred Instagram whereas 30 ($\cong 7.6\%$) students used Facebook for their interpersonal communication. While 19 ($\cong 4.8\%$) respondents among students preferred to use Messenger, 4 ($\cong 1\%$) students recorded that they preferred Snapchat to establish interpersonal communication. As the least chosen among the other items, 3 ($\cong 0.7\%$) students reported that they used Twitter while only 1 ($\cong 0.2\%$) student preferred Viber for their interpersonal communication.

Looking at the data solicited from faculty members, it can be seen in table 14 that the 32 ($\cong 45\%$) instructors preferred WhatsApp whereas 25 ($\cong 35.2\%$) of them utilized Facebook for their interpersonal communication. This continued with 9 ($\cong 12.6\%$) faculty members who preferred to use Messenger for their interpersonal communication. Followed by 4 ($\cong 5.6\%$) faculty members who utilized Instagram, whereas 1 ($\cong 1.4\%$) instructor preferred Twitter for their interpersonal communication. As indicated in table below, none of the faculty members preferred Viber or Snapchat for their interpersonal communication.

In the light of these findings, WhatsApp revealed to be the most used app among the 465 participants included both students and faculty members with 254 ($\cong 54.6\%$) respondents.

Table 16: Descriptive Statistics of the Participants towards the Question “Which of The Following Social Media Platforms Do You Use the Most for Interpersonal Communication?”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
Which of the following social media platforms do you use the most for interpersonal communication?			
Facebook	25	30	55
Instagram	4	115	119
WhatsApp	32	222	254
Viber	0	1	1
Messenger	9	19	28
Snapchat	0	4	4
Twitter	1	3	4
Total	71	394	465

Based on the question asked to both the students and faculty members regarding which technological tools/platforms should be used in the classroom for teaching and learning, out of the 394 students, 287 ($\cong 72.8\%$) of them stated that the computer-projector-sound system-WIFI system should be used in the classroom for teaching and learning processes whereas 86 ($\cong 21.8\%$) students preferred social media platforms such as WhatsApp, Facebook, Instagram etc. According to the 21 ($\cong 5.3\%$) students, none of the technological tools/platforms should be used in classroom for teaching and learning processes.

Amongst the 71 faculty members, 50 ($\cong 70.4\%$) of them reported that the computer-projector-sound system-WIFI system should be used the most in the classroom whereas 8 ($\cong 11.2\%$) instructors preferred social media platforms such as

WhatsApp, Facebook, Instagram etc. 4 ($\cong 5.6\%$) faculty members wanted Teams, Moodle or other e-learning platforms as part of learning and teaching processes whereas 9 ($\cong 12.6\%$) instructors did not want any of the technological tools as part of the learning and teaching processes in the classroom.

It is worth stating at this point that the 337 ($\cong 72.4\%$) participants among the 465, including both students and faculty members, specified that the computer-projector-sound system-WIFI system should be used the most in the classroom. Hence, they preferred face-to-face interaction to online education.

Table 17: Descriptive Statistics of the Participants towards the Question “Which of the Following Technological Tools/Platforms Do You Think Should be used the Most in the Classroom for Teaching and Learning Processes?”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
Which of the following technological tools/platforms do you think should be used the most in the classroom in teaching and learning processes?			
Computer-Projector-Sound System-WIFI system	50	287	337
Social media platforms (WhatsApp, Facebook, Instagram etc.)	8	86	94
None of the above	9	21	30
Teams, Moodle or other e-learning platforms	4	0	4
Total	71	394	465

4.3 Descriptive Statistics of Items on Questions Regarding Classroom Interactions

This part of the study composed to illustrate descriptive analysis on respondents' answers on classroom interactions.

Based on the answers retrieved, out of the 394 students, 225 ($\cong 57.1\%$) of them specified that it was more appropriate for students to consult their instructors in the class period or/and at office hours when they had questions regarding their courses whereas 112 ($\cong 28.4\%$) students reported that asking questions to their teachers through social media platforms was more appropriate for them. The ones who selected social media platforms were teenagers who were between the ages of 18-23. Followed by 52 ($\cong 13.1\%$) students who specified that communicating via e-mail was more appropriate while 5 ($\cong 1.2\%$) students declared that communicating through phone when students had questions concerning their courses was more appropriate.

In addition to this, out of the 71 faculty members, 46 ($\cong 64.7\%$) of them reported that it was more appropriate for students to consult their instructors in the class period or/and at office hours when they had questions regarding their courses whereas 16 ($\cong 22.5\%$) instructors indicated that asking questions through e-mail was more appropriate for students. While 9 ($\cong 12.6\%$) faculty members specified that communicating via social media platforms was more appropriate, none of them found it appropriate to communicate over phone in terms of asking questions to the instructors about courses.

On the whole, amongst the 465 respondents, 271 ($\cong 58.2\%$) of them reported that it was more appropriate for students to consult their instructors in the class period or/and at office hours when they had questions regarding their courses.

Table 18: Descriptive Statistics of the Participants towards the Question “When Students Have Questions Regarding Their Courses, Which One of the Following Do You Think is More Appropriate?”

	Position at EMU		
	Faculty Member (Instructor)	Student	Total
When students have questions regarding their courses, which one of the following do you think is more appropriate?			
Consulting the instructors during the class period or/and at office hours	46	225	271
Communicating via Social media platforms (WhatsApp, Viber, Facebook, Messenger, etc.)	9	112	121
Communicating via e-mail	16	52	68
Communicating via phone	0	5	5
Total	71	394	465

In response to the question asked to the participants concerning their preferences in the new media technologies during the classroom presentations, out of the 394 students, 217 ($\cong 55\%$) of them preferred MS PowerPoint whereas 85 ($\cong 21.5\%$) of them preferred social media platforms during classroom presentations. This was followed by 79 ($\cong 20\%$) students who opted to Electronic Whiteboards during classroom presentations while 13 ($\cong 3.2\%$) did not prefer any of the new media technologies during classroom presentations.

Additionally, out of the 71 faculty members, 35 ($\cong 49.2\%$) of them preferred MS PowerPoint while 16 ($\cong 22.5\%$) instructors opted to social media platforms during classroom presentations. 13 ($\cong 18.3\%$) faculty members preferred Electronic Whiteboards whereas 4 ($\cong 5.6\%$) of them preferred IOS Keynote during classroom presentations for students and/or classroom instructions for teachers. According to the

statistics, out of the 71 instructors, only 3 ($\cong 4.2\%$) of them did not prefer any of the new media technologies during classroom presentations.

In brief, among the 465 participants, 252 ($\cong 54.1\%$) of them declared that they preferred Microsoft PowerPoint during classroom presentations for students and/or classroom instructions for teachers.

Table 19: Descriptive Statistics of the Participants towards the Question “During Classroom Presentations for Students and/or Classroom Instructions for Teachers, Which New Technologies Do You Prefer the Most?”

		Position at EMU		
		Faculty Member (Instructor)	Student	Total
During classroom presentations for students and/or classroom instructions for teachers, which new technologies do you prefer the most?”	Social media platforms (e.g., YouTube, WhatsApp etc)	16	85	101
	MS PowerPoint	35	217	252
	Electronic Whiteboards	13	79	92
	IOS Keynote	4	0	4
	None of them	3	13	16
Total		71	394	465

Based on the below mentioned question, out of the 394 students, 220 ($\cong 55.8\%$) of them claimed that it was more appropriate for them to consult their instructors in the class period or/and at office hours when they had problems regarding personal, social or academic affairs whereas 117 ($\cong 29.6\%$) asserted that it was more appropriate for students to communicate via social media platforms when they had personal, social or academic problems. According to 49 ($\cong 12.4\%$) students, it was more appropriate to communicate through e-mail while 8 ($\cong 2\%$) students claimed that it was more appropriate for them to communicate over the phone when they had problems concerning personal, social or academic concerns.

Additionally, out of the 71 faculty members, 36 ($\cong 50.7\%$) of them reported that it was more appropriate for students to consult their instructors in the class period or/and at office hours when they had problems regarding personal, social or academic affairs while 22 ($\cong 30.9\%$) claimed that it was more appropriate for them to communicate through social media platforms in case of a problem regarding their personal, social or academic affairs. 13 ($\cong 18.3\%$) instructors stated that it was more appropriate for students to communicate via e-mail whereas none of the faculty members claimed that it was appropriate for students to communicate over the phone when they had problems regarding personal, social or academic affairs.

All things considered, among the 465 respondents including both the students and faculty members, 256 ($\cong 55\%$) of them notified that it was more appropriate for students to consult their instructors in the class period or/and at office hours when they had problems regarding personal, social or academic concerns.

Table 20: Descriptive Statistics of The Participants towards the Question “When Students Have Problems Concerning Personal, Social or Academic Affairs, Which One of the Following Do You Think is More Appropriate?”

	Position at EMU		Total	
	Faculty Member (Instructor)	Student		
When students have problems concerning personal, social or academic affairs, which one of the following do you think is more appropriate?”	Consulting the instructors during the class period or/and at office hours	36	220	256
	Communicating via Social media platforms (WhatsApp, Viber, Facebook, Messenger, etc.)	22	117	139
	Communicating via e-mail	13	49	62
	Communicating via phone	0	8	8
Total	71	394	465	

4.4 Descriptive Statistics of Items on Likert Scale: Analysis of the Questions on the Usage of Digital Technologies in Interpersonal Communication

As illustrated in table 21 below, out of the 394 students, 97 ($\cong 24.6\%$) of them disagreed that the use of new media technologies increased face-to-face communication between people whereas 95 ($\cong 24.1\%$) students agreed upon the usage of digital technologies increased face-to-face communication among people. 89 ($\cong 22.5\%$) students were undecided while 69 ($\cong 17.5\%$) of them strongly agreed with the given statement. Based on the statistics, 44 ($\cong 11.1\%$) students strongly disagreed that the use of new media technologies increased face-to-face communication between people.

The findings have affirmed that the 164 ($\cong 41.6\%$) students agreed that the digital platforms increased face-to-face communication among people.

On the faculty members' side, out of the 71 respondents, 25 ($\cong 35.2\%$) of them which was the majority, disagreed that the use of new media technologies increased face-to-face communication between people while 17 ($\cong 23.9\%$) instructors agreed the given statement. While 12 ($\cong 16.9\%$) faculty members strongly agreed towards the statement that the usage of digital technologies increased face-to-face communication among people, 9 ($\cong 12.6\%$) of them reported that they were undecided regarding the given statement. As minority, 8 ($\cong 11.2\%$) faculty members stated that they were strongly disagreed that the usage of digital innovations increased face-to-face communication among people.

The findings have affirmed that the majority among faculty members 33 of them ($\cong 46.4\%$) disagreed that the usage of digital media platforms increased face-to-face communication among people.

To sum up, out of the 465 participants including both students and faculty members, 193 ($\cong 41.5\%$) of the respondents agreed that usage of digital technologies increased face-to-face communication between people.

Table 21: Descriptive Statistics of the Participants towards the item "The Use of New Media Technologies Increase Face-to-Face Communication between People."

	Position at EMU			
	Faculty Member (Instructor)	Student	Total	
The use of new media technologies increase face-to-face communication between people	Strongly Disagree	8	44	52
	Disagree	25	97	122
	Undecided	9	89	98
	Agree	17	95	112
	Strongly Agree	12	69	81
Total	71	394	465	

As indicated in table below, out of the 394 students, 117 ($\cong 29.6\%$) of them agreed with the statement that the usage of modern technologies facilitated exchange of feelings among individuals whereas 89 ($\cong 22.5\%$) students strongly agreed upon the given item. 77 ($\cong 19.5\%$) students asserted that they disagreed that the technological innovations facilitated exchange of feelings among individuals whereas 68 ($\cong 17.2\%$) of them were undecided regarding the given item. 43 ($\cong 10.9\%$) students strongly agreed upon the statement that the technological innovations facilitated exchange of feelings between people.

On the faculty members' side, amongst the 71 instructors, while 29 ($\cong 40.8\%$) of them agreed, 20 ($\cong 28.1\%$) faculty members disagreed that the use of new media technologies facilitated exchange of feelings between people. Followed by 15 ($\cong 21.1\%$) faculty members who strongly agreed that the use of new media technologies facilitated exchange of feelings among individuals whereas 6 ($\cong 8.4\%$) of them were undecided regarding the given statement. Only 1 ($\cong 1.4\%$) instructor strongly disagreed that the digital platforms facilitated exchange of feelings between people.

The findings have affirmed that out of the 465 participants including both students and instructors, 250 ($\cong 53.7\%$) of them declared that the digital technologies facilitated exchange of feelings between people.

Table 22: Descriptive Statistics of the Participants towards the item “The Use of New Media Technologies Facilitate Exchange of Feelings between Individuals.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies facilitate exchange of feelings between individuals	Strongly Disagree	1	44
	Disagree	20	97
	Undecided	6	74
	Agree	29	146
	Strongly Agree	15	104
Total	71	394	465

Table 23 below demonstrated that the majority, 124 ($\cong 31.4\%$) students agreed upon the item suggesting that the digital platforms developed humans’ communication skills whereas 97 ($\cong 24.6\%$) of them strongly agreed with the given item. While 82 ($\cong 20.8\%$) students remained undecided regarding the use of digital media in developing humans’ communication skills, 62 ($\cong 15.7\%$) of them disagreed with the provided item. On the other hand, 29 ($\cong 7.3\%$) students reported that they strongly disagreed with the statement that the digital platforms developed humans’ communication skills.

Additionally, out of the 71 faculty members, the majority, 29 ($\cong 40.8\%$) instructors agreed on the statement that the modern technology developed humans’ communication skills whereas 14 ($\cong 19.7\%$) instructors strongly agreed with the given item. 10 ($\cong 14\%$) faculty members remained undecided concerning the given statement while the other 10 ($\cong 14\%$) faculty members disagreed that digital media tools developed humans’ communication skills. Followed by 8 ($\cong 11.2\%$) faculty members,

the minority who reported that they strongly disagreed upon the item that modern technologies developed humans' communication skills.

To conclude, it was worth stating at this point that regardless of position, age, gender or nationality, the majority of respondents ($\cong 56.7\%$) declared that the modern media technologies developed humans' communication skills.

Table 23: Descriptive Statistics of the Participants towards the item "The Use of New Media Technologies Develop Human's Communication Skills."

	Position at EMU		
	Faculty Member (Instructor)	Student	Total
The use of new media technologies develop human's communication skills			
Strongly Disagree	8	29	37
Disagree	10	62	72
Undecided	10	82	92
Agree	29	124	153
Strongly Agree	14	97	111
Total	71	394	465

As illustrated in table 24 below, out of the 394 students, 166 ($\cong 42.1\%$) of them agreed upon the item that digital platforms helped people to start communication much easier whereas 145 ($\cong 36.8\%$) students strongly agreed with the statement. While 58 ($\cong 14.7\%$) students remained undecided regarding the item that stating the usage of digital technologies helped individuals to start communication, 20 ($\cong 5\%$) of them disagreed with the given statement. Based on the statistics, the minority, 5 ($\cong 1.2\%$) students strongly disagreed that the use of new media technologies made it easier for people to start communication.

In addition to this, out of the 71 faculty members, the majority, 32 ($\cong 45\%$) of them agreed that the use of new media technologies made it easier for people to start communication whereas 28 ($\cong 39.4\%$) of them strongly agreed with the provided statement. Followed by 7 ($\cong 9.8\%$) instructors, who remained undecided upon the item

stating that the digital innovations facilitated communication while 4 ($\cong 5.6\%$) of them disagreed with the provided statement. Based on the data, none of the faculty members reported that they strongly disagreed that the digital technologies made it easier for people to start communication.

The findings have revealed that the 371 ($\cong 79.8\%$) respondents out of the 465 (both students and instructors were included) stated that the use of technological platforms made it easier to start communication.

Table 24: Descriptive Statistics of the Participants on “The Use of New Media Technologies make it Easier for People to Start Communication.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies make it easier for people to start communication	Strongly Disagree	0	5
	Disagree	4	20
	Undecided	7	58
	Agree	32	166
	Strongly Agree	28	145
Total	71	394	465

According to the data received from 394 ($\cong 84.7\%$) students concerning the question in table 23, 192 ($\cong 48.7\%$) of them strongly agreed, 147 ($\cong 37.3\%$) of them agreed, 34 ($\cong 8.6\%$) of them were undecided, 13 ($\cong 3.2\%$) of them disagreed and 8 ($\cong 2\%$) of them strongly agreed on the item that digital media technologies eliminated the time and distance issue in interpersonal communication.

Additionally, the majority amongst the 71 faculty members, 37 ($\cong 52.1\%$) of them strongly agreed, 29 ($\cong 40.8\%$) of them agreed, 3 ($\cong 4.2\%$) of them were undecided and 2 ($\cong 4.2\%$) of them disagreed that the use of new media technologies eliminated the time and distance issue in interpersonal communication. Based on the

answers given to the item, none of the faculty members reported that they strongly disagreed with the item proposing the digital platforms eliminated the time and distance issue in interpersonal communication.

In the final analysis, it could be said that the majority of the respondents, 405 ($\cong 87\%$) of them claimed that people could establish interpersonal communication through new media technologies regardless of time and distance issue. In addition, the mean and standard deviation statistics indicated that the majority of the participants strongly agreed with the given statement (see table 48, p.116).

Table 25: Descriptive Statistics of the Participants towards “The Usage of New Media Platforms Eliminate the Time and Distance Issue in Interpersonal Communication.”

	Position at EMU			Total
	Faculty Member (Instructor)	Student		
The use of new media technologies eliminate the time and distance issue in interpersonal communication	Strongly Disagree	0	8	8
	Disagree	2	13	15
	Undecided	3	34	37
	Agree	29	147	176
	Strongly Agree	37	192	229
Total	71	394	465	

Based on the statistics below, amongst the 394 students, 123 ($\cong 31.2\%$) of them strongly agreed, 123 ($\cong 31.2\%$) of them agreed, 68 ($\cong 17.2\%$) of them were undecided, 42 ($\cong 10.6\%$) of them strongly disagreed and 38 ($\cong 9.6\%$) of them disagreed on the statement that the use of digital tools caused technology addiction and declined face-to-face communication among people.

In addition to this, out of the 71 faculty members, 26 ($\cong 36.6\%$) of them strongly agreed, 21 ($\cong 29.5\%$) of them agreed, 11 ($\cong 15.4\%$) of them were undecided, 8 ($\cong 11.2\%$) of them disagreed and 5 ($\cong 7\%$) of them strongly disagreed that the usage

of digital media platforms caused technology addiction and declined face-to-face communication among people.

In brief, regardless of position or other variables, the majority of the participants ($\cong 63\%$) claimed that the use of online platforms caused technology addiction and declined one-to-one in person between people.

Table 26: Descriptive Statistics of the Participants on “Digital Media Technologies Cause Technology Addiction which Also Decline Face-To-Face Communication among People.”

	Position at EMU		Total	
	Faculty Member (Instructor)	Student		
The use of new media technologies cause technology addiction which also decline face-to-face communication among people	Strongly Disagree	5	42	47
	Disagree	8	38	46
	Undecided	11	68	79
	Agree	21	123	144
	Strongly Agree	26	123	149
Total	71	394	465	

As illustrated below in table 27, out of the 394 students, the majority, 160 ($\cong 40.6\%$) of them agreed, 104 ($\cong 26.3\%$) of them were undecided, 98 ($\cong 24.8\%$) of them strongly agreed, 24 ($\cong 6\%$) of them disagreed and 8 ($\cong 2\%$) of them strongly disagreed with the statement that digital technologies changed the format (way) of face-to-face communication from physical communication to technology-mediated communication

Further, amongst the 71 faculty members, 34 ($\cong 47.8\%$) of them agreed, 25 ($\cong 35.2\%$) of them strongly agreed, 10 ($\cong 14\%$) of them were undecided, 1 ($\cong 1.4\%$) of them disagreed and 1 ($\cong 1.4\%$) of them strongly disagreed the use of new media

technologies changed the format (way) of face-to-face communication from face-to-face communication to face-to-face communication through technology.

In summary, the majority of the participants, 317 ($\cong 68.1\%$) respondents out of the 465, claimed that the use of new media technologies changed the way of face-to-face communication in person to face-to-face communication through technology.

Table 27: Descriptive Statistics of the Participants towards the item “The Use of Digital Technologies Change the Format (Way) Of Face-To-Face Communication from Face-To-Face Communication to Face-To-Face Communication through Technology.”

	Position at EMU			Total
	Faculty Member (Instructor)	Student		
The use of new media technologies change the format (way) of face-to-face communication from face-to-face communication to face-to-face communication through technology	Strongly Disagree	1	8	9
	Disagree	1	24	25
	Undecided	10	104	114
	Agree	34	160	194
	Strongly Agree	25	98	123
Total	71	394	465	

4.5 Descriptive Statistics of Items on Likert Scale: Analysis of the Questions towards the Use of New Media Technologies in Interpersonal Communication at Tertiary Education

Statistics demonstrated that amongst the 394 students, the majority, 192 ($\cong 48.7\%$) of them agreed, 117 ($\cong 29.6\%$) strongly agreed, 66 ($\cong 16.7\%$) of them were undecided, 17 ($\cong 4.3\%$) of them disagreed and 2 ($\cong 0.5\%$) of them strongly disagreed that the use of new media technologies was vital concerning teacher-student interactions at tertiary education.

The statistics continued with the faculty members. 32 ($\cong 45\%$) of them agreed, 28 ($\cong 39.4\%$) of them strongly agreed, 8 ($\cong 11.2\%$) of them were undecided and 3 ($\cong 4.2\%$) of them disagreed that the use of new media technologies was vital concerning teacher-student interactions at tertiary education. Based on the statistics, none of the faculty members declared that they strongly disagreed that the use of new media technologies was vital concerning teacher-student interactions at tertiary education.

The findings have shown that the 369 ($\cong 79.3\%$) participants within the total of 465 respondents, claimed that the digital media tools were vital concerning teacher-student interactions at tertiary education.

Table 28: Descriptive Statistics of the Participants upon “The Usage of Modern Media Technologies is Vital Concerning Teacher-Student Interactions at Tertiary Education.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies is vital concerning teacher-student interactions at tertiary education	Strongly Disagree	0	2
	Disagree	3	17
	Undecided	8	66
	Agree	32	192
	Strongly Agree	28	117
Total	71	394	465

As illustrated in table 29 below, among the 394 students, the majority, 200 ($\cong 50.7\%$) of them agreed, 179 ($\cong 45.4\%$) of them strongly agreed, 11 ($\cong 2.7\%$) of them disagreed and 4 ($\cong 1\%$) of them strongly disagreed with the item proposing the use of new media technologies should be the part of learning and instruction at tertiary education. According to the answers, none of the students reported that they were undecided regarding the item stating the use of new media technologies should be the part of learning and instruction at tertiary education.

The ratios proceeded with 71 instructors. 37 ($\cong 52.1\%$) of them strongly agreed, 32 ($\cong 45\%$) of them agreed and 2 ($\cong 2.8\%$) of them disagreed with the provided item suggesting that the online platforms should be the part of learning and instruction at tertiary education. Based on the statistics, none of the faculty members stated that they were undecided or strongly disagreed with the item saying the use of new media technologies should be the part of learning and instruction at tertiary education.

To conclude, the majority of respondents ($\cong 96.3\%$) reported that they wanted the new media technologies as part of the learning and teaching processes at tertiary education.

Table 29: Descriptive Statistics of the Participants towards “The Use of New Media Technologies Should be the Part of Learning and Instruction at Tertiary Education”

	Position at EMU			Total
	Faculty Member (Instructor)	Student		
The use of new media technologies should be the part of learning and instruction at tertiary education	Strongly Disagree	0	4	4
	Disagree	2	11	13
	Undecided	0	0	0
	Agree	32	200	232
	Strongly Agree	37	179	216
Total	71	394	465	

Based on the data gathered from 394 students, the majority, 188 ($\cong 47.7\%$) of them agreed, 116 ($\cong 29.4\%$) of them strongly agreed, 58 ($\cong 14.7\%$) of them were undecided, 27 ($\cong 6.8\%$) of them disagreed and 5 ($\cong 1.2\%$) of them strongly disagreed with the provided item proposing the use of new media technologies facilitated teacher-student interactions.

On the faculty members' side, amongst the 71 instructors, 31 ($\cong 43.6\%$) of them agreed, 29 ($\cong 40.8\%$) of them strongly agreed, 6 ($\cong 8.4\%$) of them were undecided and 5 ($\cong 7.4\%$) of them disagreed that the use of new media technologies facilitated interactions among teachers and student. Based on the data collected, none of the faculty members stated that they strongly disagreed that the use of new media technologies facilitated teacher-student interactions.

In summary, regardless of position or other variables, the majority of the respondents, 364 ($\cong 78.2\%$) claimed that usage the of digital platforms facilitated interactions between teachers and students. Moreover, the mean and standard deviation values demonstrated that the majority of the respondents strongly agreed with the given item (see table 48, p.116).

Table 30: Descriptive Statistics of the Participants on “The Usage of Digital Media Technologies Facilitate Teacher-Student Interactions.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies facilitate teacher-student interactions	Strongly Disagree	0	5
	Disagree	5	27
	Undecided	6	58
	Agree	31	188
	Strongly Agree	29	116
Total	71	394	465

As table 31 illustrates, the collected data from the 394 students, 211 ($\cong 53.5\%$) of them strongly agreed, 146 ($\cong 37\%$) of them agreed, 23 ($\cong 5.8\%$) of them were undecided, 11 ($\cong 2.7\%$) of them disagreed and 3 ($\cong 0.7\%$) of them strongly disagreed that online platforms facilitated accessibility of information.

Followed by the 71 faculty members, 39 ($\cong 54.9\%$) of them strongly agreed, 28 ($\cong 39.4\%$) of them agreed, 3 ($\cong 4.2\%$) of them were undecided and 1 ($\cong 1.4\%$) of them disagreed that the utilization of digital media platforms facilitated accessibility of information. Statistics reflected that none of the faculty members reported that they strongly disagreed with the given item.

After all these interpretations above, it was worth stating at this point that the majority, 424 ($\cong 91.1\%$) participants (both students and faculty members) claimed that the new media technologies facilitated accessibility of information.

Table 31: Descriptive Statistics of the Participants upon “Digital Technologies Facilitate Accessibility of Information.”

	Position at EMU			
	Faculty Member (Instructor)	Student	Total	
The use of new media technologies facilitate accessibility of information	Strongly Disagree	0	3	3
	Disagree	1	11	12
	Undecided	3	23	26
	Agree	28	146	174
	Strongly Agree	39	211	250
Total	71	394	465	

Statistics showed in table 32 that out of the 394 students, 155 ($\cong 39.3\%$) of them agreed, 133 ($\cong 33.7\%$) of them strongly agreed, 75 ($\cong 19\%$) of them strongly were undecided, 24 ($\cong 6\%$) of them disagreed and 7 ($\cong 1.7\%$) of them strongly disagreed that the use of new media technologies facilitated comprehension of information.

Among the 71 faculty members, 32 ($\cong 45\%$) of them agreed, 23 ($\cong 32.3\%$) of them strongly agreed, 10 ($\cong 14\%$) of them were undecided and 6 ($\cong 8.4\%$) of them disagreed upon the statement that the digital platforms facilitated comprehension of information. None of the faculty members stated that they strongly disagreed with the given item.

Based on the answers received from the 465 respondents regarding the statement in table 32 below, the majority of them, 343 ($\cong 73.7\%$) declared that the usage of digital media technologies facilitated comprehension of information.

Table 32: Descriptive Statistics of the Participants towards “The Use of New Media Technologies to Facilitate Comprehension of Information.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies facilitate comprehension of information	Strongly Disagree	0	7
	Disagree	6	24
	Undecided	10	75
	Agree	32	155
	Strongly Agree	23	133
Total	71	394	465

Based on the data gathered, out of the 394 students, 146 ($\cong 37\%$) of them agreed, 106 ($\cong 26.9\%$) of them strongly agreed, 87 ($\cong 22\%$) of them were undecided, 35 ($\cong 8.8\%$) of them disagreed and 20 ($\cong 5\%$) of them strongly disagreed that the new media technologies increased student’s motivation.

Apart from the students, 71 data were collected from the faculty members and 25 ($\cong 35.2\%$) of them strongly agreed, 21 ($\cong 29.5\%$) of them agreed, 20 ($\cong 28.1\%$) of them were undecided, 4 ($\cong 5.6\%$) of them disagreed and 1 ($\cong 1.4\%$) of them strongly disagreed that digital media platforms increased students’ motivation.

The findings have revealed that out of the 465 respondents, 298 ($\cong 64\%$) of them stated that the use of new media technologies increased students’ motivation.

Table 33: Descriptive Statistics of the Participants Over “The Usage of Digital Media Tools Increase Student’s Motivation.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies increase student’s motivation	Strongly Disagree	1	21
	Disagree	4	39
	Undecided	20	107
	Agree	21	146
	Strongly Agree	25	131
Total	71	394	465

In the light of the statistics in table 34 below, it could be said that among the 394 students, 206 ($\cong 52.2\%$) students strongly agreed, 98 ($\cong 24.8\%$) students agreed, 57 ($\cong 14.4\%$) students disagreed, 19 ($\cong 4.8\%$) students were undecided and 14 ($\cong 3.5\%$) students strongly disagreed that the use of new media technologies increased student’s self-esteem.

Out of the 71 faculty members, 35 ($\cong 49.2\%$) of them strongly agreed, 17 ($\cong 23.9\%$) of them agreed, 11 ($\cong 15.4\%$) of them disagreed and 8 ($\cong 11.2\%$) of them were undecided that the use of new media technologies increased student’s self-esteem.

Above all, it was revealed that the majority of the respondents, 356 ($\cong 76.5\%$) out of the 465 (both students and faculty members) reported that online platforms increased student’s self-esteem.

Table 34: Descriptive Statistics of the Participants on “Digital Technologies Increase Student’s Self-Esteem.”

	Position at EMU			
	Faculty Member (Instructor)	Student	Total	
The use of new media technologies increase student’s self-esteem	Strongly Disagree	0	14	14
	Disagree	11	57	68
	Undecided	8	19	27
	Agree	17	98	115
	Strongly Agree	35	206	241
Total	71	394	465	

Considering the 394 data collected from students, 177 ($\cong 44.9\%$) of them agreed, 158 ($\cong 40.1\%$) of them strongly agreed, 43 ($\cong 10.9\%$) of them were undecided, 10 ($\cong 2.5\%$) of them disagreed and 6 ($\cong 1.5\%$) of them strongly disagreed that the innovative media technologies increased the accessibility of teachers.

Amongst the 71 instructors, 35 ($\cong 49.2\%$) of them agreed, 34 ($\cong 47.8\%$) of them strongly agreed and 2 ($\cong 2.8\%$) of them were undecided that the use of new media technologies increased the accessibility of teachers. According to the data solicited from faculty members, none of them reported that they disagreed or strongly disagreed with the given statement.

According to the result composed by the data, the majority of the respondents, out of the 465, 404 ($\cong 86.8\%$) of them claimed that the new media technologies increased the accessibility of teachers. In addition to this, the mean and standard deviation statistics illustrated that the majority of the participants strongly agreed with the given statement (see table 48, p.116).

Table 35: Descriptive Statistics of the Participants on “The Utilization of New Media Platforms Increase the Accessibility of Teachers.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies increase the accessibility of teachers	Strongly Disagree	0	6
	Disagree	0	10
	Undecided	2	43
	Agree	35	177
	Strongly Agree	34	158
Total	71	394	465

Out of the 394 students, 137 ($\cong 34.7\%$) of them agreed, 118 ($\cong 29.9\%$) of them were undecided, 71 ($\cong 18\%$) of them strongly agreed, 50 ($\cong 12.6\%$) of them disagreed and 18 ($\cong 4.5\%$) of them strongly disagreed that the innovative media technologies changed the role of teachers in the classroom.

In addition to this, among the 71 faculty members, 23 ($\cong 32.3\%$) of them agreed, 17 ($\cong 23.9\%$) of them disagreed, 15 ($\cong 21.1\%$) of them were undecided, 14 ($\cong 19.7\%$) of them strongly agreed and 2 ($\cong 2.8\%$) of them strongly disagreed that the digital media technologies changed the role of teachers in the classroom.

To conclude, out of the 465 participants, 245 ($\cong 52.6\%$) of them reported that use of new media technologies changed the role of teachers in the classroom.

Table 36: Descriptive Statistics of the Participants upon “The Usage of New Media Technologies Change the Role of Teachers in the Classroom Because the Education Is More Student-Centred Now.”

		Position at EMU		Total
		Faculty Member (Instructor)	Student	
The use of new media technologies change the role of teachers in the classroom because the education is more student-centred now	Strongly Disagree	2	18	20
	Disagree	17	50	67
	Undecided	15	118	133
	Agree	23	137	160
	Strongly Agree	14	71	85
Total		71	394	465

According to the table 37 below, among the 394 students, 153 (\cong 38.8%) of them agreed, 117 (\cong 29.6%) of them strongly agreed, 79 (\cong 20%) of them were undecided, 36 (\cong 9.1%) of them disagreed and 9 (\cong 2.2%) of them strongly disagreed that the utilization of technological instruments removed the communication barrier between teachers and students.

Out of the 71 faculty members, 33 (\cong 46.4%) of them agreed, 24 (\cong 33.8%) of them strongly agreed, 8 (\cong 11.2%) of them were undecided and 6 (\cong 8.4%) of them disagreed that the digital platforms removed the communication barrier between teachers and students. Based on the ratio, none of the faculty members declared that they strongly disagreed with the given statement.

In summary, out of the 465 participants, 327 (\cong 70.3%) of them claimed that the utilization of modern technologies removed the communication barrier between teachers and students.

Table 37: Descriptive Statistics of the Participants on “Digital Media Technologies Remove the Communication Barrier between Teachers and Students.”

	Position at EMU			Total
	Faculty Member (Instructor)	Student		
The use of new media technologies remove the communication barrier between teachers and students	Strongly Disagree	0	9	9
	Disagree	6	36	42
	Undecided	8	79	87
	Agree	33	153	186
	Strongly Agree	24	117	141
Total	71	394	465	

As table 38 indicated below, out of the 394 students, 154 ($\cong 39\%$) of them agreed, 111 ($\cong 28.1\%$) of them strongly agreed, 75 ($\cong 19\%$) of them were undecided, 37 ($\cong 9.3\%$) of them disagreed and 17 ($\cong 4.3\%$) of them strongly disagreed that the use of new media technologies enhanced the effectiveness of learning.

Among the 71 faculty members, 27 ($\cong 38\%$) of them agreed, 26 ($\cong 36.6\%$) of them strongly agreed, 14 ($\cong 19.7\%$) of them were undecided and 4 ($\cong 5.6\%$) of them disagreed that the use of new media technologies enhanced the effectiveness of learning. According to the answers collected, none of the faculty members stated that they strongly disagreed that the use of new media technologies enhanced the effectiveness of learning.

In the final analysis, it is worth stating at this point that the majority of participants, 318 ($\cong 68.3\%$) out of the 465 reported that the utilization of new media devices improved the effectiveness of learning.

Table 38: Descriptive Statistics of the Participants over “The Utilization of New Media Platforms Enhance the Effectiveness of Learning.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies enhance the effectiveness of learning			
Strongly Disagree	0	17	17
Disagree	4	37	41
Undecided	14	75	89
Agree	27	154	181
Strongly Agree	26	111	137
Total	71	394	465

Considering 394 data collected from students concerning the statement in table 37 below, 148 ($\cong 37.5\%$) of them agreed, 114 ($\cong 28.9\%$) of them strongly agreed, 72 ($\cong 18.2\%$) of them were undecided, 48 ($\cong 12.1\%$) of them disagreed and 12 ($\cong 3\%$) of them strongly disagreed that the use of new media technologies enhanced the effectiveness of teaching.

In addition, amongst the 71 instructors, 33 ($\cong 46.4\%$) of them agreed, 23 ($\cong 32.3\%$) of them strongly agreed, 11 ($\cong 15.4\%$) of them were undecided and 4 ($\cong 5.6\%$) of them disagreed that the use of new media technologies enhanced the effectiveness of teaching. According to the data solicited from the faculty members, none of them reported that they strongly disagreed that the use of new media technologies enhanced the effectiveness of teaching.

According to the results, the majority of the respondents, out of the 465, 318 ($\cong 68.3\%$) of them claimed that the use of new media technologies enhanced the effectiveness of teaching.

Table 39: Descriptive Statistics of the Participants towards “The Use of New Media Technologies Enhance the Effectiveness of Teaching.”

	Position at EMU			
	Faculty Member (Instructor)	Student	Total	
The use of new media technologies enhance the effectiveness of teaching	Strongly Disagree	0	12	12
	Disagree	4	48	52
	Undecided	11	72	83
	Agree	33	148	181
	Strongly Agree	23	114	137
Total	71	394	465	

Based on the responses for the statement in table 40, among the 394 students, 121 ($\cong 30.7\%$) of them disagreed, 99 ($\cong 25.1\%$) of them were undecided, 86 ($\cong 21.8\%$) of them agreed, 50 ($\cong 12.6\%$) of them strongly disagreed and 38 ($\cong 9.6\%$) of them strongly agreed that the usage of new media devices declined the authority of teacher in the classroom.

Out of the 71 faculty members, 29 ($\cong 40.8\%$) of them disagreed, 16 ($\cong 22.5\%$) of them strongly disagreed, 12 ($\cong 16.9\%$) of them were undecided, 9 ($\cong 12.6\%$) of them agreed and 5 ($\cong 7\%$) of them strongly agreed that the utilization of modern media technologies declined the authority of teacher in the class.

It could be said that 216 ($\cong 46.4\%$) participants including both the faculty members and students did not confirm that the digital media technologies declined the authority of teacher in class whereas 138 ($\cong 29.6\%$) of them claimed the opposite. 111 ($\cong 23.8\%$) of the respondents were undecided regarding this item. (See table 48, p.116).

Table 40: Descriptive Statistics of the Participants towards “The Use of New Media Technologies Decline the Authority of Teacher in the Class.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies decline the authority of teacher in the class	Strongly Disagree	16	66
	Disagree	29	150
	Undecided	12	111
	Agree	9	95
	Strongly Agree	5	43
Total	71	394	465

As seen in table 41, out of the 394 students, 162 ($\cong 41.1\%$) of them agreed, 102 ($\cong 25.8\%$) of them were undecided, 89 ($\cong 22.5\%$) of them strongly agreed, 35 ($\cong 8.8\%$) of them disagreed and 6 ($\cong 1.5\%$) of them strongly disagreed that the use of social media technologies enabled students to take active roles in decision-making process in the classroom.

Statistics of the 71 faculty members are as follows: 28 ($\cong 39.4\%$) of them agreed, 23 ($\cong 32.3\%$) of them strongly agreed, 11 ($\cong 15.4\%$) of them were undecided, 6 ($\cong 8.4\%$) of them disagreed and 3 ($\cong 4.2\%$) of them strongly disagreed that the digital media tools enabled students to take active roles in decision-making process in the classroom.

The findings showed that the majority of total participants, 302 ($\cong 64.9\%$) of them claimed that the new media technologies enabled students to take active roles in decision-making process in the classroom.

Table 41: Descriptive Statistics of the Participants upon “The Use of New Media Platforms Enable Students to Take Active Roles in Decision-Making Process in the Classroom.”

		Position at EMU		Total
		Faculty Member (Instructor)	Student	
The use of new media technologies enable students to take active roles in decision-making process in the classroom	Strongly Disagree	3	6	9
	Disagree	6	35	41
	Undecided	11	102	113
	Agree	28	162	190
	Strongly Agree	23	89	112
Total		71	394	465

Among the 394 students shown in table 42, 185 ($\cong 46.9\%$) of them agreed, 141 ($\cong 35.7\%$) of them strongly agreed, 49 ($\cong 12.4\%$) of them were undecided, 16 ($\cong 4\%$) of them disagreed and 3 ($\cong 0.7\%$) of them strongly disagreed that the use of new media technologies allowed students to pursue their learning activities outside of the school settings.

Statistics proceeded with 71 faculty members. 33 ($\cong 46.4\%$) of them strongly agreed, 29 ($\cong 40.8\%$) of them agreed, 6 ($\cong 8.4\%$) of them were undecided and 3 ($\cong 4.2\%$) of them disagreed that the use of new media technologies allowed students to pursue their learning activities outside the school settings. It could be seen in the table that none of the faculty members stated that they strongly disagreed that the use of new media technologies allowed students to pursue their learning activities outside the school settings.

In summary, the results indicated that the majority of respondents ($\cong 83.4\%$) confirmed that the utilization of the new media technologies allowed learners to pursue their learning activities outside of the school settings.

Table 42: Descriptive Statistics of the Participants towards “The Online Technologies Allow Students to Pursue Their Learning Activities Outside of the School Settings.”

	Position at EMU			Total
	Faculty Member (Instructor)	Student		
The use of new media technologies allow students to pursue their learning activities outside of the school settings	Strongly Disagree	0	3	3
	Disagree	3	16	19
	Undecided	6	49	55
	Agree	29	185	214
	Strongly Agree	33	141	174
Total	71	394	465	

According to the data solicited from students in table 43, out of the 394, 178 ($\cong 45.1\%$) of them agreed, 157 ($\cong 39.8\%$) of them strongly agreed, 45 ($\cong 11.4\%$) of them were undecided, 11 ($\cong 2.7\%$) of them disagreed and 3 ($\cong 0.7\%$) of them strongly disagreed that the use of new media technologies created a new source of information for students.

Amongst the 71 faculty members, 39 ($\cong 54.9\%$) of them agreed, 27 ($\cong 38\%$) of them strongly agreed, 3 ($\cong 4.2\%$) of them were undecided and 2 ($\cong 2.8\%$) of them disagreed that the utilization of digital technologies created a new source of information for students. Statistics demonstrated that none of the instructors reported that they strongly disagreed that the online technologies created a new source of information for students.

To summarize, 401 ($\cong 86.2\%$) respondents confirmed that the digital media technologies formed a new source of information for students. In addition to this, the mean and standard deviation table showed that the majority of the respondents including both the faculty members and students strongly agreed with the given item (see table 48, p.116).

Table 43: Descriptive Statistics of the Participants over “The Usage of Digital Media Technologies Create a New Source of Information for Students.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies create a new source of information for students			
Strongly Disagree	0	3	3
Disagree	2	11	13
Undecided	3	45	48
Agree	39	178	217
Strongly Agree	27	157	184
Total	71	394	465

According to table 44, out of the 394 students, 178 ($\cong 45.1\%$) of them agreed, 124 ($\cong 31.4\%$) of them strongly agreed, 66 ($\cong 16.7\%$) of them were undecided, 18 ($\cong 4\%$) of them disagreed and 8 ($\cong 2\%$) of them strongly disagreed upon the statement that the new media technologies enabled students to improve their course contents.

Considering the faculty members, 27 ($\cong 38\%$) of them agreed, 26 ($\cong 36.6\%$) of them strongly agreed, 10 ($\cong 14\%$) of them were undecided and 8 ($\cong 11.2\%$) of them disagreed that the usage of digital media platforms enabled students to improve their course contents. Considering the data presented in table 42, it could be said that none of the faculty members stated that they strongly disagreed that the new media technologies enabled students to improve their course contents.

In summary, among the 465 participants, 355 ($\cong 76.3\%$) of them stated that the utilization of online technologies enabled students to improve their course contents.

Table 44: Descriptive Statistics of the Participants on “The Usage of Online Technologies Enable Students to Improve Their Course Contents.”

		Position at EMU		Total
		Faculty Member (Instructor)	Student	
The use of new media technologies enable students to improve their course contents	Strongly Disagree	0	8	8
	Disagree	8	18	26
	Undecided	10	66	76
	Agree	27	178	205
	Strongly Agree	26	124	150
Total		71	394	465

Statistics below in table 45 illustrates that the 193 ($\cong 48.9\%$) students from the total of 394 agreed, 156 ($\cong 39.5\%$) of them strongly agreed, 29 ($\cong 7.3\%$) of them were undecided, 10 ($\cong 2.5\%$) of them disagreed and 6 ($\cong 1.5\%$) of them strongly agreed that the use of new media technologies allowed students to communicate with their teachers though social media platforms in or out of the school settings.

Among the 71 faculty members, 34 ($\cong 47.8\%$) of them agreed, 32 ($\cong 45\%$) of them strongly agreed, 3 ($\cong 4.2\%$) of them disagreed and 2 ($\cong 2.8\%$) of them were undecided that the use of new media technologies allowed students to communicate with their teachers through social media platforms in or out of the school settings. Statistics indicated that none of the faculty members stated that they strongly disagreed that the use of new media technologies allowed students to communicate with their teachers through social media platforms in or out of the school settings.

To sum up briefly, out of the 465 participants, the majority, 415 ($\cong 89.2\%$) of them claimed that digital media platforms allowed students to communicate with their teachers in or out of the school settings. Moreover, the mean and standard deviation table indicated that the majority of the respondents strongly agreed with the given statement (see table 48, p.116).

Table 45: Descriptive Statistics of the Participants over “The Use of New Media Technologies Allow Students to Communicate with their Teachers through Social Media Platforms in or Out of the School Settings.”

	Position at EMU		Total
	Faculty Member (Instructor)	Student	
The use of new media technologies allow students to communicate with their teachers through social media platforms in or out of the school settings	Strongly Disagree	0	6
	Disagree	3	10
	Undecided	2	29
	Agree	34	193
	Strongly Agree	32	156
Total	71	394	465

In light of the statistics below, it could be said that amongst the 394 students, 155 ($\cong 39.3\%$) of them agreed, 136 ($\cong 34.5\%$) of them strongly agreed, 67 ($\cong 17\%$) of them were undecided, 24 ($\cong 6\%$) of them disagreed and 12 ($\cong 3\%$) of them strongly disagreed that the use of modern media technologies enabled teachers and students to create class groups on social media which help teachers to establish a warm and sincere relationship with their students.

Out of the 71 faculty members, 26 ($\cong 36.6\%$) of them agreed, 22 ($\cong 30.9\%$) of them strongly agreed, 13 ($\cong 18.3\%$) of them were undecided, 7 ($\cong 9.8\%$) of them disagreed and 3 ($\cong 4.2\%$) of them strongly disagreed that the usage of digital media technologies enabled teachers and students to create class groups on social media which help teachers to establish a warm and sincere relationship with their students.

The findings showed that out of the 465 participants, 339 ($\cong 72.9\%$) of them claimed that the use of digital media technologies enabled teachers and students to create class groups on social media which help teachers to establish a warm and sincere relationship with their students.

Table 46: Descriptive Statistics of the Participants on “The Usage of Digital Media Platforms Enable Teachers and Students to Create Class Groups on Social Media Which Help Teachers to Establish a Warm and Sincere Relationship with Their Students.”

	Position at EMU		Total	
	Faculty Member (Instructor)	Student		
The use of new media technologies enable teachers and students to create class groups on social media which help teachers to establish a warm and sincere relationship with their students	Strongly Disagree	3	12	15
	Disagree	7	24	31
	Undecided	13	67	80
	Agree	26	155	181
	Strongly Agree	22	136	158
	Total	71	394	465

In view of the below statement in table 47, out of the 394 students 164 ($\cong 41.6\%$) of them agreed, 123 ($\cong 31.2\%$) of them strongly agreed, 79 ($\cong 20\%$) of them were undecided, 18 ($\cong 4.5\%$) of them disagreed and 10 ($\cong 2.5\%$) of them strongly disagreed that the usage of new media technologies encouraged students to start an interaction in the classroom much easier because digital media technologies allowed teachers and students to improve their relationships out of the school settings as well.

Followed by the 33 ($\cong 47.6\%$) faculty members who agreed, 20 ($\cong 28.1\%$) of them strongly agreed, 9 ($\cong 12.6\%$) of them were undecided, 8 ($\cong 11.2\%$) of them disagreed and 1 ($\cong 1.4\%$) of them strongly disagreed that the digital media technologies encouraged students to start an interaction in the classroom much easier because digital platforms allowed teachers and students to improve their relationships outside of the school settings as well.

To sum up everything, 340 ($\cong 73.1\%$) participants out of the 465 recorded that the usage of the new media technologies encouraged students to start an interaction in

the classroom much easier because modern technologies allowed educators and learners to improve their relationships outside of the school settings as well.

Table 47: Descriptive Statistics of the Participants towards “The Utilization of New Media Platforms Encourage Students to Start An Interaction in the Classroom Much Easier Because Digital Media Technologies Allow Teachers and Students to Improve Their Relationships Outside of The School Settings as Well.”

	Position at EMU			Total
	Faculty Member (Instructor)	Student		
The use of new media technologies encourage students to start an interaction in the classroom much easier because new media technologies allow teachers and students to improve their relationships outside of the school settings as well				
Strongly Disagree	1	10	11	
Disagree	8	18	26	
Undecided	9	79	88	
Agree	33	164	197	
Strongly Agree	20	123	143	
Total	71	394	465	

4.6 Statistical Analysis of the Likert Scale Questions

Table 48 illustrates the mean and the standard deviation of the answers obtained from the participants. According to Balcı’s scale division measurements, 1= Strongly Disagree (1- 1.79: SD), 2= Disagree (1.80- 2.59: D), 3= Undecided (2.60- 3.39: U), 4= Agree (3.40- 4.19: A) and 5= Strongly Agree (4.20- 5: SA) (2004).

Table 48: Mean and Standard Deviation of the Participants

Items	Mean	Std. Deviation	Likert Scale Division Attitudes
The use of new media technologies increase face to face communication between people	3.40	1.28	A
The use of new media technologies facilitate exchange of feelings between individuals	3.43	1.29	A
The use of new media technologies develop humans' communication skills.	3.49	1.23	A
The use of new media technologies made it easier for people to start communication	4.10	.89	A
The use of new media technologies eliminate the time and distance issue in interpersonal communication	4.30	.87	SA
The use of new media technologies cause technology addiction which also decline face to face communication among people	3.65	1.29	A
The use of new media technologies change the format (way) of face-to-face communication from face-to-face communication to face-to-face communication through technology	3.85	.93	A
The use of new media technologies are vital concerning teacher-student interactions at tertiary education	4.05	.82	A
The use of new media technologies should be the part of learning and instruction at tertiary education	4.12	.80	A
The use of new media technologies facilitate teacher-student interactions	4.00	.90	A
The use of new media technologies facilitate accessibility of information	4.41	.76	SA
The use of new media technologies facilitate comprehension of information	3.98	.95	A
The use of new media technologies increase students' motivation	3.75	1.09	A
The use of new media technologies increase students' self-esteem	3.59	1.11	A
The new media technologies increase the accessibility of teachers	4.23	.81	SA
The use of new media technologies change the roles of teachers in the classroom because the education is more student-centred now	3.48	1.07	A
The use of new media technologies remove the communication barrier between teachers and students	3.88	1.00	A
The use of new media technologies enhance the effectiveness of learning	3.82	1.06	A

The use of new media technologies enhance the effectiveness of teaching	3.82	1.05	A
The use of new media technologies decline the authority of teacher in the class	2.78	1.19	U
The use of new media technologies enable students to take active roles in decision-making process in the classroom	3.76	.97	A
The use of new media technologies allow students to pursue their learning activities outside of the school settings	4.15	.83	A
The use of new media technologies create a new source of information for students	4.22	.78	SA
The use of new media technologies enable students to improve their course contents	4.00	.93	A
The use of new media technologies allow students to communicate with their teachers though social media platforms in or out of the school settings	4.24	.80	SA
The use of new media technologies enable teachers and students to create class groups on social media which help teachers to establish a warm and sincere relationship with their students	3.94	1.03	A
The use of new media technologies encourage students to start an interaction in the classroom much easier because new media technologies allow teachers and students to improve their relationships outside of the school settings as	3.94	.96	A

4.7 Analysis of Chi-square Tests

Chi Square test was employed to reveal if there were significant difference concerning the respondents' answers given and their age or positions. This test allowed researcher to deeply investigate significant differences between variables and answers towards presented items in the questionnaire.

It was revealed after the test that depending on the value of " $p \leq 0.05$ ", statistically significant difference between students' preference on communication forms and their faculties was found as " $p = .004$ " in the Chi-square test. Therefore, it could be said that the responses differed significantly in accordance with the students' faculties.

Among the 394 students, 27.1% (107) of them were from the FCMS, 51.4% (55) of them preferred communicating through social media platforms whereas 44% (47) of them preferred to communicate one to one in person (face-to-face communication). Followed by 3.7% (4) of students who preferred communicating on phone while 0.9% (1) of them preferred communicating through e-mail. Additionally, 11% (75) of students were from Faculty of Business and Economics. 52% (39) of them preferred face-to-face communication whereas 37% (28) of them preferred communicating through social media platforms. While 8% (6) of them opted to communicate over phone, 2.6% (2) of them preferred to communicate via e-mail. Followed by 34.7% (137) of students from Faculty of Education and 48.9% (67) of them preferred to communicate through social media platforms, 43.7% (60) of them preferred to communicate face-to-face and 7.2% (10) of them opted to communicate on the phone. Out of the 394 students, 19% (75) of them were from Faculty of Engineering and 58.6% (44) of them preferred to communicate face-to-face, 34.6% (26) of them preferred to communicate through social media platforms, 4% (3) of them opted to communicate over phone and 2.6% (2) of them preferred to communicate through e-mail.

In summary, it was revealed after Chi-square test that the significant difference was $p = .004$ and the majority of the participants from social sciences such as FCMS and Education Faculty, mostly preferred to communicate through social media platforms, whereas majority of respondents from positive sciences faculties like Engineering and Business and Economics mostly preferred face-to-face communication.

Table 49: Chi-Square Tests towards the Question “When You Communicate, Which Of The Following Communication Tools/Platforms Do You Prefer The Most?” With Respect to Students’ Faculty

		when you communicate, which of the following do you prefer the most?					
		Communicating through Social media platforms (e.g., WhatsApp, Facebook etc.)	Communicating one-to-one in-person (face-to-face communication)	Communicating on phone	Communicating through e-mail	Total	
In which faculty do you study?	Faculty of Communication and Media Studies	Count	55	47	4	1	107
	% within In which faculty do you study?						
	% within When you communicate, which of the following do you prefer the most?		51.4%	44%	3.7%	0.9%	100.0%
	% of Total		28.0%	20.3%	13.8%	8.3%	22.7%
			11.6%	10.1%	0.9%	0.2%	22.7%
Faculty of Business & Economics		Count	28	39	6	2	75
		% within In which faculty do you study?	37.3%	52%	8%	2.6%	100.0%
		% within When you communicate, which of the following do you prefer the most?	17.1%	20.2%	17.7%	16.7%	22.6%
		% of Total	7.1%	8.8%	1.3%	0.4%	17.6%
Faculty of Education		Count	67	60	10	0	137
		% within In which faculty do you study?	48.9%	43.7%	7.2%	0.0%	100.0%
		% within When you communicate, which of the following do you prefer the most?	28.6%	31.1%	34.5%	0.0%	29.2%
		% of Total	14.2%	12.9%	2.1%	0.0%	29.2%

Faculty of Engineering	Count	26	44	3	2	75
	% within In which faculty do you study?	34.6%	58.6%	4%	2.6%	100.0%
	% within When you communicate, which of the following do you prefer the most?	15.5%	20.8%	10.3%	16.7%	17.8%
	% of Total	6.4%	10.3%	0.6%	0.4%	17.8%
Total	Count	176	190	23	5	394
	% within In which faculty do you study?	44.6%	48.2%	5.8%	1.4%	100.0%
	% within When you communicate, which of the following do you prefer the most?	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	41.4%	49.6%	6.2%	2.6%	100.0%

Table 50: Chi-Square Tests Table

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42.946 ^a	16	.000
Likelihood Ratio	34.994	16	.004
N of Valid Cases	465		

a. 11 cells (44.0%) have expected count less than 5. The minimum expected count is .13.

As indicated in table 51 below, it was revealed after the test that depending on the value of “ $p \leq 0.05$ ”, statistically significant difference between instructors’ preference in communication forms and their faculties was found as “ $p = .001$ ” in the Chi-square test. Therefore, it could be said that the responses differed significantly depending on the instructors’ faculties.

Among the 465 participants, 15.2% (71) were faculty members and 28% (20) of them were from FCMS. 55% (11) of them preferred to communicate through social media platforms whereas 45% (9) of them opted to communicate one to one in person

(face-to-face communication). Followed by 21% (15) faculty members from Faculty of Business and Economics and 60% (9) of them preferred face-to-face communication whereas 26.6% (4) of them preferred to communicate through e-mail. While 6.6% (1) of them preferred to communicate on social media platforms, 6.6% (1) of them preferred to communicate on the phone. The ratio proceeded with 28% (20) faculty members from Faculty of Education and 50% (10) of them preferred to communicate through social media platforms whereas 25% (5) of them opted to communicate face-to-face. While 20% (4) faculty members preferred to communicate over the phone, 5% (1) of them preferred to communicate via e-mail. Followed by 22.5% (16) faculty members from Faculty of Engineering and 62.5% (10) of them preferred face-to-face communication, 25% (4) of them preferred to communicate through social media platforms and 12.5% (2) of them preferred to communicate through e-mail.

In brief, Chi-square tests indicated that the majority of the instructors from social sciences faculties like Education and Communication mostly preferred to communicate through social media platforms, while majority of the faculty members from positive sciences faculties such as Engineering and Business and Economics mostly preferred face-to-face communication.

Table 51: Chi-Square Tests towards the Question “When You Communicate, Which Way Do You Prefer The Most?” With Respect to Instructors’ Faculty

		“When you communicate, which one do you prefer the most?”					
		Communicating through Social media platforms (e.g., WhatsApp, Facebook etc.)	Communicating one-to-one in-person (face-to-face communication)	Communicating on phone	Communicating through e-mail	Total	
In which faculty do you teach?	Faculty of Communication and Media Studies	Count	11	9	0	0	20
		% within In which faculty do you teach?	55.0%	45.0%	0.0%	0.0%	100.0%
		% within When you communicate, which one do you prefer the most?	5.7%	4.3%	0.0%	0.0%	5.4%
		% of Total	2.4%	2.1%	0.0%	0.0%	5.4%
	Faculty of Business & Economics	Count	1	9	1	4	15
		% within In which faculty do you teach?	6.6%	60.0%	6.6%	26.6%	100.0%
		% within When you communicate, which one do you prefer the most?	1.6%	5.6%	3.4%	33.3%	4.5%
		% of Total	0.6%	2.8%	0.2%	0.9%	4.5%
	Faculty of Education	Count	10	5	4	1	20
		% within In which faculty do you teach?	50.0%	25.0%	20.0%	5.0%	100.0%
		% within When you communicate, which one do you prefer the most?	6.9%	3.1%	13.8%	8.3%	5.8%

	% of Total	3.4%	1.3%	0.9%	0.2%	5.8%
Faculty of Engineering	Count	4	10	0	2	16
	% within In which faculty do you teach?	25.0%	62.5%	0.0%	12.5%	100.0%
	% within When you communicate, which one do you prefer the most?	2.1%	6.1%	0.0%	16.7%	4.3%
	% of Total	0.9%	3.0%	0.0%	0.4%	4.3%
Total	Count	26	33	5	7	71
	% within In which faculty do you teach?	36.6%	46.4%	7.0%	9.8%	100.0%
	% within When you communicate, which one do you prefer the most?	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	41.4%	49.6%	6.2%	2.6%	100.0%

Table 52: Chi-Square Tests Table

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	52.214 ^a	16	.000
Likelihood Ratio	40.539	16	.001
N of Valid Cases	465		

a. 13 cells (52.0%) have expected count less than 5. The minimum expected count is .04.

As demonstrated in table 53 below, Chi-square tests were performed and the significance difference was found as “ $p=.014$ ” between participants’ age category and their preferences in communication forms based on the formula “ $p \leq 0.05$ ”. Hence, it could be said that responses differed depending on the respondents’ ages.

Out of the 465 respondents, 55.6% (259) of them were between the ages 18-23 and 48.6% (126) of them preferred to communicate through social media platforms,

45.2% (117) of them preferred face-to-face communication and 6.2% (16) of them preferred communicating over phone. Followed by 25.5% (119) participants from the age category of 24-29 and 49.6% (59) of them preferred face-to-face communication, 41.2% (49) of them preferred to communicate through social media platforms, 5.9% (7) of them preferred to communicate on phone and 3.4% (4) of them preferred to communicate via e-mail. This proceeded with 9.4% (44) participants who were 41 and above. 52.3% (23) of them preferred face-to-face communication, 25% (11) of them preferred to communicate through social media platforms, 15.9% (7) of them preferred communicating through e-mail and 6.8% (3) of them preferred communicating over the phone. Followed by 5.5% (26) respondents from the age category of 30-35, 50% (13) of them preferred face-to-face communication, 42.3% (11) of them preferred to communicate through social media platforms and 7.7% (2) of them preferred to communicate on phone. Out of the 465 participants, 3.6% (17) of them were between the ages 36-41 and from this group 58.8% (10) of them preferred face-to-face communication, 29.4% (5) of them preferred to communicate through social media platforms, 5.9% (1) of them preferred to communicate over the phone and 5.9% (1) of them preferred to communicate via e-mail.

Table 53: Chi-Square Tests towards the Question “When You Communicate, Which Of The Following Technological Tools/Platforms Do You Prefer The Most?” With Respect To Participants’ Age Categories.

		When you communicate which one of the following do you prefer the most?				
		Communicating through Social media platforms (e.g., WhatsApp, Facebook etc.)	Communicating one-to-one in-person (face-to-face communication)	Communicating on phone	Communicating through e-mail	Total
Age						
18-23	Count					
	% within Age					
	% within	126	117	16	0	259
	When you	48.6%	45.2%	6.2%	0.0%	100.0%
	communicate					
which one of the following do you prefer the most?		54.5%	60.6%	55.2%	0.0%	55.6%
		27.0%	25.1%	3.4%	0.0%	55.6%
	% of Total					
24-29	Count	49	59	7	4	119
	% within Age	41.2%	49.6%	5.9%	3.4%	100.0%
	% within					
	When you					
	communicate					
which one of the following do you prefer the most?		25.4%	25.5%	24.1%	33.3%	25.5%
	% of Total	10.5%	12.7%	1.5%	0.9%	25.5%
30-35	Count	11	13	2	0	26

	% within Age	42.3%	50.0%	7.7%	0.0%	100.0%
	% within When you communicate which one of the following do you prefer the most?	5.7%	5.6%	6.9%	0.0%	5.6%
	% of Total	2.4%	2.8%	0.4%	0.0%	5.6%
36-41	Count	5	10	1	1	17
	% within Age	29.4%	58.8%	5.9%	5.9%	100.0%
	% within When you communicate which one of the following do you prefer the most?	2.6%	4.3%	3.4%	8.3%	3.6%
	% of Total	1.1%	2.1%	0.2%	0.2%	3.6%
41+	Count	11	23	3	7	44
	% within Age	25.0%	52.3%	6.8%	15.9%	100.0%
	% within When you communicate which one of the following do you prefer the most?	5.7%	10.0%	10.3%	58.3%	9.4%
	% of Total	2.4%	4.9%	0.6%	1.5%	9.4%
Total	Count	202	222	29	12	465
	% within Age	43.3%	48.0%	6.2%	2.5%	100.0%
	% within When you communicate which one of the following do you prefer the most?	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	43.3%	48.0%	6.2%	2.5%	100.0%

Table 54: Chi-Square Tests Table

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	514.640 ^a	35	.000
Likelihood Ratio	55.923	35	.014
N of Valid Cases	465		

a. 35 cells (72.9%) have expected count less than 5. The minimum expected count is .00.

As illustrated below, when Chi-square tests were performed to reveal the difference among the item “the use of new media technologies facilitate comprehension of information” and participants’ position at EMU, statistically significant difference was found as “ $p=.048$ ” based on the value “ $p \leq 0.05$ ”. This rates showed that the responses varied according to the participants’ position at EMU.

Table 55: Chi-Square Tests performed towards the item “The Usage of Digital Media Technologies Facilitate Comprehension of Information” with Respect to Participants’ Position at EMU

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	469.118 ^a	10	.000
Likelihood Ratio	18.461	10	.048
N of Valid Cases	465		

a. 10 cells (55.6%) have expected count less than 5. The minimum expected count is .00.

When p was taken as “ $p \leq 0.05$ ”, the significant difference was found to be “ $p=.023$ ” with respect to participants’ position at EMU and the item “the utilization of modern technologies increase students’ motivation”. In light of this ratio, it could be said that responses differed depending on the respondents’ position at EMU.

Table 56: Chi-Square Tests Performed Towards the item “The Use of New Media Technologies Increase Students’ Motivation” with Respect to Participants’ Position at EMU

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	471.942 ^a	10	.000
Likelihood Ratio	20.758	10	.023
N of Valid Cases	465		

a. 9 cells (50.0%) have expected count less than 5. The minimum expected count is .00.

As table below shows, Chi- Square Tests results were revealed as “ $p=.004$ ”, when the item “the use of new media technologies increase accessibility of teachers” considered and it was illustrated a significant difference between the item aforementioned and participants’ positions at EMU. This means that the answers varied depending on the participants’ occupation.

Table 57: Chi-Square Tests Employed On the item “The Use of New Media Technologies Increase Accessibility of Teachers” With Respect To Respondents’ Position at EMU

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	474.111 ^a	10	.000
Likelihood Ratio	26.085	10	.004
N of Valid Cases	465		

a. 10 cells (55.6%) have expected count less than 5. The minimum expected count is .00.

The Chi-square tests was employed concerning the positions of participants at EMU and the item “the use of new media technologies facilitate exchange of feelings between individuals”. Significant difference was “ $p=.001$ ”, if p is accepted as “ $p \leq 0.05$ ”. Therefore, it could be said that responses differed depending on the respondents’ position at EMU.

Table 58: Chi-Square Tests Employed On the Item “The Use of New Media Technologies Facilitate Exchange of Feelings between Individuals” Concerning the Positions of Participants at EMU

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	479.291 ^a	10	.000
Likelihood Ratio	30.429	10	.001
N of Valid Cases	465		

a. 8 cells (44.4%) have expected count less than 5. The minimum expected count is .00.

As indicated in the table below, Chi-square tests was performed and the significance difference was found as “ $p=.040$ ” between participants’ positions at EMU and the item “the digital media platforms eliminate the time and distance issue in interpersonal communication depending on the formula “ $p \leq 0.05$ ”. Hence, it could be said that responses varied depending on the respondents’ occupations.

Table 59: Chi-Square Tests Employed On the Item “The Digital Technologies Eliminate the Time and Distance Issue in Interpersonal Communication” Concerning the Positions of Participants at EMU

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	469.297 ^a	10	.000
Likelihood Ratio	19.033	10	.040
N of Valid Cases	465		

a. 10 cells (55.6%) have expected count less than 5. The minimum expected count is .00.

The Chi-square tests was performed with respect to the positions of participants at EMU and the item “the digital technologies facilitate teacher-student interactions”. Significant difference was came out as “ $p=.025$ ”, when p was taken as “ $p \leq 0.05$ ”. Based on the ratio, it could be said that responses differed depending on the respondents’ positions at EMU.

Table 60: Chi-Square Tests Employed On the Item “The Utilization of Modern Media Technologies Facilitate Teacher-Student Interactions” Concerning the Positions of Participants at EMU

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	471.353 ^a	10	.000
Likelihood Ratio	20.433	10	.025
N of Valid Cases	465		

a. 11 cells (61.1%) have expected count less than 5. The minimum expected count is .00.

As table 64 below illustrates, Chi-square tests results were revealed as “ $p=.006$ ”, when the item “the online technologies decline the authority of teachers in the classroom” was taken into consideration and it was revealed that there was a significant difference between the item and respondents’ positions at EMU. Hence, responses differed depending on the respondents’ positions at EMU.

Table 61: Chi-Square Tests Employed On The Item “The Use of New Media Technologies Decline The Authority Of Teachers In The Classroom” With Respect To The Positions of Participants at EMU

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	476.658 ^a	10	.000
Likelihood Ratio	24.805	10	.006
N of Valid Cases	465		

a. 8 cells (44.4%) have expected count less than 5. The minimum expected count is .00.

4.8 Analysis of the Research Questions

This study sets out to explore the teacher-student interactions at EMU, in 2019-2020 Spring Semester. The first two research questions addressed to measure the general perception regarding the usage of new media technologies and interpersonal communication, the rest set to explore the impacts of new media technologies at school-settings concerning the interpersonal communication. The following research questions were addressed in the present study. In addition, the responses reflect the

opinions and perceptions of both the teachers and students regarding the use of new media technologies during the COVID-19 pandemic process.

RQ1: Do New Media Technologies Have Changed the Interpersonal Communication among People?

Ever since people started living in this world, they are instinctively in need of communication and interaction with other human-beings. In the 21st century, new media technologies mean more than being just communication tools for people. As an extension of their lives, the young generations tend to communicate on social media rather than one-to-one in person. At the first glance, the importance of face-to-face communication may seem declining due to the growing demand in the use of new media technologies. However, the majority among the participants of this survey ($\cong 81.2\%$) claimed that the utilization of modern technologies increased interpersonal communication (appendix A, item 10). $\cong 78.7\%$ of the participants stated that the social media platforms increased interpersonal communication (appendix A, item 11). In this regard, it can be said that the form of communication shifted from physical interpersonal communication to technology-mediated interpersonal communication. Also, $\cong 41.5\%$ of them claimed that new media technologies increased face-to-face communication among people (appendix A, item 17). Considering the fact that the essence of interpersonal communication is not limited with the face-to-face interactions, it is worth stating at this point that new media platforms positively affected the communication between people. Amongst the 465 respondents, $\cong 53.7\%$ of them reported that the digital technologies facilitated exchange of feelings among individuals, $\cong 56.7\%$ of them argued that the usage of digital tools developed humans' communication skills, $\cong 79.7\%$ of them declared that the use of new media tools made it easier for people to start communication and $\cong 87\%$ of them stated that the use of

digital media platforms eliminated the time and the distance issue in interpersonal communication (appendix A, items 18, 19, 20 and 21). One of the reasons why social media is so popular today is the opportunity for people to interact with other individuals whenever they want without concerning about the time and the distance. With the globalisation and interactivity, people can communicate with other individuals as long as they have a smartphone and an Internet connection. Looking at the aforementioned percentages, it could be said that the majority of respondents reported that they were feeling positively regarding the usage of new media technologies in interpersonal communication.

In summary, the results have shown that the perception towards the usage of new media technologies into interpersonal communication were generally positive. Hence, people are getting used to new media technologies by utilizing them especially for their two-way communication, which is the most important activity of human interaction.

RQ2: Do New Media Technologies Have Improved the Interpersonal Communication Between Teachers and Students at Tertiary Education?

Results revealed after the analyses that the majority of the participants ($\cong 78.2\%$) confirmed that the use of new media technologies facilitated teacher-student interactions (appendix A, item 26). It could be seen from the statistics that the majority of the respondents have at least one social media account today. The accessibility and convenience of the new media platforms allow people to use it for their social interactions and engagements with other human-beings in every part of their lives. $\cong 86.8\%$ of the participants claimed that the new media tools increased the accessibility of teachers (appendix A, item 27). Hence, students can contact with their teachers at any time through social media platforms. In addition to this, $\cong 68.3\%$ of the

participants asserted that the digital media technologies removed the communication barrier between teachers and students (appendix A, item 33). $\cong 89.2\%$ of the participants declared that the utilization of digital media devices allowed students to communicate with their teachers through social media platforms in or out of the school settings which help both parties to reinforce their relationships and in turn, create a positive and efficient classroom environment (appendix A, item 41). In the past, teachers tended to keep a distance between themselves and their students when applying traditional education approaches. However, today, on the contrary, educators who apply the modern education approaches tend to establish closer relationships with their students, listen to their problems, and identify an educational approach based on the learners' needs and expectations. In doing so, social media helps to establish an environment for educators and learners to connect and express themselves to each other. $\cong 72.9\%$ of the participants claimed that the digital media technologies enabled teachers and students to create class groups on social media, which help teachers to establish a warm and sincere relationship with their students (appendix A, item 42). $\cong 73.1\%$ of the participants stated that the digital platforms encouraged students to start an interaction in the classroom much easier (appendix A, item 43). In the same line, Pal et al. argue that establishing a supportive environment in the classroom is beneficial for both the educators and learners equally. It gives the chance to the teachers to get to know students and notice their needs and expectations. In doing so, educators may develop their ways accordingly. On the other side, the learners may feel more comfortable, connected and close to their teacher which creates friendly classroom atmosphere. Hence, the learners would be more confident and relax when they are asking the questions to the educator. Teachers who embrace modern education approaches internalized the idea that the educators and students should be

communicating, discussing and sharing ideas regardless of time or other factors (2016).

RQ3: Do New Media Technologies Have Changed Teacher-Student Roles in Terms of Accessibility, Comprehension of Information, Self-Esteem and Motivation?

With the implementation of student-centered education approaches and advancements in new media technologies, the roles of teachers and students, the quality of education and learning/instruction processes and environments have been modified. In light of this, the findings revealed that out of the 465 participants, $\cong 52.6\%$ of them reported that the usage of innovative media technologies changed the role of teachers in the classroom because the education was more student-centered now (appendix A, item 32). Followed by $\cong 91.1\%$ of the participants who declared that the use of new media technologies facilitated accessibility of information (appendix A, item 27). Also, results showed that $\cong 73.7\%$ of the respondents claimed that the social media technologies facilitated comprehension of information whereas $\cong 64\%$ of the participants reported that the utilization of social media tools increased students' motivation (appendix A, items 28 and 29). Findings proceeded with $\cong 86.8\%$ of the participants who claimed that the use of new media platforms increased students' self-esteem (appendix A, item 30). $\cong 86.8\%$ (the majority) of the participants stated that the modern media technologies increased the accessibility of teachers (appendix A, item 31). Biesta et al. stated that the emergence and inclusion of the new media technologies caused the roles of educators to change. The classroom domination and power used to belong to the teachers only because the only source of information was the teachers. However, today power and authority are shared equally among the learners and educators because today, students are no longer passive receivers. Nowadays, the

learners have a power like social media, which allows students to build new knowledge and experiences on what they learn in the classroom. Hence, they started taking more active roles in decision-making processes concerning the teaching and the learning process (2015). In addition to this, the learners can create their own learning environments in or out of the school settings which boost their self-esteem. Also, due to the teacher-student interactions on social media, teachers are more accessible now. Students can reach out their course teachers whenever they need. Also, new media technologies rescued teachers from being the only source of information by creating electronic learning environments and providing excessive amount of information. All these opportunities not only help students for their courses but also motivate them to study and create better assignments supported by innovative media technologies.

RQ4: Do New Media Technologies Have Changed Teaching-Learning Process at Tertiary Education?

With the growing demand in the usage of new technology, people started to utilize new innovations as part of their teaching and learning activities. According to Domingo and Bradley, new media opportunities began to form new learning and instruction activities through modern technology. For instance, people can join several universities' open courses for self-development. Also, electronic libraries facilitate access to information. The internet environment provide limitless information to the users. For instance, when students have assignments, they can enrich their contents by benefiting from the new media technologies. This means that learning is no longer limited within the school settings. With the assistance of innovative media platforms, people can pursue their learning activities outside of the school settings as well. The findings of the study demonstrate that $\cong 72.4\%$ of the participants stated that the computer-projector-sound system-WIFI system should be used in the classroom for

teaching and learning processes, $\cong 20.2\%$ of them stated that social media platforms should be used in the classroom for teaching and learning processes and $\cong 5.6\%$ of them stated that Teams, Moodle or other e-learning platforms should be used in the classroom for teaching and learning processes. As mentioned earlier, the majority of the participants wanted to enrich their teaching and learning processes by utilizing the new media technologies. $\cong 54.1\%$ of them preferred MS PowerPoint whereas $\cong 20.2\%$ of them preferred social media platforms during classroom presentations for students and/or classroom instructions for teachers. This ratio proceeded with $\cong 19.7\%$ of the participants who preferred Electronic Whiteboards and $\cong 5.6\%$ participants who preferred IOS Keynote during classroom presentations. Such kind of platforms facilitated the flow and comprehension of information by appealing both the visual and affective intelligence. The findings revealed after the analyses that $\cong 96.3\%$ participants asserted that the use of new media technologies should be the part of learning and instruction at tertiary education (appendix A, item 25). $\cong 68.3\%$ of the participants reported that the use of new media technologies enhanced effectiveness of learning, $\cong 68.3\%$ of the respondents declared that the use of new media technologies enhanced effectiveness of teaching (appendix A, items 34 and 35). Adopting technology into the education has always been very beneficial in terms of preparing and presenting the course content in the classroom (Sun, 2019). $\cong 64.9\%$ of them claimed that the technological innovations enabled students to take active roles in decision-making process in the classroom (appendix A, item 37). Since the emergence and adaptation of new media technologies into education, students have started to express their ideas and preferences in educational approaches. Also, the majority of the participants ($\cong 83.4\%$) reported that the usage of innovative media technologies allowed students to pursue their learning activities outside of the school settings

(appendix A, item 38). $\cong 86.2\%$ of them claimed that the utilization of online technologies created a new source of information for students whereas $\cong 76.3\%$ of participants reported that the new media technologies enabled students to improve their course contents (appendix A, items 39 and 40). For instance, opportunities such as e-learning and e-library provide learners a new environment with quite useful materials and knowledge that lead academic, personal, emotional development and social growth (Sun, 2019). The learning and instruction processes have been expanded with all these improvements in innovative technology.

RQ5: With The Emergence of New Media Technologies, What Problems Do Teachers and Students Face in Their Interactions at Tertiary Education?

When it comes to academic success, no one would deny that the face-to-face communication among teachers and students is extremely important for both parties. In light of what mentioned in the former sentence, $\cong 63\%$ of the participants asserted that the technological tools caused technology addiction, which also declined face-to-face communication in person (appendix A, item 22). Nowadays, especially younger generation tend to spend most of their times in the virtual environments. For instance, even though it is not allowed to utilize smartphones in the classroom during the instruction, new generation cannot be separated from their smartphones. Unfortunately, this creates distractions for both students and the educators, causes less eye-contact with their peers or teachers and less physical activity. Followed by $\cong 52.6\%$ of respondents who reported that the use of social media platforms changed the role of teachers in the classroom in connection with the fact that education is now more student-centered (appendix A, item 32). This reflects the opinions of the traditionalist teachers because they still claim that the student-centered approaches weaken the educators by declining their power. However, according to Elledge et al.,

most of the countries started to shift their educational approaches from traditional to modern education approaches. Modern education approach is known as student-centered education. In this regard, modern education approaches require to consider students' needs and expectations. In this sense, teachers become guides, mentors and facilitators to their students, who help them to discuss and decide upon the future career plans. In this respect, it can be said that the roles of teachers have modified. $\cong 46.4\%$ of the respondents claimed that the social media technologies declined the authority of teachers in the classroom (appendix A, item 36). In the light of the previous sentence, it could be said that the new media technologies have given more power to the students. Therefore, the learners are more confident and self-sufficient in the classroom, which makes students more independent from their teachers. In the past, traditionalist teachers were claiming that the only authority and the only source of information were themselves, which would push students one step back from their educators. However, today modern approaches let both parties to connect. This makes students more confident and independent. Hence, the educators and learners can maintain healthy interactions through social media or face-to-face in person.

RQ6: With The Emergence of New Media Technologies, What Opportunities Do Teachers and Students Face in Their Interactions at Tertiary Education?

In this digital age, technological innovations provide lots of opportunities for people. Since the research was done within the tertiary education, participants were asked which technologies should be used for teaching and learning and $\cong 72.4\%$ of the participants declared the computer-projector-sound system-WIFI system, $\cong 20.2\%$ of them stated social media platforms and $\cong 5.6\%$ of them specified that the Teams, Moodle or other e-learning platforms should be used in the classroom for teaching and

learning processes. As it identified earlier, the majority of both students and faculty members who participated in this study reported that they want new media technologies as part of learning and instruction at tertiary education. Considering the importance of communication between teachers and students, $\cong 26\%$ of the respondents stated that they found it appropriate to ask questions to the instructors through social media platforms. During classroom presentations for students and/or classroom instructions for teachers, $\cong 54.1\%$ participants preferred MS PowerPoint whereas $\cong 20.2\%$ of them preferred social media platforms. This ratio proceeded with $\cong 19.7\%$ participants who preferred Electronic Whiteboards and $\cong 5.6\%$ of the participants who preferred IOS Keynote during classroom presentations for students and/or classroom instructions for teachers. Results revealed that the majority of the participants, $\cong 78.2\%$ of them asserted that the use of new media technologies facilitated teacher-student interactions. In addition to this, $\cong 68.3\%$ participants reported that the use of new media technologies removed the communication barrier between teachers and students (appendix A, item 33). $\cong 89.2\%$ of the respondents claimed that the use of new media technologies allowed students to communicate with their teachers through social media platforms in or out of the school settings (appendix A, item 38). $\cong 72.9\%$ of the participants declared that the new media technologies enabled teachers and students to create class groups on social media, which help teachers to establish a warm and sincere relationship with their students (appendix A, item 42). As Uses and Gratifications Theory suggest, human-beings always find reasons for utilizing and engaging in social media. $\cong 73.1\%$ of the participants asserted that the use of technological innovations encouraged students to start an interaction in the classroom much easier because innovative media technologies allowed teachers and students to improve their relationships outside of the school settings as well

(appendix A, item 43). This phrase reminds the Social Network Theory, which identify how social connections and interactions are formed in the society.

Chapter 5

CONCLUSION

This part of the study essentially contains a main summary of the research with more conclusive and explanatory approaches. The results obtained within the scope of the research and the interpretation of these results are discussed extensively in this section. In addition, meaningful and explanatory answers to the research questions have been presented in this part. Finally, this section also includes recommendations to further researches.

5.1 Summary of the Study

This study attempted to explore the impacts of new media technologies on interpersonal communication and teacher-student interactions within the scope of EMU in the 2019-20 Spring semester. Students and faculty members from faculties which are Communication and Media Studies, Education, Engineering and Business and Economics compose the sample of the research. These faculties were chosen due to the high number of students and faculty members. 394 students and 71 faculty members were participated in this research. Obtained data regarding the changes that the new media technologies caused in the interpersonal communication, indicated that the majority of participants claimed that the use of new media technologies increased interpersonal communication and face-to-face communication, facilitated exchange of feelings, made it easier for people to start communication. Shabir et al. claimed in line with the previous sentence that the digital media platforms began to bring people together and allow them to involve in mass communication. Despite of the perception

that digitalization declined physical communication, new media technologies caused more communication and interaction by offering computer-mediated communication. All these opportunities enriched interpersonal communication and ensure freedom of expression among people. Also, the majority of the respondents stated that the use of new media technologies eliminated the time and the distance issue in interpersonal communication. As mentioned by Greenhow and Lewin, the use of new media platforms not only facilitate interactivity among people. It also enable individuals to communicate regardless of the time and distance. With the globalization and improvements in ICT, people had the opportunity to socialize with each other even if they are on the other part of the world. Data concerning how new media technologies changed the interpersonal communication between teachers-students demonstrated that -most of the participants claimed that the digital tools facilitated teacher-student interactions, increased accessibility of teachers, removed communication barriers among teachers and students, allowed them to communicate in or out of the school settings and helped teachers and students to establish a warm and sincere relationship. In light of these data, unlike the traditionalist teachers, modern instructors tend to establish and maintain a sufficient communication with their students. In the past, traditionalists were supporting the argument that there should always be a distance between the educator and the learner. However, modern teachers, who support student-centered education approaches, care about the interaction and communication with their students. Modern educators mostly adopt new media technologies into their educational approaches. In doing so, the teachers establish a good connections with their students because they believe that the teacher-student interactions are vital for students' emotional, cognitive and academic development.

In addition, Chi-square tests results revealed that a significant difference was found between the responses given by the participants and variables such as age and positions of the participants and faculties at EMU. In other words, answers of the respondents differed based on the aforementioned variables. For instance, while participants from faculties of social sciences preferred to communicate through social media platforms, respondents from faculties of positive sciences opted to communicate face-to-face in person. The reason for science-based faculties to prefer face-to-face communication might be related with the fact that the practical courses require physical activity. Hence, face-to-face communication is especially significant in order to follow the progress of the students both in practice and theory. On the other hand, members of such faculties as Communication and Media Studies and Education, are equipped with verbal and nonverbal communication skills and technological knowledge. Hence, it was inevitable that they preferred technology-mediated communication. In connection to this, WhatsApp was revealed to be the most used and preferred application among other social media platforms. Since the data were collected during the pandemic called COVID-19, people's perceptions and insights were extremely significant. The reason is related with the high use and engagement in new media technology during this crisis phrase. Lockdown caused people to utilize new media platforms more than ever. Therefore, the data of this research is very valuable because it reflects the opinions of the stakeholders during the crisis period.

5.2 Conclusion Drawn from the Study

The ultimate aim of this study was to investigate the positive and negative impacts of new media technologies on the interpersonal communication and teacher-student interactions within the scope of Eastern Mediterranean University during the COVID-19 pandemic process. The data collection process and the partial curfew in

TRNC coincided. This increases the value and significance of the data because during the partial curfew, people were at their homes, and this was the time when the demand and usage upon the new media technologies were the greatest. Since this research was exactly about the effects and usage of new media technologies, obtained data ensured the most sincere and realistic information. Moreover, in this period, even those who did not use the technology started to use it because such hard times required being a part of it. This has radically changed the essence and purpose of the social media use. In the 21st century, people have witnessed so many changes in communication forms/ways due to the emergence in the modern media technologies. In this respect, fields such as communication and education are the most affected areas. Face-to-face communication have changed to the technology-mediated communication along with the inclusion of new media technologies into our lives. Nowadays, people prefer to communicate through the social media platforms such as WhatsApp, rather than establishing face-to-face interactions in person. Such platforms allow individuals to communicate with masses regardless of the time and distance issue. All these improvements and opportunities allow people to choose social media platforms for socialization, which also increases the interaction and communication among people.

It was revealed that the perceptions towards the new media technologies within the interpersonal communication and teacher student interactions were mostly positive because the findings have affirmed that the majority of the respondents claimed that the new media technologies have improved, reinforced and increased the interpersonal communication regardless of time and distance by offering new media platforms for interactivity. Also, the learners and educators reported that they wanted new media technologies as part of the teaching and learning processes. This shows that the ideas of teachers who resisted not to adopt student-centred education for years have started

to change. In the past, educators were afraid to switch to modern educational approaches because they did not want to share or lose their authority and power. However, today's research has proven that the power is started being shared equally between the teachers and students in the classroom, perspective on student-centered education is very positive and technological developments are also used to enrich learning and teaching. Also, this research have confirmed that the WhatsApp revealed to be the most used application among participants in their interpersonal communication. Today, modern teachers allow their students to communicate themselves through such social media platforms when they have questions regarding their courses or other academic problems. This leads academic and social development for students because they can pursue his/her learning process with his/her educator out of the school settings as well. Especially participants from the Social Sciences Faculties like the Communication and Media Studies and Education, declared that they preferred to communicate via the social media platforms whereas the respondents from the Positive Sciences Faculties like the Engineering and Business and Economics reported that they preferred face-to-face communication mostly. The reason for the participants from social sciences faculties preferring to communicate through social media platforms may be because students' verbal/non-verbal communication and technological competencies are highly developed as theory-based courses are offered in such faculties. On the other hand, in the positive sciences faculties, generally practical courses are offered and face-to-face interactions, observations and physical contacts are required in this process. It was revealed after the analyses that the participants who belong to the age group of 18-23 reported that they mostly preferred to communicate via social media platforms. Since the new generation (generation Z) was born into the technological developments, it was not surprising to find this.

Younger generation tends to spend most of their times in virtual environments. On the other hand, participants who were between the ages of 24 and above reported that they preferred face-to-face communication. One of the most significant reasons to prefer face-to-face communication might be the easy and better understanding because face-to-face communication can be supported by the facial expressions, gestures and body language to ensure a stronger expression. To identify the differences between participants, chi-square tests were performed which was demonstrated that there were a significant difference between the responses to questions and participants' variables such as age and positions. This means that the responses obtained from the participants differed based on these variables.

5.3 Recommendation for Further Research

The ultimate aim of the study was to raise awareness concerning the impacts of new media technologies on interpersonal communication and teacher-student interactions in the following faculties at EMU which were the Faculty of Communication and Media Studies, Faculty of Business and Economics, Faculty of Education and Faculty of Engineering. In this regard, data was solicited from faculty members and students in the 2019-20 Spring semester. It would be strongly suggested that the future researches go beyond the four aforementioned faculties.

A further research on the interpersonal communication and technological competencies of teachers and students would be recommended to conduct by including all the universities in TRNC to provide significant data for the subject matter.

Even though the attempts to acquire and present data regarding how new media technologies affected the interpersonal communication and teacher-student interactions at tertiary education, some parts may still be insufficient. Therefore, at this point, additional data collection tools would be employed with different samples.

Although comprehensive data were acquired at the end of the research, in-depth interviews should be used in the future researches in terms of filling the gap that surveys cannot fill. That is why, it is highly suggested that the future researchers utilize mixed methodologies, which is the combination of quantitative and qualitative research methodologies, to obtain deeper and more extensive data. Furthermore, it would be significant if the future researches address incomplete aspects of this study such as technological adequacy of instructors and students. In doing so, limitations of this research can be reduced with new and comprehensive suggestions related to the topic.

REFERENCES

- A Look Back at the Top Apps and Games of the Decade: App Annie Blog. (2019, December 16). Retrieved April 10, 2020, from <https://www.appannie.com/en/insights/market-data/a-look-back-at-the-top-apps-games-of-the-decade/>
- Adelmann, K. (2012). The Art of Listening in an Educational Perspective. *Education Inquiry*, 3(4), 513–534.
- Ahn, J. (2011). The effect of social network sites on adolescent's social and academic development: Current theories and controversies. *Journal of the American Society for Information Science and Technology*, 62(8), 1435–1445.
- Akpınar, B. (2010). Yapılandırmacı Yaklaşımda Öğretmenin, Öğrencinin ve Velinin Rolü. *Eğitim Bir Sen Dergisi*, 6(16), 15–20.
- Akpınar, B., & Aydın, K. (2007). Eğitimde Değişim ve Öğretmenlerin Değişim Algıları. *Eğitim Ve Bilim*, 32(144).
- Akram, W., & Kumar, R. (2017). A Study on Positive and Negative Effects of Social Media on Society. *International Journal of Computer Sciences and Engineering*, 5(10), 347–354.

- Alias. (2018, November 25). Cultural Differences between the USA and Japan. Retrieved May 25, 2020, from <https://owlcation.com/social-sciences/Cultural-Differences-Between-the-US-and-Japan>
- Anikina, O. V., & Yakimenko, E. V. (2015). Edutainment as a Modern Technology of Education. *Procedia - Social and Behavioral Sciences*, 166, 475–479.
- Apodaca, M. (2019, August 9). How to Maintain Strong Interpersonal Relationships. Retrieved February 25, 2020, from <https://www.lifehack.org/842962/interpersonal-relationship>
- Balcı, A. (2004). *Sosyal Bilimlerde Araştırma Yöntem, Teknik ve İlkeler*. Ankara: Pegem Akademi Yayıncılık.
- Best in North Cyprus Universities. (2020). Retrieved April 10, 2020, from <https://www.emu.edu.tr/north-cyprus-universities>
- Biesta, G., Priestley, M., & Robinson, S. (2015). The role of beliefs in teacher agency. *Teachers and Teaching*, 21(6), 624–640.
- Bonaccio, S., O'Reilly, J., O'Sullivan, S. L., & Chiochio, F. (2016). Nonverbal Behavior and Communication in the Workplace. *Journal of Management*, 42(5), 1044–1074.
- Bulut, M. (2016). Effect of Micro Teaching Applications Practiced by the Preservice Teachers in the Scope of First Turkish Reading and Writing Lesson on Their

Verbal Communication Skills. *Universal Journal of Educational Research*, 4(12), 2863–2874.

Burke, A. (2011). Group Work: How to Use Groups Effectively. *The Journal of Effective Teaching*, 11(2), 87–95.

Businessstopia. (2018, January 6). Transactional Model of Communication. Retrieved from <https://www.businessstopia.net/communication/transactional-modelcommunication>.

Butts, C. T. (2008). Social network analysis: A methodological introduction. *Asian Journal of Social Psychology*, 11, 13–41.

Büyükbaykal, C. I. (2015). Communication Technologies and Education in the Information Age. *Social and Behavioral Sciences*, 174, 636–640.

Chugh, R., & Ruhi, U. (2017). Social media in higher education: A literature review of Facebook. *Education and Information Technologies*, 23(2), 605–616.

Chugh, R., & Ruhi, U. (2019). Social Media for Tertiary Education. *Encyclopaedia of Education and Information Technologies*, 1–6.

Chung, M., & Kim, J. (2016). The Internet Information and Technology Research Directions based on the Fourth Industrial Revolution. *KSII Transactions on Internet and Information Systems*, 10(3), 1311-1320.

- Conrad, D., & Newberry, R. (2011). 24 Business Communication Skills: Attitudes of Human Resource Managers versus Business Educators. *American Communication Journal*, 13(1), 4–23.
- Cramer, H., Juan, P. D., & Tetreault, J. (2016). Sender-intended functions of emojis in US messaging. *Proceedings of the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services - MobileHCI 16*.
- Devito, J. A. (2012). *Interpersonal communication book* (13th ed.). USA: Pearson Education.
- Domingo, J. R., & Bradley, E. G. (2017). Education Student Perceptions of Virtual Reality as a Learning Tool. *Journal of Educational Technology Systems*, 46(3), 329–342.
- Downer, J. T., Stuhlman, M., Schweig, J., Martínez, J. F., & Ruzek, E. (2015). Measuring Effective Teacher-Student Interactions from a Student Perspective. *The Journal of Early Adolescence*, 35(5-6), 722–758.
- Dux, J. (2018). Social Live-Streaming: Twitch.TV and Uses and Gratification Theory Social Network Analysis. *Computer Science & Information Technology*, 47–61.
- Elledge, L. C., Elledge, A. R., Newgent, R. A., & Cavell, T. A. (2015). Social Risk and Peer Victimization in Elementary School Children: The Protective Role of Teacher-Student Relationships. *Journal of Abnormal Child Psychology*, 44(4), 691–703.

- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- Gamble T. K. & Gamble M.W. (2014). *Interpersonal Communication: Building Connections Together*. USA: SAGE Publications, Inc.
- Goertz, G. & Mahony, J. (2012). *A tale of two cultures: Qualitative and quantitative research in the social sciences*. Princeton, NJ: Princeton University Press.
- Greenhow, C., & Lewin, C. (2015). Social media and education: reconceptualizing the boundaries of formal and informal learning. *Learning, Media and Technology*, 41(1), 6–30.
- Grey, J. R., Grove, S. K., & Sutherland, S. (2017). *The practice of nursing research: conduct, critique, and utilization* (8th ed.). St. Louis, Missouri: Elsevier, Saunders.
- Guzzo, R. A., & Dickson, M. W. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47(1), 307–338.
- Hafen, C. A., Ruzek, E. A., Gregory, A., Allen, J. P., & Mikami, A. Y. (2015). Focusing on teacher–student interactions eliminates the negative impact of students’ disruptive behavior on teacher perceptions. *International Journal of Behavioral Development*, 39(5), 426–431.

- Halverson, R., Kallio, J., Hackett, S., & Halverson, E. (2018). Participatory Culture as a Model for How New Media Technologies Can Change Public Schools. *The Emerging Learning Design Journal*, 3(1), 1–6.
- Hamid, N. A., Ishak, M. S., & Yazam, S. M. (2015). Facebook, YouTube and Instagram: Exploring Their Effects on Undergraduate Students' Personality Traits. *The Journal of Social Media in Society*, 4(2), 138.
- Hanlon, R. E. (2018). *Classroom Movement: Study in Educational Practice of Physical Movement within Traditional Educational Settings*. Published doctoral thesis, Aurora University.
- Hanson, R. E. (2010). *Mass Communication: Living in a Media World* (3rd ed.). Washington D.C.: CQ Press.
- Harris, T. E., & Sherblom, J. C. (2018). *Small group and team communication* (5th ed.). Long Grove, IL: Waveland Press, Inc.
- Hartley, P. (2000). *Interpersonal Communication* (2nd ed.). Abingdon, United Kingdom: Routledge.
- He, L. (2020). Application of Computer Information Technology in Modern Distance Education System. *Journal of Physics: Conference Series*, 1453.
- Hunter, D. (2007). *The art of facilitation: The essentials for leading great meetings and creating group synergy*. Auckland: Random House.

- Hussein, S. A., & Andujar, A. (2019). Mobile-mediated communication and students listening skills: a case study. *International Journal of Mobile Learning and Organisation*, 13(3), 309.
- Izadinia, M. (2015). Student teachers' and mentor teachers' perceptions and expectations of a mentoring relationship: do they match or clash? *Professional Development in Education*, 42(3), 387–402.
- Jamali, M., & Abolhassani, H. (2006). Different Aspects of Social Network Analysis. *2006 IEEE/WIC/ACM International Conference on Web Intelligence*.
- Juvova, A., Chudy, S., Neumeister, P., Plischke, J., & Kvintova, J. (2015). Reflection of Constructivist Theories in Current Educational Practice. *Universal Journal of Educational Research*, 3(5), 345–349.
- Kadushin, C. (2012). *Understanding Social Networks: Theories, Concepts and Findings*. New York: Oxford University Press, Inc.
- Kämpfen, F., & Maurer, J. (2018). Does education help “old dogs” learn “new tricks”? The lasting impact of early-life education on technology use among older adults. *Research Policy*, 47(6), 1125–1132.
- Katz, E., Haas, H., & Gurevitch, M. (1973). On the Use of the Mass Media for Important Things. *American Sociological Review*, 38(2), 164–181.

- Kaya, T., & Bicen, H. (2016). The effects of social media on students' behaviors; Facebook as a case study. *Computers in Human Behavior*, 59, 374-379.
- Kıran, H. (Ed.). (2012). *Etkili Sınıf Yönetimi* (8th ed.). Ankara: Anı Yayıncılık
- Kırık, A. M. (2017). Yeni Medya Aracılığıyla Değişen İletişim Süreci: Sosyal Paylaşım Ağlarında Gençlerin Konumu. *Gumushane University E-Journal of Faculty of Communication*, 5(1), 231-261.
- Konijn, E. A., Utz, S., Tanis, M., & Barnes, S. B. (2009). *Mediated interpersonal communication*. New York, NY: Routledge.
- Krahenbuhl, K. S. (2016). Student-centered Education and Constructivism: Challenges, Concerns, and Clarity for Teachers. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 89(3), 97–105.
- Kuruç-Kutoglu, U. K., & Opiyo, B. (2020). Social media usage and activism by non-western budding PR professionals during crisis communication. *Corporate Communications: An International Journal*, 25(1), 98-112.
- Küçükahmet L. (2001). *Öğretim ilke ve yöntemleri* (12th ed.). Ankara: Nobel Yayın Dağıtım.
- Lai, C., Yeung, Y., & Hu, J. (2015). University student and teacher perceptions of teacher roles in promoting autonomous language learning with technology outside the classroom. *Computer Assisted Language Learning*, 29(4), 703–723.

- Lange, C., & Costley, J. (2019). The negative impact of media diversity on self-regulated learning strategies and cognitive load. *Issues in Educational Research, 29*(1).
- Lasswell's model. (2014, July 10). Retrieved from <https://www.communicationtheory.org/lasswells-model/>.
- Laswell, H. (1953). The structure and function of communication in society. In L. Bryson (Ed.), *The communication of ideas: a series of addresses*. New York: Harper & Co
- Leung, L. & Wei, R. (2000). More than just talk on the move: Uses and Gratifications of the Cellular Phone, *Journalism & Mass Communication Quarterly, 77*(2), 308-320.
- Lin, F. (2019). Positive or negative: emoji usage in online social media. *Proceedings of the 4th International Conference on Humanities Science, Management and Education Technology (HSMET 2019), 334*.
- Lucas, S. E. (2015) *The Art of Public Speaking* (12th ed.). USA: McGraw-Hill Education
- Ludlow, R., & Panton, F. (1992). *The essence of effective communication*. Prentice-Hall.

- Lustig, M. W., & Koester, J. (1996). *Intercultural Competence: Interpersonal Communication across Cultures* (2nd ed.). New York: HarperCollins College Publishers.
- Lynch, M. (2017, November 21). 9 Ways that Technology Boosts Student Confidence in the Classroom. Retrieved January 29, 2020, from <https://www.thetechedvocate.org/9-ways-technology-boosts-student-confidence-classroom/>.
- Madsen, E. S., & Mikkelsen, L. L. (2017). The need for knowledge modification in technology change: A framework to consider changes in domain complexity, knowledge and productivity. *Production Planning & Control*, 29(2), 91-105.
- Manca, S., & Ranieri, M. (2016). “Yes for sharing, no for teaching!”: Social Media in academic practices. *The Internet and Higher Education*, 29, 63–74.
- McLuhan, M. (1994). *Understanding media: the extensions of man* (1st ed.). Cambridge: The MIT Press.
- Mehrad, J., & Tajer, P. (2016). Uses and Gratification Theory in Connection with Knowledge and Information Science: A Proposed Conceptual Model. *International Journal of Information Science and Management*, 14(2), 1–14.
- Mihelj, S., Leguina, A., & Downey, J. (2019). Culture is digital: Cultural participation, diversity and the digital divide. *New Media & Society*, 21(7), 1465–1485.

- Montag, C., Błaszkiwicz, K., Sariyska, R., Lachmann, B., Andone, I., Trendafilov, B., Markowetz, A. (2015). Smartphone usage in the 21st century: who is active on WhatsApp? *BMC Research Notes*, 8(1).
- Naikoo, A. A., Thakur, S. S., Guroo, T. A., & Lone, A. A. (2018). Development of Society under the Modern Technology- A Review. *Scholedge International Journal of Business Policy & Governance ISSN 2394-3351*, 5(1), 1–8.
- Nieborg, D. B., & Helmond, A. (2018). The political economy of Facebook's Platformization in the Mobile Ecosystem: Facebook Messenger as a platform instance. *Media, Culture & Society*, 41(2), 196–218.
- Pal, N., Halder, S., & Guha, A. (2016). Study on Communication Barriers in the Classroom: A Teacher's Perspective. *Online Journal of Communication and Media Technologies*, 6(1).
- Pandey, A., & Karve, S. (2017). Understanding the Relationship of Team Roles and Communication in Team Tasks. *International Journal of Business Insights & Transformation*, 11(1), 22–29.
- Papsdorf, C. (2015). How the Internet automates communication. *Information, Communication & Society*, 18(9), 991–1005.
- Person. (2015, July 22). Roles of a Teacher in the Classroom. Retrieved 14, 2019, from <https://www.education.gov.gy/web/index.php/teachers/tips-for-teaching/item/1603-roles-of-a-teacher-in-the-classroom>.

- Pielmeier, M., Huber, S., & Seidel, T. (2018). Is teacher judgment accuracy of students' characteristics beneficial for verbal teacher-student interactions in classroom? *Teaching and Teacher Education*, *76*, 255–266.
- Roberts, J. A., & David, M. E. (2020). The Social Media Party: Fear of Missing Out (FoMO), Social Media Intensity, Connection, and Well-Being. *International Journal of Human-Computer Interaction*, *36*(4), 386–392.
- Rosengren, K. E. (2000). *Communication an Introduction*. London: SAGE.
- Segrin, G. & Flora, J. (2000). Poor social skills are a vulnerability factor in the development of psychological problems. *Human Communication Research*, *26*(3) 489-514
- Selders, S., S. (2019). Traditional Media vs. New Media: Which Methods Belong in Your Marketing Plan? Retrieved 12, 2019, from <https://www.webfx.com/internet-marketing/traditional-media-vs-new-media.html>.
- Selwyn, N., & Stirling, E. (2016). Social media and education ... now the dust has settled. *Learning, Media and Technology*, *41*(1), 1–5.
- Shabir, G., Safdar, G., Jamil, T., & Bano, S. (2015). Mass Media, Communication and Globalization with the Perspective of 21st Century. *IISTE*, *34*.

- Siddiqui, S., & Singh, T. (2016). Social Media its Impact with Positive and Negative Aspects. *International Journal of Computer Applications Technology and Research*, 5(2), 71–75.
- Skoric, M. M., Zhu, Q., Goh, D., & Pang, N. (2016). Social media and citizen engagement: A meta-analytic review. *New Media & Society*, 18(9), 1817–1839.
- Skrypnyk, O., Joksimović Srećko, Kovanović Vitomir, Gašević Dragan, & Dawson, S. (2015). Roles of course facilitators, learners, and technology in the flow of information of a cMOOC. *The International Review of Research in Open and Distributed Learning*, 16(3).
- Sloan, W. D., & Zhou, S. (Eds.). (2015). *Research Methods in Communication* (3rd ed.). Northport, USA: Vision Press.
- Smith, B. E. (2015). Enhancing motivation through student-teacher Facebook relationships. *People: International Journal of Social Sciences*, 1(1), 34–41.
- Sobaih, A. E. E., Moustafa, M. A., Ghandforoush, P., & Khan, M. (2016). To use or not to use? Social media in higher education in developing countries. *Computers in Human Behavior*, 58, 296–305.
- Southren, J. (2019, July 3). The Difference between New Media and Social Media. Retrieved from <https://southren.ca/the-difference-between-new-media-and-social-media/>.

- Stewart, M. C., & Arnold, C. L. (2017). Defining Social Listening: Recognizing an Emerging Dimension of Listening. *International Journal of Listening*, 32(2), 85–100.
- Stukalenko, N. M., Zhakhina, B. B., Kukubaeva, A. K., Smagulova, N. K., & Kazhibaeva, G. K. (2016). Studying innovation technologies in modern education. *International Journal of Environmental & Science Education*, 11(15), 7297–7308.
- Sun, J. C. Y., & Wu, Y. T. (2016). Analysis of Learning Achievement and Teacher–Student Interactions in Flipped and Conventional Classrooms. *The International Review of Research in Open and Distributed Learning*, 17(1).
- Sun, Y. (2019). Changes from the Internet Language to Emoji*. *Proceedings of the 6th International Conference on Education, Language, Art and Inter-Cultural Communication (ICELAIC 2019)*, 378.
- Sutikno, T., Handayani, L., Stiawan, D., Riyadi, M. A., & Subroto, I. M. I. (2016). WhatsApp, Viber and Telegram which is best for Instant Messaging? *International Journal of Electrical and Computer Engineering (IJECE)*, 6(3), 909.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach’s alpha. *International Journal of Medical Education*, 2, 53-55.

- Thomas, G. (2010). Facilitator, Teacher, or Leader? Managing Conflicting Roles in Outdoor Education. *Journal of Experiential Education*, 32(3), 239–254.
- Trespacios, J. (2017). Exploring Small Group Analysis of Instructional Design Cases in Online Learning Environments. *Online Learning*, 21(1).
- Tunçay, S. S., & Özer, P. S. (2017). Asil-Vekil İlişkilerinin Kültürel Bağlamda Sosyal Ağ Kuramı Çerçevesinde Sosyal Ağ Analizi Kullanılarak İncelenmesi. *İşletme Araştırmaları Dergisi*, 9(2), 478–510.
- Valkenburg, P. M. (2017). Understanding Self-Effects in Social Media. *Human Communication Research*, 43(4), 477–490.
- Vissak, T. (2010). Recommendations for Using the Case Study Method in International Business Research. *The Qualitative Report*, 15(2), 370-388.
- West, R., & Turner, L. H. (2011). *Understanding Interpersonal Communication: Making Choices in Changing Times* (2nd ed.). Boston: Cengage Learning.
- Whitcomb, C. A., & Whitcomb, L. E. (2013). *Effective interpersonal and team communication skills for engineers*. Hoboken, NJ: IEEE Press.
- Wood, J. T. (2014). *Interpersonal Communication - Everyday Encounters* (8th ed.). Cengage Learning, Inc.

- Yengin, D. A. (2016). Social Media and Smart Mobile Technology: Smart Social Lives. *The Turkish Online Journal of Design, Art and Communication*, 6(2), 105–113.
- Yin, R. K. (2014). *Case study research: design and methods* (5th ed.). Thousand Oaks, CA: Sage.
- Younes, M. B., & Zoubi, S. A.-. (2015). The Impact of Technologies on Society: A Review. *IOSR Journal of Humanities and Social Science*, 20(2), 82–86.
- Z., G. (2013, August 19). Models of Communication. Retrieved November 29, 2019, from <http://thecommunicationprocess.com/models-of-communication/>.
- Zeki, C. P. (2009). The importance of non-verbal communication in classroom management. *Procedia - Social and Behavioral Sciences*, 1(1), 1443–1449.
- Zhu, X. (2018). The Integration of Media Technology and the Change of Education (IMTCE) — A Study of Model of the Impact of Media Technology on Education. *International Journal of Information and Education Technology*, 8(6), 422–427.

APPENDICES

Section 2

Questions concerning the use of Technology

7. When did you have your first personal computer?

- a) Early 1990's b) late 1990's c) between the years 2000-2007 d) between the years 2008-2015 e) after the year 2015

8. When did you first start using the Internet?

- a) Early 1990's b) late 1990's c) between the years 2000-2007 d) between the years 2008-2015 e) after the year 2015

9. When you communicate, which one of the following do you prefer the most?

- a. Communicating through Social media platforms (e.g., WhatsApp, Facebook etc.)
- b. Communicating one-to-one in-person (face-to-face communication)
- c. Communicating on phone
- d. Communicating through e-mail
- e. Other, (please specify) _____

10. Do you think that new media technologies improve interpersonal communication?

- a. Yes b. No

11. Do you think that social media platforms improve interpersonal communication?

- a. Yes b. No

12. Which of the following Social media platforms do you use the most for interpersonal communication?

a. Facebook b. Instagram c. WhatsApp d. Viber e. Messenger f. Other, (please specify) _____

13. Which of the following technological tools/platforms do you think should be used the most in the classroom in teaching and learning processes?

a. Computer-Projector-Sound System-WIFI system

b. Social media platforms (WhatsApp, Facebook, Instagram etc.)

c. None of the above

d. Other, (please specify) _____

Section 3

Questions regarding Classroom Interactions

14. When students have questions regarding their courses, which one of the following do you think is more appropriate?

- a. Consulting the instructors during the class period or/and at office hours,
- b. Communicating via Social media platforms (WhatsApp, Viber, Facebook, Messenger, etc.),
- c. Communicating via e-mail,
- d. Communicating via phone,
- e. Other, (please specify)_____

15. During classroom presentations for students and/or classroom instructions for teachers, which new technologies do you prefer the most?

- a. Social media platforms (e.g., YouTube, WhatsApp etc.) b. Microsoft PowerPoint
- c. Electronic Whiteboards d. None of them e. Other, (please specify) _____

16. When students have problems concerning personal, social or academic affairs, which one of the following do you think is more appropriate?

- a. Consulting the instructors during the class period or/and at office hours,
- b. Communicating via Social media platforms (WhatsApp, Viber, Facebook, Messenger, etc.),
- c. Communicating via e-mail,
- d. Communicating via phone,
- e. Other, (please specify)_____

Section 4

The Use of New Media Technologies in Interpersonal Communication

Please tick one option to show your degree of agreement

5: Strongly Agree 4: Agree 3: Undecided 2: Disagree 1: Strongly Disagree

The use of new media technologies;					
17. increased face-to-face communication between people	5	4	3	2	1
18. facilitated exchange of feelings between individuals	5	4	3	2	1
19. developed human's communication skills	5	4	3	2	1
20. made it easier for people to start communication	5	4	3	2	1
21. eliminated the time and distance issue in interpersonal communication	5	4	3	2	1
22. caused technology addiction which also decline face-to-face communication among people	5	4	3	2	1
23. changed the format (way) of face-to-face communication from face-to-face communication to face-to-face communication through technology	5	4	3	2	1

Section 5

The Use of New Media Technologies in Interpersonal Communication at Tertiary (University) Education

The use of new media technologies;					
24. is vital concerning teacher-student interactions at tertiary education	5	4	3	2	1
25. should be the part of learning and instruction at tertiary education	5	4	3	2	1
26. facilitated teacher-student interactions	5	4	3	2	1
27. facilitated accessibility of information	5	4	3	2	1
28. facilitated comprehension of information	5	4	3	2	1
29. increased student's motivation	5	4	3	2	1
30. increased student's self-esteem	5	4	3	2	1
31. increased the accessibility of teachers	5	4	3	2	1
32. changed the role of teachers in the classroom because the education is more student-centred now	5	4	3	2	1
33. removed the communication barrier between teachers and students	5	4	3	2	1
34. enhanced the effectiveness of learning	5	4	3	2	1
35. enhanced the effectiveness of teaching	5	4	3	2	1
36. declined the authority of teacher in the class	5	4	3	2	1
37. enabled students to take active roles in decision-making process in the classroom	5	4	3	2	1
38. allow students to pursue their learning activities outside of the school settings	5	4	3	2	1
39. created a new source of information for students	5	4	3	2	1
40. enabled students to improve their course contents	5	4	3	2	1
41. allow students to communicate with their teachers through social media platforms in or out of the school settings	5	4	3	2	1
42. enable teachers and students to create class groups on social media which help teachers to establish a warm and sincere relationship with their students	5	4	3	2	1
43. encourage students to start an interaction in the classroom much easier because new media technologies allow teachers and students to improve their relationships outside of the school settings as well	5	4	3	2	1

Appendix B: Consent Form

Dear Participant (s);

I conduct this research as part of my M.A thesis. The purpose of this study is to figure out to what extent have the new media technologies changed the interactions between teachers and students at Eastern Mediterranean University. For this study, data will be collected from faculty members and students who study or teach any of the following faculties at EMU: *Faculty of Education, Faculty of Communication and Media Studies, Faculty of Engineering and Faculty of Business and Economics.*

Collected data will be used for scientific purposes only. Confidentiality is essential. Therefore, no name or other identity information will be requested from the participants during the survey. Also, all the necessary permissions have been obtained. It is utmost importance that you provide sincere and honest answers for given questions in order to ensure valid and reliable data.

The questionnaire will take 10-15 minutes to complete. Participation is entirely voluntary. The participants may stop filling the survey any time they want.

Please answer all questions with honesty and sincerity. Thank you for your valuable time and taking part in this study.

You may contact with us for further questions and information.

Ahmet İyici

Assist. Prof. Dr. Ülfet Kutoğlu Kuruç

M.A Student

Thesis Supervisor

Eastern Mediterranean University

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E-mail: ulfet.kutoglu@emu.edu.tr

Tel: 0533 831 52 24 / (0392) 630 2613

Tel: (0392) 630 1041

I read and understood the consent form.

Participant's Signature:

Date:.....

Appendix C: Permit Report Received from EMU's Scientific Research and Publication Ethics Board (BAYEK)



Etik Kurulu / Ethics Committee

Reference No: ETK00-2020-0121

06.04.2020

Subject: Your application for ethical approval.

Re: Ahmet İyici (18500078)

Faculty of Communication and Media Studies.

EMU's Scientific Research and Publication Ethics Board (BAYEK) has approved the decision of the Ethics Board of Communication (date: **02.03.2020**, issue: **70**) granting Ahmet İyici from the Faculty of Communication and Media Studies to pursue with his MA thesis work titled "**The Impacts of New Media Technologies on Interpersonal Communication : Case Study of Teacher Student Interaction at EMU**" supervised by Assist. Prof. Dr. Ülfet Kutoğlu Kuruç.


Prof. Dr. Yücel Vural
Chair, Board of Scientific Research and Publication Ethics - EMU

YV/ns.


www.emu.edu.tr

Appendix D: Permission Letter Received from the Faculty of Education

7/22/2020 Posta - AHMET İYICI - Outlook

← Tümünü yanıtla ✓ Sil Gereksiz Engelle ...

Re: Yüksek Lisans Tezi için Veri Toplama İzni Hk.

 Eda Kargı Yazgın
4.04.2020 Cmt 10:29
Kime: Prof. Dr. Ahmet Pehlivan; FYK
Bilgi: Betül Akilhoca; AHMET İYICI; Nihan Koran; AYSE ISIK GURSİMSEK; hazalrenkmen21@hotmail.com

Sevgili Ahmet İyici, araştırmanın veri toplama işlemini Temel Eğitim Bölümü öğrencileri ve öğretim elemanları ile (bilgi ve onamlarını almak koşuluyla) sürdürmen uygundur. Herhangi bir soru, veya bilgi, destek ihtiyacın olursa yardıma hazırız. Başarılar dilerim.

Outlook Mobile'dan gönderildi

From: Prof. Dr. Ahmet Pehlivan <ahmet.pehlivan@emu.edu.tr>
Sent: Saturday, April 4, 2020 9:14:41 AM
To: FYK <fyk@emu.edu.tr>
Cc: Betül Akilhoca <betul.akilhoca@emu.edu.tr>
Subject: İlt: Yüksek Lisans Tezi için Veri Toplama İzni Hk.

Sayın Bölüm Başkanları öğrencimize yardımcı olalım lütfen.
Ahmet

Gönderen: AHMET İYICI <ahmet.iyici@emu.edu.tr>
Gönderildi: 26 Mart 2020 Perşembe 11:40 ÖÖ
Kime: Prof. Dr. Ahmet Pehlivan <ahmet.pehlivan@emu.edu.tr>
Bilgi: Ülfet Kutoglu <ulfet.kutoglu@emu.edu.tr>
Konu: Yüksek Lisans Tezi için Veri Toplama İzni Hk.

Sayın Dekanım,

Ben İletişim (İngilizce) Yüksek Lisans programı öğrencisi ve Eğitim Bilimleri Araştırma Görevlilerinden Ahmet İyici. Yrd. Doç. Dr. Ülfet Kutoğlu Kuruç'un danışmanlığında yürüttüğüm "The Impacts of New Media Technologies on Interpersonal Communication: A Case Study of Teacher-Student Interactions at EMU" ("Yeni Medya Teknolojilerinin Kişilerarası İletişim Üzerindeki Etkileri: DAÜ'de Öğretmen-Öğrenci Etkileşimi Durum Çalışması") başlıklı tez çalışmam kapsamında DAÜ'nün aşağıda yer alan fakültelerinde çalışan ve okuyan öğretmen ve öğrencilerden veri toplanması amaçlanmıştır. Fakülteler: **İletişim, Eğitim, Mühendislik ile İşletme ve Ekonomi Fakülteleridir.**

Anketim alt etik kuruldan geçmiş ancak salgın dolayısıyla araya tatil girmesi sebebiyle üst etik izin belgesi henüz elime ulaşamamıştır. Tez sürecimi en az zararlı tamamlayabilmem ve mezun olabilmem için anketimi online ortamda bahsi geçen fakültelerdeki öğretim elemanları ve öğrencilere mail üzerinden bir link vasıtasıyla ulaştırarak verileri toplamam gerekmektedir.

Ekteki anket ve onam formu Türkçe ve İngilizce dillerinde hazırlanmış olup hem Türk hem de yabancı öğrencilerden ve öğretim elemanlarından veri toplanması amaçlanmaktadır.

<https://outlook.office.com/mail/deeplink?version=2020071201.02&popupv2=1>

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Appendix E: Permission Letter Received from the Faculty of Communication and Media Studies

7/22/2020

Posta - AHMET İYİCİ - Outlook

<pembebehcet@gmail.com>; Pembe Behcetogullari <pembe.behcetogullari@emu.edu.tr>; Ahmet Goran <ahmet.goran@emu.edu.tr>; Barcin Bogac <barcin.bogac@emu.edu.tr>; Serkan Sen <serkan.sen@emu.edu.tr>; Raziye Nevzat <raziye.nevzat@emu.edu.tr>; Yetin Arslan <yetin.arslan@emu.edu.tr>; Nilufer Turksoy <nilufer.turksoy@emu.edu.tr>; Mashoed Bailie <mashoed.bailie@emu.edu.tr>; Baruck Opiyo <baruck.opiyo@emu.edu.tr>; 'fatma nazli koksal' <nazzkoksal@gmail.com>; Engin Aluc <engin.aluc@emu.edu.tr>; Safiye Bagkur <safiye.bagkur@emu.edu.tr>; Can Bekcan <Can.Bekcan@emu.edu.tr>; Elega Abdulateef Adeola <elegaadeola@gmail.com>
Bilgi: Agah Gümüş <agah.gumus@emu.edu.tr>
Konu: İlt: tez çalışması hk.(survey for thesis)

Sayın Hocalarım,

Lütfen aşağıdaki linki doldurunuz ve ayrıca öğrencilerinizle linki paylaşıp doldurmaları için yönlendirmenizi rica ederim.

Dear Teacher's,

Please fill in the following questionnaire and I would appreciate if you could direct your students to fill it in.

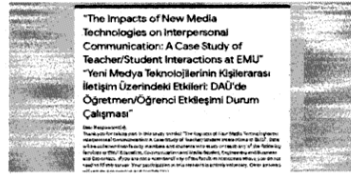
Assoc.Prof. Agah GÜMÜŞ
Dean

Tez çalışmam için online bir link vasıtasıyla İletişim Fakültesi öğretim elemanları ve öğrencilerinden veri toplanması amaçlanmaktadır.

Link'i **İletişim Fakültesinin değerli öğretim elemanlarıyla** paylaşma konusunda yardımlarınızı saygılarımla arz ederim.

Saygılarımla,
Ahmet İyici.

<https://forms.gle/v13be5ZcNyHx6Qf86>



"The Impacts of New Media Technologies on Interpersonal Communication: A Case Study of Teacher/Student Interactions at EMU" "Yeni Medya Teknolojilerinin Kişilerarası İletişim Üzerindeki Etkileri: DAÜ'de Öğretmen/Öğrenci Etkileşimi Durum Çalışması"

<https://outlook.office.com/mail/deeplink?version=2020071201.02&popup=2=1>


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Appendix F: Permission Letter Received from the Faculty of Engineering

7/22/2020 Posta - AHMET İYİCİ - Outlook

« Tümünü yanıtla Sil Gereksiz Engelle ...

Re: Yüksek Lisans Tezi için Veri Toplama İzni hk.

 Ulfet Kutoglu
3.04.2020 Cum 11:24
Kime: AHMET İYİCİ; Aykut Hocanın

Aykut hocam ilginiz ve desteğiniz için sonsuz teşekkürler...

Ülfet Kutoğlu Kuruç

[Android için Outlook'u edinin](#)

From: Aykut Hocanın <Aykut.Hocanın@emu.edu.tr>
Sent: Thursday, April 2, 2020 8:04:17 PM
To: AHMET İYİCİ <ahmet.iyici@emu.edu.tr>
Cc: Ulfet Kutoglu <ulfet.kutoglu@emu.edu.tr>
Subject: RE: Yüksek Lisans Tezi için Veri Toplama İzni hk.

Ahmet merhaba,

Gönderdiğin formları inceledim. Veri toplamak için kullanacağın internet bağlantısını bana gönderebilirsen Fakültemizdeki hocalara iletirim. Öğrencilere ulaştırılması için de sen gerekli girişimi yaparsın.

Başarılar dilerim,
Aykut Hocanın

Prof. Dr. Aykut Hocanın

Dekan
Mühendislik Fakültesi
Doğu Akdeniz Üniversitesi
Gazimağusa, KKTC.

Tel. : +90 392 630 1380
Fax : +90 392 630 2989
E-posta : aykut.hocanın@emu.edu.tr
[http : //faraday.ee.emu.edu.tr/hocanın](http://faraday.ee.emu.edu.tr/hocanın)

From: AHMET İYİCİ <ahmet.iyici@emu.edu.tr>
Sent: Thursday, 2 April, 2020 6:25 PM
To: Aykut Hocanın <Aykut.Hocanın@emu.edu.tr>
Cc: Ulfet Kutoglu <ulfet.kutoglu@emu.edu.tr>
Subject: Yüksek Lisans Tezi için Veri Toplama İzni hk.

Sayın Dekanım,

Ben İletişim (İngilizce) Yüksek Lisans programı öğrencisi ve Eğitim Fakültesi Araştırma

<https://outlook.office.com/mail/deeplink?version=2020071201.02&popoutv2=1> 1/1

Appendix G: Permission Letter Received from the Faculty of Business and Economics

7/22/2020 Posta - AHMET İYICI - Outlook

« Tümünü yanıtla Sil Gereksiz Engelle ...

Re: İşletme ve Ekonomi Fakültesinde veri toplama hk.

Ai AHMET İYICI 7.04.2020 Sal 19:24 Kime: Selcan Timur

Sayın dekanım araştırmama olumlu yanıt verdiğiniz ve katkılarınız için çok teşekkür ederim. Saygılarımla.

Get Outlook for Android

From: Selcan Timur <selcan.timur@emu.edu.tr>
Sent: Tuesday, April 7, 2020 7:21:13 PM
To: AHMET İYICI <ahmet.iyici@emu.edu.tr>
Cc: Ulfet Kutoglu <ulfet.kutoglu@emu.edu.tr>
Subject: Re: İşletme ve Ekonomi Fakültesinde veri toplama hk.

İsteginiz kabul edilmiştir sevgili Ahmet. Fakültemizde anket için sağladığınız link paylaşılacaktır. Bol Sans.

From: AHMET İYICI <ahmet.iyici@emu.edu.tr>
Sent: April 7, 2020 05:56 PM
To: Selcan Timur <selcan.timur@emu.edu.tr>
Cc: Ulfet Kutoglu <ulfet.kutoglu@emu.edu.tr>
Subject: İşletme ve Ekonomi Fakültesinde veri toplama hk.

Sayın Dekanım,

Ben İletişim yüksek lisans programı öğrencisi ve Eğitim Bilimleri bölümü araştırma görevlisi Ahmet İyici. Yrd. Doç. Dr. Ülfet Kutoğlu Kuruç danışmanlığında yürüttüğüm "**Yeni Medya Teknolojilerinin Kişilerarası İletişim Üzerindeki Etkileri: DAÜ'de Öğretmen/Öğrenci Etkileşimi Durum Çalışması**" adlı tez çalışmam için veri toplama sürecindeyim.

Önceki mesajımda BAYEK'ten izin raporumun henüz olmadığından söz etmiştim fakat bugün itibarıyla **Etik kurulun gönderdiği izin raporu** elime geçmiştir, **ek'te** saygılarımla arz ederim.

Tez çalışmam için bir link vasıtasıyla İşletme ve Ekonomi Fakültesi öğretim elemanları ve öğrencilerinden online ortamda veri toplanması amaçlanmaktadır.

Link'i İşletme ve Ekonomi Fakültesinde görev yapan değerli öğretim elemanlarıyla paylaşma konusunda yardımlarınızı saygılarımla arz ederim.

Saygılarımla,
Ahmet İyici.

<https://forms.gle/G8TNCCUE9yGWHsPMA>

<https://outlook.office.com/mail/deeplink?version=2020071201.02&popout=1> 1/1