New vs Traditional Social Environments: Usage of Social Networks by Digital Natives for Interpersonal Communication

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ABSTRACT

Social Network Sites (SNS), particularly Facebook, have become extremely popular among digital natives, especially university-level students. Moreover, they sometimes may see the SNS as the new communication platform for interpersonal communication. Interpersonal communication skill levels both in the social and e-social environment of digital natives are measured in order to figure out whether there is any statistically significant difference between two environments in terms of sending clear messages, listening, giving and getting feedback, and handling emotional interactions. Based on the Social Information Processing and Uses and Gratifications Theories, this study explores attitudes of English speaking tertiary students who study at the Faculty of Communication and Media Studies at the Eastern Mediterranean University in North Cyprus in 2018. Interpersonal Communication Skills Inventory has been used to find out the IPCS scores of students in order to have an idea about the IPCS profiles of the students both in "social" and "e-social" environments. This study also aims to explore whether there is a difference between the four dimensions (sending clear messages, listening, giving and getting feedback, and handling emotional interactions) of interpersonal communication skills (IPCS) on social and e-social environments. The results of this study indicate that tertiary students need to improve their IPCS in both environments. Also, there is merely statistically significant difference between sending clear messages section on social and e-social environments.

Keywords: Social Information Processing Theory, Uses and Gratifications Theory, Social Network Sites, Facebook, Interpersonal Communication Skills

ÖZ

Sosyal Ağ Siteleri, özellikle Facebook dijital yerliler arasında, özellikle üniversite düzeyindeki öğrenciler arasında son derece popüler hale geldi. Dahası, bazen sosyal ağ sitelerini üniversite öğrencileri kişilerarası iletişim için yeni bir iletişim platformu olarak görebilirler. Açık mesaj gönderme, dinleme, geribildirim verme ve geribildirim alma açısından iki ortam arasında üniversite öğrencileri için istatistiksel olarak anlamlı bir fark olup olmadığını anlamak açısından hem sosyal hem de e-sosyal ortamlarındaki kişilerarası iletişim becerileri seviyeleri ölçüldü. Bu çalışmada, Sosyal Bilgiyi İşleme ile Kullanımlar ve Doyumlar Kuramları temel alınarak, Kuzey Kıbrıs'ta Doğu Akdeniz Üniversite'si İletişim ve Medya Çalışmaları Fakültesi'nde öğrenim gören İngilizce konuşan yüksek öğrenim öğrencilerinin tutumlarını araştırmayı amaçlamaktadır. Kişilerarası İletişim Becerileri Envanteri, hem "sosyal" hem de "e-sosyal" ortamlarda öğrencilerin kişilerarasi iletişim profilleri hakkında fikir sahibi olmak için öğrencilerin kişilerarası iletişim puanlarını bulmak için kullanılmıştır. Bu çalışma aynı zamanda kişilerarası iletişim becerilerinin sosyal ve e-sosyal ortamlarda dört boyutu (net mesajlar gönderme, dinleme, geri bildirim alma ve verme duygusal etkileşimleri yönetme) arasında bir fark olup olmadığını araştırmayı amaçlamaktadır. Çalışmanın sonuçları, yükseköğretim öğrencilerinin her iki ortamda da kişilerarası iletişim becerilerini geliştirmeleri gerektiğini göstermektedir. Ayrıca, sosyal ve e-sosyal ortamlarda net mesajlar gönderme bölümü arasında sadece anlamlı fark bulunmuştur.

Anahtar Kelimeler: Sosyal Bilgiyi İşleme Kuramı, Kullanımlar ve Doyumlar Kuramı, Sosyal Ağ Siteleri, Facebook, Kişilerarası İletişim Becerileri

DEDICATION

This thesis is dedicated to my dear dad

İSMAİL KAHRAMAN (M.Sc.)

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

E-IPC	Interpersonal Communication in Electronic Environment
E-IPCS	Interpersonal Communication Skills in Electronic Environment
EMU	Eastern Mediterranean University
ESL	English as a Second Language
FB	Facebook
FCMS	Faculty of Communication and Media Studies
FtF	Face-to-Face Communication
GAF	Giving and Getting Feedback
HEI	Handling Emotional Interactions
HURIER	Hearing, Understanding, Remembering, Interpreting, Evaluating, Responding
IPC	Interpersonal Communication
IPCS	Interpersonal Communication Skills
LS	Listening Skill
SCM	Sending Clear Messages
SNS	Social Network Sites
SIP	Social Information Processing Theory
TALL	Technology Assisted Language Learning
UGT	Uses and Gratifications Theory

Chapter 1

INTRODUCTION

Social Network Sites (SNS) are highly popular among tertiary students. Studying at a university is one of the main developments in young people's socialization since they leave their parents' homes and go to live alone in another city or abroad. In their new lives, they loosen their bonds with the family and the environment in which they have grown. In a nutshell, tertiary students, during their university education, communicate both face-to-face (FtF) and virtually mostly through SNS.

Currently, almost all tertiary students are digital natives (Prensky, 2001); thus, this study seeks to explore interpersonal communication skills (IPCS) of tertiary students who study at the Faculty of Communication and Media Studies (FCMS) at the Eastern Mediterranean University (EMU) in 2018 academic year. EMU is an international university located in Famagusta, Northern Cyprus. Tertiary students who study at the EMU rely heavily on SNS for communicating with their family and friends at home and with the new friends they make during their university education. It is estimated that more than 68.5 % of digital natives use social media in their daily routines (Kuss & Griffiths, 2011). Among all, the SNS digital natives show preference towards Facebook (Goh et al., 2019; Niu, 2019). This study focuses on Facebook (FB) as an e-social environment[1] since it has been noted as one of the

[1] It is preferred to use an e-social environment instead of a virtual environment to avoid debate whether the new communication environment is virtual or real. By e-social environment (electronic environment), we mean new electronic platforms that enter our lives such as SNS, interactive social media, etc.

most used platforms / SNS among university students (Feng et al., 2019; Sharma, 2013).

Traditionally, IPC has been to a large extent, FtF. In the late 20th century, the virtual communication was added to traditional IPC. In this study, the researcher mainly focuses on four dimensions of IPCS, these are: sending clear messages, listening, giving and getting feedback, and handling emotional interactions in real life (social) and e-social (virtual) environments, particularly FB.

Currently, through the growth of new communication technologies, communicating with people is facilitated. As the SNS take more significant place in our lives, the IPC gains another dimension. In addition to traditional IPC, the social media communication started to gain ground in line with this. Tertiary students communicate both in the traditional social environments and the virtual (e-social) environments. To some extent, it can be argued that the virtual environments provide more freedom and more accessibility when compared to the FtF communication (Xue et al., 2018).

To sum up, one of the key concerns of this research is related to how FB as an e-social environment gratifies the interpersonal communication needs of tertiary students concerning IPCS both in real and online environments. In other words, this study seeks to shed light on the attitudes of tertiary students' IPCS in real-life and e-social environments.

1.1 Background of the Study

IPC is as old as humanity. Until the late 20th century, IPC has been only FtF or through the correspondence. This type of IPC takes place in real-world and FtF communication. Apart from correspondence, this type of communication is synchronious communication. The invention of the phone provided means for communication through distance, in synchronous form as well. Through the developments in communication, the technology preference for synchronized vs asynchronized communication has gained ground.

In FtF, real life communication, the IPC has been divided into verbal communication and non-verbal communication. The most important elements of verbal communication are speaking and listening. It is very necessary to understand the words properly during verbal communication. Otherwise, verbal communication cannot be fully realized. Furthermore, in verbal communication, non-verbal elements such as language and voice play an important role during the communication process.

Additionally, in non-verbal communication, physical actions and body posture are particularly influential during the communication process as well as other features of non-verbal communication such as gestures and facial expressions (Bambaeeroo et al., 2017). Facial expressions express our emotions and reflect our mood. Gestures may differ according to societies and cultures; however, there are also universal gestures. Apart from these, appearance, physical contact, and mimics and touching also play an important role in conveying our feelings and thoughts (Matsumoto et al., 2016).

In addition to traditional and FtF communication, in the 20th century, the Web 1 technology entered into our lives. This form of communication is a one-way communication. The first innovation that the Internet provided us was content that could only be read by the audience. Web 1 had numerous restrictions such as we could only find and read information from sites without the opportunity to give feedback or include content (Brewington et al., 2000).

Further development arrived in Web 2 format which aims to enable people to use the Internet more actively. Later, one-way communication in Web 1 has been replaced by two-way communication Web 2; in other words, the interactive communication where the users can develop content or even be a content provider (O'Reilly, 2009). Today, the most popular representatives of Web 2 are SNS through which users can share texts, pictures, photographs, videos, and live status. One of the most popular of them is Facebook (FB) which has been very popular in the last decade. It is in the foreground, it has image, audio, text, and video-sharing as well as the features of video-calling and sharing live status.

In Web 2 technology, according to Newhagen and Rafaeli (1996), there are five main characteristics. The first one is a multimedia feature that enables the user to interact through multiple perceptions rather than through a single perception. For example, audio, text, graphics, images, animation, and video, etc. The second one is called hyper-textuality. It is the feature through which presentations are made not only in plain text but also through various forms that make links with other internet pages. The third one is packet switching. It is to deliver the information on the Internet to the users as suitable information packages. Then, the fourth one is the elasticity of synchronity which means that the communication can be synchronous as it can take

place at the same time or can be asynchronous which means, it can take place at different times. The last one is the interactivity. In other words, communication can have a message sent feedback received. It can be explained as the message sent during the communication process which also affects the previous messages (Newhagen & Rafaeli, 1996).

Facebook, which has entered into our lives with Web 2 technology, also provides all five features mentioned above. By the courtesy of multimedia features, FB allows us to share more than one content (Soysa et al., 2013). Furthermore, Web 2 technology gives users the access to add footnotes and hyperlinks to texts (Rocamora, 2012). In FB, hyper-textuality made it easy for users to communicate by adding multiple links; video sharing and live streaming, etc. (Lam, 2013). In the packet-switching feature of FB; the Internet gathers the users' information and categorize every material then sends back to users (Bernasconi et al., 2006). Moreover, the flexibility of synchrony allows users to read content either simultaneously or later on FB (Wright, 2012). FB which creates an interactive communication environment supports the users' content sharing, sharing photos, audio sharing, video calling, etc. in one-to-one or in crowded groups (Barbara, 2007).

1.2 Motivation for the Study

I started to be interested in this study in the years when I spent my life for my graduate education away from my family. I needed socialization in a new country that I have just arrived and wanted to keep in touch with my family and friends back at home. I managed to do this through the use of various social media applications at those times. This study investigates foreign students who leave their families for college education and they tend to heavily use social media as a socialization tool in

the newly adopted culture. Also, when I studied away from home, I realized that I adopted a different approach to real and virtual communication. Upon my experience, I decided to study communication in the real and virtual environment which is described as two separate worlds. At the point of departure, I realized that digital natives consider social media tools as an indispensable part of their daily lives. Since I am a very strict social media user myself, I decided to conduct the research to prove that the real and virtual environments that are divided into two separate worlds are actually one whole now.

1.3 Aims of the Study

The purpose of the study is to measure digital natives' IPCS in the real and e-social environments under four sub-sections:

1) Sending Clear Messages: It is very important to use the right words while communicating and convey clearly what we would like to speak fluently to the person in front of us.

2) Listening: It is one of the essential elements of the communication process. Listening to the person who communicates with us shows how much value we give to him/her. In this study, what we mean by "listening", is not just an activity we do with our ears, but much more than that being mindful (Wood, 2007) and "reading" what the sender actually means, as she/he means.

3) Giving and Getting Feedback: Feedback indicates that a healthy communication process takes place. It is a situation in favor of both sides to be understood clearly. Feedback was introduced by Wilbur Shramm (1955) and he added this concept to the interactional model of communication as senders expecting feedback from receivers.

4) Handling Emotional Interactions: It is about managing personal emotions while communicating with people. Controlling anger, anxiety, or sadness gives people a chance to build strong relationships with their company.

Also, this study seeks to explore IPCS profiles of international students who study at the FCMS at the EMU in Northern Cyprus, in 2018.

Tertiary students tend to use numerous technological devices such as smartphones, computers, and tablets when they interact with their families, friends, and loved ones; they prefer to use the Internet connection. Through Web 2 technology, the traditional pattern of IPC gained yet another dimension with SNS.

Through examining the use of IPCS both in social and e-social environments by the tertiary students; this study aims to measure IPCS scores of the digital natives'. In a nutshell, this study seeks to shed light on the four aspects of communication in traditional FtF communication and the virtual communication.

1.4 Research Questions and Hypotheses

Two different research questions and hypotheses have been put forward to make the research meaningful. The research questions and hypotheses seek to reveal the interrelated differences of the interpersonal communication skills that digital natives practice in social and e-social environments. The two research questions of the present study seek to find answers are:

RQ1: What are the IPCS profiles of international students who study at the FCMS, EMU, in 2018?

RQ2: To what extent do the IPCS of tertiary students who study at the FCMS/EMU in 2018 differ in real and e-social environments?

The two hypotheses the present study tried to answer are:

H1. Is there a statistically significant difference between interpersonal communication skill profiles of tertiary students between social and e-social environments?

H2. Is there a statistically significant difference between IPCS of tertiary students with respect to "sending clear messages", "listening", "giving and getting feedback", and "handling emotional interactions" in social and e-social environments?

1.5 Significance of the Study

As it has been mentioned earlier, IPCS have great importance for the digital natives who study abroad and need to socialize and communicate with family, and friends in their home country. In the studies carried out up to today (Drago, 1981; Ivcevic & Ambady, 2013), it has been suggested that university students exhibit different personalities in their communication in real life and in social media (N. K. Baym et al., 2004). This study seeks to contribute to the ongoing discussions with respect to the differences in the real world and the virtual world in the context of IPCS. Currently, the social media use, indeed, exponentially increased (Flaherty et al., 1998; Merchant et al., 2017). IPCS is inevitable for students who study abroad as they communicate with their families, friends, and other people in order to be able to establish healthy communication and also, to evaluate opportunities that can come to them in their future lives (Iksan et al., 2012).

This study is the first in the field of Communication and Media Studies, revealing the difference between IPCS used by tertiary students in social and e-social environments in four different dimensions. Numerous studies have been conducted in relation to the FB about attachment style (Özad & Uygarer, 2014), and the FB and social anxiety are related with social media tools, or interpersonal relationships on online platforms as a substitute for real-life, etc. (Burke et al., 2011; Jenkins-Guarnieri et al., 2013). On the other hand, another research suggests that college students tend to prefer FB and MySpace for interpersonal interactions more than FtF communication (Kujath, 2011). Despite there are numerous studies on SNS and FB use of tertiary students, there has been no research on comparing IPCS of university students in traditional, social and e-social environments.

1.6 Limitations of the Study

This study is limited to the EMU in North Cyprus and 2018 fall semester. Besides, the study was conducted with students of the Communication and Media Studies Faculty at the EMU. It is presumed that FCMS students would be more conscious about communication skills. Also, the present study is limited with the international students (Turkish and Turkish Cypriot students are excluded) who study at the FCMS in the EMU in the 2018 academic year.

Another limitation of the present study is the comparison of IPCS on real and FB environments. Only FB has been chosen as the SNS for this research and other social media platforms are not included.

Moreover, in relation to the four sub-branches discussed in this study, there has been dearth of research in the field. In general, IPCS has been studied in the field of

Education (Ahmad, 2016) and in the field of Health Communication (Nave et al., 2018). Particularly, in the listening section, there are numerous music preferences related research. Yet, the focus has never been on listening on its own. The importance of IPCS has been highlighted in the research with health professionals. In the field of education, IPCS has been researched particulary with students learning foreign languages.

Chapter 2

LITERATURE REVIEW

The information included in this Chapter aims to provide theoretical background for the study. By doing so, it is sought to place the study in the context of Communication and Media Studies literature. Hence the Chapter includes definition and conceptualization of communication, face-to-face (FtF) communication, SCM, LS, GAF, and HEI in real life, early interpersonal communication models, Web 1, Web 2, and Web 3 technologies, Computer-Mediated Communication (CMC) as a new channel of IPC, SCM, LS, GAF, and HEI in CMC, New media as a new communication platform and e-social platforms: Social Network Sites (SNS) and social networking, FB as one of the most popular SNS, emerging generations: “Digital Natives”, SNS usage among “Digital Natives”, can e-social platforms be the extensions of social communication platforms?, theoretical framework: Social Information Processing Theory (SIP) and research into SIP Theory, Uses and Gratifications Theory (UGT) and research into UGT.

2.1 Definitions and Conceptualization of Communication

Communication is one of the most difficult words to define; indeed, the word communication has more than two hundred definitions in the literature (Aziz, 2016). The root of “Communication” comes from the Latin "communis," which means "common" (Velentzas & Broni, n.d.). Hence "to communicate" means "to make common" or "to make known", "to share" and it consists of various means of personal interaction.

Communication has been defined as the transmission of information, emotions, ideas, etc. through meaningful symbols (Tella et al., 1968). It is also a social process accomplished by the transmission of messages (Gerbner, 1956). Furthermore, Pearson and Nelson (2000) explain communication as a process of understanding and sharing meaning. In other words, it is a meaningful social interaction between two or within a group of people (Hartley & Hartley, 1952). Since the concept of communication can be a part of numerous disciplines, each discipline can take into consideration and define it in its own context.

The earliest studies on communication have started with mass communication for persuasion and influence during the Second World War (Telman, N. & Unsal, P. 2009; McQuail, D. & Windahl, S. 2015). It is known that Communication and Media Studies field has developed from a linear model of communication. This explains how an idea, an emotion, an attitude, etc., is transferred from one to another and emphasizing the transmission aspect of the communication process, to communication models that emphasize mutuality, common perception and sharing (Mutlu, 2004). In other words, as Telman & Unsal (2009) claim over time, the main theme in the communication process has shifted from persuasion to influence and people's understanding of each other.

Although there are various definitions of communication that seem different in the literature, in fact, it is possible to say that these definitions are all articulated to each other. It is noteworthy that various communication definitions have some common points in terms of interpersonal communication. Within this context, interpersonal communication, which is one of the types of communication that takes relationship systems as for granted, can be defined as a psycho-social process in which at least

two people share their knowledge, feelings, thoughts and experiences mutually in certain ways.

No matter how definition of communication is evolved, perhaps the only thing that will not change is the elements of communication: sender, receiver, message and the channel (no the medium). These elements of communication can change form or be reconceptualized, but they must always take part in this process.

According to Kaya (2011) who refers to the classification of communication, communication can be classified in numerous different ways in terms of its qualities. As he highlights, communication can be classified according to its effects, direction, code system that is used, relationship systems (like the one mentioned above), positions of individuals and time-space dimensions.

Regarding to its effects, communication is divided into two as positive and negative communication. While positive communication gives individuals the mutual satisfaction and leaves positive effects; negative communication is the communication process in which the participants are critical and accusatory in the communication process and the communication process is evaluated negatively.

On the other hand, according to its direction, communication can be divided into one-way and two-way communication. One-way communication process consists of the sender, the message sent, and the recipient of the message. Since the sender is active and the recipient of the message is passive in the one-way communication process, the message sent directly affects the receiver. The two-way communication process, on the other hand, enables the receiver to switch to the active position with

the receiver sending feedback. It is possible to say that, because the recipient reflects his or her own thoughts through feedback, the two-way communication is more democratic and, moreover, is geared towards solving problems. This is also called interactive model of communication.

According to the code system that is used, it is possible to examine the communication as verbal, written and non-verbal communication. Basic elements of verbal communication is speaking and listening. It is important to use proper appropriate language and convey the message to the other party correctly with words and sentences in order for the speech to take place effectively.

In written communication, it is a matter of conveying feelings and thoughts "in writing". It is the process of delivering the message to the recipient via letters, numbers, or symbols. Another form of communication is verbal communication. One form of verbal communication is spoken communication. Hearing is a physical process by which sound hits our ear drums and passes into our body. It is a passive activity in which we do not have to actively engage our brain. It “is an accidental and automatic brain response to the sound that requires no effort” (Wrenc, J. S., 2012).

On the contrary, listening, unlike hearing, is an active process that requires effort and actually we have to “listen” consciously. In order to listen, the voices heard must be turned into meaningful sentences. Listening is “active, focused, concentrated attention for the purpose of understanding the meanings expressed by a speaker” (Wrenc, J. S., 2012).

In the FtF communication, both verbal and non-verbal communication are present. Verbal communication is the process of transferring information, mutual feelings and thoughts between two or more people through words (Wood, 2009). In verbal communication, the most important elements are words that have chosen and the interpretation of these words. Effective speaking and listening are among the basic skills of the verbal communication.

Besides, non-verbal communication is a form of communication beyond words. This type of communication involves features like gestures and body language are meaningful, as well as the tone of voice, appearance, and perception people create on the other's mind (Mehrabian, 2017).

Finally, according to the dimensions of time and space, which the study is built on, the communication process is considered as FtF communication and distant communication[2] or online communication.

Indisputably, both of the changing times, needs and conditions and the developing technological infrastructure have brought the need for reconceptualization of communication. As it has been mentioned earlier, it is also possible to find different definitions and classifications of "communication", which is the cornerstone of various fields, according to the field and purpose of use.

Unlike the FtF communication, which is required to be physically in the same place and at the same time, distance communication is carried out by means of Internet technology.

[2] Distant communication is handled as computer-mediated communication in the present study.

In the present study, it is sought to explore whether there is statistically significant difference between FtF and online communication of digital natives through FB.

2.2 Face-to-Face Interpersonal Communication

Interpersonal communication (IPC), which can be defined as a continuous and dynamic process between the interacting participants, is all about giving and taking messages. Interpersonal communication is constructed and clarified by acting linguistically (Antos et al., 2008). In other words, interpersonal communication can be defined as a two-way verbal and non-verbal interaction process between individuals or small groups that is based on mutual trust, creates a network of relationships, and aims to share knowledge and feelings (Berger & Roloff, 2019).

Martin Bubber (1970) defines interpersonal communication as a continuum. Bubber puts forth three different points in the continuum. The first one is I-It communication which describes other people as objects, unimportant or worthless to give attention. This stands on one extreme side of the continuum. The second one is I-You communication which stands in the mid-way. It refers to communication with people that we know but are not very close to us. We verify the existence of the people we are in contact with, but we refrain from having very close relationships with them. The last one is I-Thou communication. Buber explains I-Thou communication as the highest level of IPC. In other words, I-Thou communication is an exclusive interpersonal communication between people. In this type of communication, communicators are involved in highest form of communication and open themselves in the communication.

In order to consider a communication as interpersonal communication, the researchers believe that the participants of the communication should be FtF with a certain proximity; it is stated that there should be a two-way mutual message exchange and the transmission of messages in the interaction, verbally and non-verbally, should be in the unity of time and space (Berger, 2014).

Communication has become a field of study towards the second half of the 20th century. The first interpersonal communication theory was put forth by Shutz in 1966 and he suggests that affection, belonging to groups and control are three prerequisites of interpersonal communication. The value given by the individual and the expected value in return are expressed as affection. In addition, individuals would like to include other individuals in the group they are in, or they would like to be part of different groups. This situation brings the need for control for individuals. In other words, individuals would like to establish dominance and authority, and ultimately. According to Shutz, they can meet all these needs only through interpersonal communication. However, based on the ideas mentioned by Shutz, Katz, Blumler, and Gurevitch (1974), it is claimed that people's needs can be met by mass media and that individuals can be satisfied by choosing a media tool that can meet their needs (Katz, 1974). By including the needs mentioned by Shutz (Rubin, 1983), within the framework of the Uses and Gratifications Theory, they take the example of the needs of individuals can be met by mass communication tools and television has been considered as the most basic example of this (Katz, 1974).

In this study, two thoughts have been brought together. These are: how we carry out our interpersonal communication in real life and through the uses of social media that came into our lives with the developing communication technologies. Moreover, this

is based on the argument of how we satisfy our need for interpersonal communication through social media.

While technology accelerates the changes in the social dynamics we live in; it also has changed interpersonal communication from its known order to technological dimensions. This argument is the main problem of the study. Today's technologies contribute to the development, execution and dynamism of relationships; some key components of communication are also reinterpreted in this study.

In interpersonal communication, as in other communication models, there are some components whose significance never change, no matter how different the communication pattern is. For this study, these are: sending clear messages (SCM), listening (LS), giving and getting feedback (GAF), and handling emotional interactions (HEI).

2.2.1 Sending Clear Messages

During the present study, as it has been mentioned earlier, particularly four components of IPC mentioned above have been investigated. The first one is sending clear messages (SCM) which aims to express how individuals send messages clearly during the communication process. Sending clear messages, as one of the cornerstones of effective communication, is the process of conveying feelings and thoughts to the other party in a clear and understandable language. The ability of an individual to express himself a/a herself correctly and to use the body language while speaking plays an important role in the effective communication (Nathan & Scobell, 2012a; Pfeiffer, 1973).

In the studies conducted, it has been observed that sending clear messages, being pleasant and indifferent, being self-confident and expressing what you would like to say in a clear language ensures the healthy progress of the FtF communication (Aldunate et al., 2018; Baker & Milutinovic, 2017). In another study conducted with university students, the platforms preferred by students to receive and deliver messages within the scope of interpersonal communication is investigated. It has been observed that internet-based communication tools are more preferred in evaluating the students' perspectives on traditional FtF communication and new internet-based communication channels (Robinson & Stubberud, 2012). In the light of these studies, in the present study, it is evaluated whether there is a statistically significant difference between FtF and CMC communications in the context of sending and receiving messages ability.

2.2.2 “Listening”: Do We Really “Listen”?

Galanes et al. (2007) define listening as a human-focused action and point out that people have four different listening characters. According to them, people-oriented listeners tend to see the positive sides of the relationship they are in, and they are the ones who do the act of listening with positive aspects in order to develop a relationship. In addition, action-oriented listeners are the listeners within the group that listen within the framework of task-relationship so that the task-oriented group determined by the communicators can take the next action. Content-oriented listeners are the audience group that examine and research into the details of the content discussed within the group. Finally, time-oriented listeners check with short and specific messages whether or not the group activities are followed by the specified time.

Additionally, Waks (2010) divides the act of listening into cognitive and non-cognitive listening. Cognitive listening involves the ability to correctly understand what is being said, to research the topic, and to understand focal points correctly, rather than hearing words correctly. Non-cognitive listening, however, is listening through empathic thinking or empathy, and empathic thinking is not an afterthought act, but listeners can be helped.

Brownell (2015) defines listening with six components over the HURIER listening model. According to this model; people first hear (hearing), then, understand what they hear, remember what they have understood, interpret what they remember in two ways, what the speaker would like to say (perceptions), and the listener interprets by adding their own thoughts (interpretation). After the individual passes what he has listened through his own thought filter, he evaluates the message, he gives meaning (evaluating), and finally gives a meaningful response (responding) as a result of the evaluation.

In this study, what we mean as the act of "listening", is not just an activity we do with our ears, but much more than that: "reading" what the sender actually means, as she/he means. Since "reading" here “perceives" the individual or individuals we communicate with, it is of great importance that we "interpret" the message of the other person.

The research about listening in the literature generally focus on the development of physical listening skill. Listening is mentioned in the studies about the development of listening skills of students (Field, 1998; Oxford, 2019; Stæhr, 2008; Weinstock, 1977) also children’s listening skills, academic listening skills for English as the

second language (ESL) students, and listening skills for nurses and healthcare practitioners (Ferris & Tagg, 1996; Loo et al., 2016; S. E. Shannon et al., 2011).

2.2.3 Sending and Receiving "Feedback": Legitimates "Listening"

Within the scope of social sciences, in 1943, Rosenblueth, Wiener, and Bigelow have defined feedback as the control of the object behavior towards the target by the error margin. In other words; the feedback is circular phenomenon that connects the input and output to each other. It was conceptualized by the definition of reaction to the information in time (Clement & Frandsen, 1976). The feedback is the base of success and learning in the studies of education, communication and media. It is divided into four in terms of its effects; the feedback can be correct or incorrect in terms of its functions; it might require time in terms of its duration; it might have regulatory effects for the individuals to audit themselves, and also, the individual may have personal feedback towards themselves (Hattie & Timperley, 2007).

With regards to IPC, feedback means acknowledging the message is received and responding to it. For a healthy communication, the receiver should acknowledge that they obtained the message and decided to respond to it (Higgins et al., 2001).

What is more, feedback is the best way to understand an individual who is exposed and it should be explained accurately. Besides this; as a result of resummarizing the key points and getting feedback on correct time, the suitable information reaches to the target easier (Beebe et al., 2014). The feedback's being effective depends on perceiving the listening skill well because the effective feedback is actually as a result of listening carefully (Kluger & Lehmann, 2018).

Giving and getting feedback on real life has been investigated more in the studies about students' feedbacks on their assessments and exams also, importance of teachers' feedback in real-life to the students (Barmaki & Hughes, 2015; Dynel, 2009; Ten Brinke & Porter, 2012; Vilpponen et al., 2006). There is dearth of research studies on giving feedback during or in IPC.

2.2.4 Handling Emotional Interactions

The emotion is a complex phenomenon that shows behavioral difference on biological and chemical levels in humans (Lindsley, 1951). Therefore, emotions are the general name of reactions of the body as a result of the transmisson of biological and mental changes in human bodies to the brain through neurons (Rolls, 2009). This study focuses on "handling the emotions" that occurs within the frame of individual interactions in IPC.

Handling emotion is the individual's ability to deal with psychological and biological feelings. In daily life, it plays a very important role in maintaining the vital functions of the individual and in the regulation of IPC. The emotions that help to activate the thoughts in the mind play a significant role in the use of innate abilities of the individuals (Goleman, 1996).

Emotions are described as cognitive, physical, and instinctive reactions of people to events or interactions (Nabi, 2010). They are "objects" that activate cognitive emotions in our minds, reminding good or bad memories. Our physical reactions are physical efforts to avoid good or bad emotions. On the other hand, individuals change the channels through which they express themselves in order to keep internal emotions under control. The transition of channels that affect interpersonal communication in the context of the channel used in Internet-based platforms has led

to the shift in the handling the spatial emotions from traditional ways to new communication platforms in detail. This will be explained later (Garvey & Fogel, 2008).

In traditional and new communication channels, the emotional interactions are investigated in studies about the facial expressions in social communication and the importance of emotions in FtF interaction (Gerdes et al., 2014; Hess & Hareli, 2015; Murray et al., 2016). Also, emotional interactions have importance for communication in diplomacy (Wong, 2016).

2.3 Early Interpersonal Communication Models

The communication models first emerged in order to refer to communication with masses. At the beginning of 20th century, the effect of radio and press on mass communication was very huge. After the WW II, the communication tools began to be used for propaganda aims. Therefore, the communication became a process which aims to adapt a thought or persuasion (McQuail & Windahl, 2015). So, the communication models are divided primarily as linear and then circular in order to explain the mass communication within this frame but (Narula, 2006). In communication research, communication models serve as a guide for explaining people's interactions. Process school is a school of thought that deals with the efficiency and accuracy of messages (John & Carey, 1992). Process school actually focuses on how messages are encoded and decoded in the communication process. At the same time, it deals with how senders use communication channels. The process school considers communication as the process by which one person influences the behavior or state of mind of another. Supporters of process school accept that intention is a vital factor (Fiske, 1982). Consequently, if the intention of

the sender is not completely clear to the receiver, the process school accepts this as a communication failure. If the communication interaction is completed with a deficiency, the process school also critizes in which part that deficiency would have appeared. The process school takes advantage of the fields of the social sciences, psychology, and sociology (Fiske, 1982).

In opposition to the process school, there is the semiotic school which, is primarily involved with how messages merge with the people who receive them. The semiotic school concentrates on semiotics which is the system of meanings and signs is contrary to the process school. Semiotic school focuses on the capability of messages. The principle study in the semiotic school is culture and text (Jenkins, 2010).

Since the concept of communication has been subjected to different categorizations in different disciplines (psychology, education, health sciences), the categorizations of interpersonal communication models is taken as the base in this study. According to Wood (2009), interpersonal communication revolves around three main communication models. These are; linear model, interactional and transactional communication models.

2.3.1 Linear Model of Communication

The first one is called Linear or Laswell's (1948) model of communication. This model describes communication as one-way linear communication. It is also called magic-bullet or hypodermic needle. Five questions are included in the linear model of communication. They are: Who says? What? In which channel? To whom? and With what effect? The Linear model considers the receiver as passive. Hence, in the

linear model, the sender's target is to send th message to the receiver and no feedback is expected (Lasswell, 1948).

This model, in principle, explains how the sender sends the message to the receiver. More specifically, the sender is the source of the message and the message is the entire words and behaviors. After that, Shannon and Weaver (1949) have added "Noise" as a new layer on the linear model. Noise means that everything that causes restrictions on information flow between the sender and the receiver (Shannon & Weaver, 1949).

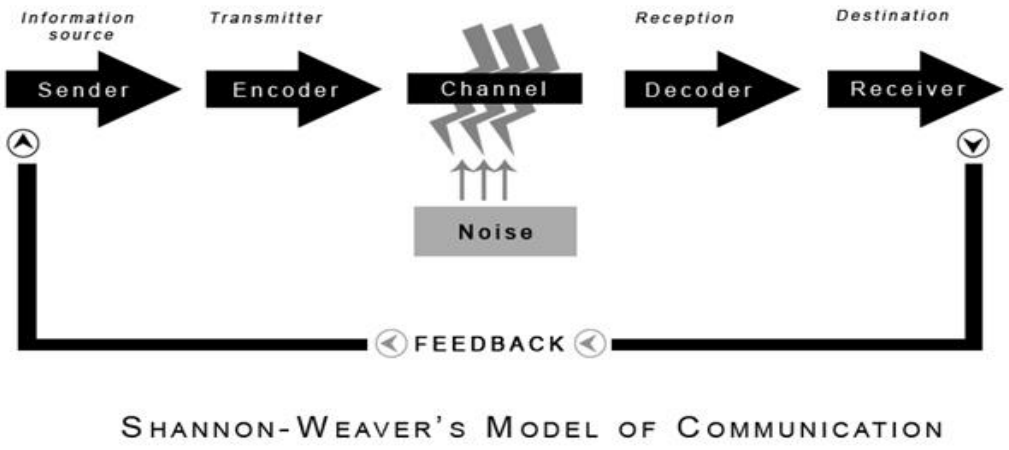

Figure 1. Shannon-Weaver's Model of Communication
Retrieved from: https://www.communicationtheory.org/shannon-and-weaver-model-of-communication/

Shannon and Weaver's model is also known as mathematical communication model. In this model, sender is named as the information source. In addition to this; the transmitter, channel (noise), reception and destination (receiver) are main components. This model has been criticized by social scientists as it was against the human communication nature because, the human decodes the sent message through

perspectives, emotions and thoughts instead of mathematical view; therefore there are uncertainities regards the understanding of the content of the message that the sender would like to send (Al-Fedaghi, 2012).

2.3.2 Interactional Model of Communication

A later development has introduced by Wilbur Schramm (1955). This model is called the interactional model of communication which puts forth that the sender sends a message and the receiver gives feedback to the sender. The interactional model of communication represents communication as a two-way process. This model focuses on interaction rather than the message. What is more, feedback considers as a whole new process for interpersonal communication. Thus, the sender and the receiver become important for the communication process. Hence, this model also has some restrictions. It includes the interactive nature of communication but still doesn't explain how communication takes place in a social and cultural environment (Clark & Mills, 2004; Shaw, 2017).

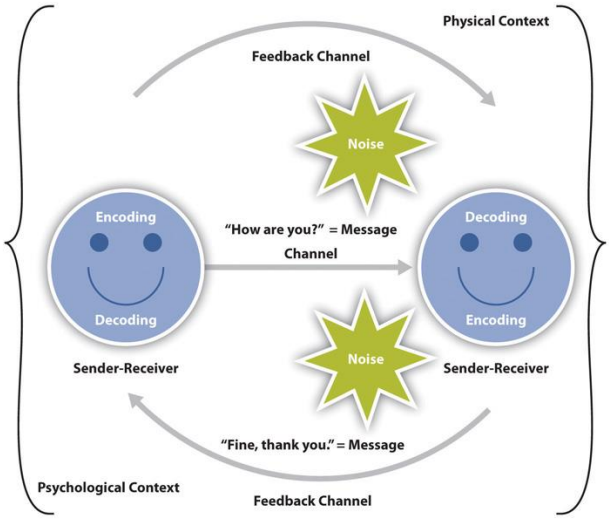

Figure 2. Interactive Model of Communication
Retrieved from:
https://ecampusontario.pressbooks.pub/professionalcomms/chapter/2-2

The interaction model includes feedback which makes communication a more interactive which means a two-way process rather than showing communication as a linear one-way process (Schramm, 1997). The involvement of a feedback cycle also leads to a more complex understanding of the roles of the participants in a communication confrontation. Instead of having a sender, a message, and a recipient, this model has two sender-receiver exchanging messages.

The interaction model is also less message-oriented and more interaction-oriented. While the linear model focuses on how a message is transmitted and whether it is received or not, the interaction model is more concerned with the communication process itself. This model admits that there are so many messages sent at one time and most of them may not be received. Some messages are also sent involuntarily. Therefore, depending on whether a single message was successfully transmitted or not, in this model communication process is not considered effective or ineffective (Kincaid, 1979).

The interaction model takes into account the physical and psychological contexts. Physical context combines environmental factors in communication which confronts more. Such as, the capacity, design, and climate of a place involved in communication process. On the other hand, the psychological context includes the intellectual and emotional components in a communication confront. Such as stress, anxiety, and emotions, etc. affect the communication process (Vlăduțescu, 2013).

2.3.3 Transactional Model of Communication

The last interpersonal communication model is the transactional model. In this model, the sender and receiver play an active role and keep the communication process alive. It has a dynamic nature that does not consider people who are involved

in communication as a sender or receiver. The transactional model considers people as communicators (Barnlund, 2017). It improves the former two models by adding the dynamic nature of communication. In the transactional model, some communicators share culture, language, and field of experience. This communication process is not considered as the message going and the feedback coming but rather as a synchronous process during which communication overlaps. In addition to these; this model defines the physical and psychological relation of communication as a reality which is created by the communicators socially and culturally (Dayal et al., 1991).

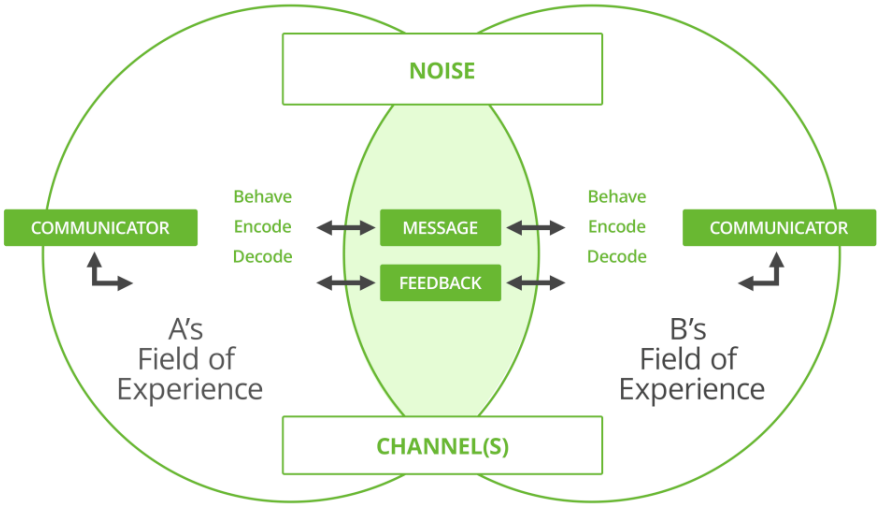

Figure 3. Transactional Model of Communication
Retrieved from: https://www.doncrawley.com/how-to-communicate/

Transactional model considers communication as a dynamic process. In other words, communication is concerted action in which communicators co-create the process, outcome, and effectiveness of the interaction. Contrary the linear model in which meaning is sent from one person to another, unlike the interactional model in which

understanding is achieved through feedback, people create common meaning in a more dynamic process in the transaction model (Rosenblatt, 1994).

The transactional model of communication also emphasis mostly on the field of experience (DeVito, 1986). While communicators' puths have a unique field of experience, they must also live in a familiar field of experience. In other words, communicators must share at least some quality of overlap in culture, language, or environment for people to interact. The transactional model also supports that the messages may affect the responses or subsequent messages achieves in the communication or interaction. This means that the messages are associated with each other. The principle of interpersonal relationship places that the messages are affiliated with each other. Finally, the transactional model of communication, based on people are seen as dynamic communicators rather than simple senders or receivers, there must be some overlap in the fields of experience to create shared meaning, and the messages are interconnected (West & Turner, 2018).

2.4 Web 1.0, Web 2.0, and Web 3.0 Technologies

Up until the beginning of the new millennium, interpersonal communication had been mostly face-to-face, through telephone or correspondence. Web 1 technology is content focused and was active from the 1990 to the 2000s which was mainly "read-only" (Choudhury, 2014). More specifically, the users used to establish one directional communication with their computers and connect to the web provider and then, they used to read the uploaded contents. It was impossible to establish communication with the users except for reading it because the Web 1 technology was not developed in terms of hardware (Aghaei, 2012). The Web 1 technology where the users are stable, has upgraded with the new technology that is based on

mutual information transmission and also with the increasing desire for the mutual interaction of users which paved the way for the occurrence of Web 2 technologies (Guha, 2009).

Web 2 technology is a second generation Internet system which is interactive and developed between the years 2000-2010. As it has been mentioned earlier, in the first chapter of this study; Tim O'reilly is the first person who used the term Web 2. Within the increasing human interest to the Internet technologies; the main aim of Web 2 technologies is to pave the way to the contents created commonly by users could be deveoped by everyone and so that; keeping the Internet technologies interactive has been ensured (O'reilly, 2009). The first phase is the people's gathering together around one network and the idea of developing a mutual content (Utz, 2009). Web 2 technologies include Social Network Sites (SNS), blogs, online libraries, e-mails and mobile applications as well as providing instant messaging via applications on Internet based systems (Kárpáti, 2009). What is more, interpersonal communication gained another dimension after the Web 2 technologies. The Internet provides various opportunities for users to enable their communication in the virtual environment (Jaafar et al., 2014; Zdravkova et al., 2012). The most popular online or virtual communication is realized through SNS which are gaining more and more popularity day by day (Davenport et al., 2014; Salehan & Negahban, 2013).

Web 2 is content development oriented and the meaning of contents is gaining importance increasingly recently as well as the Web 2 technology is continuing to be developed towards Web 3 technology.

The concept of Web 3.0 as imagined by business models and Web developers is often associated with the idea of Semantic Web. The idea was first invented in 1999 by Tim Berners-Lee, creator of the World Wide Web, who envisioned the possibility of enabling machines to "talk to each other" and understand and generate semantic data (Floridi, 2009).

Web 3 or semantic Web refers to the so-called third-generation Internet-based services that include semantic web, microformats, natural language search, data mining, machine learning, and artificial intelligence technologies (Lassila & Hendler, 2007). Web 3 technologies emphasize the understanding of information facilitated by the machine to provide a user experience (Barassi & Treré, 2012). In Web 3.0, machines turn the traditional supportive role of the internet infrastructure into a protagonist in content/process production, getting along with users in content production and decision-making processes (Fuchs et al., 2010). Besides, Web 3.0 services can unify users and computers for problem-solving and computing tasks.

2.5 Computer-Mediated Communication as a New Channel of Interpersonal Communication

Computer-Mediated Communication (CMC) is defined as a dynamic and creative communication process as well as being the general name of computer-based technological systems that provide humans means to communicate with each other (Romiszowski, 1989). As it has been mentioned earlier, the increase in the need for individuals to interact with each other, the creation of internet-based social communities with websites has brought out the phenomenon of CMC (Baym, 1995).

Computer mediated communication is a process of human communiation via computers, involving people, situated in particular contexts, engaging in processes to shape media for a variety of purposes (December, 1997). The well-known accepted CMC systems are; electronic mails, video conferencing and various applications that help people communicate with each other. The most important characteristics of these systems is that the people may continue to communicate through different time and place (Herring, 2002).

CMC pragmatically and in light of the rapidly changing nature of communication technologies, does not specify forms, the process that people create, exchange and perceive information using networked telecommunications systems making it easier to encode, transmit and decode messages (December, 1996). In addition, CMC includes both delivery mechanisms derived from communication theory and the importance of technologies and people's interactions processes are mediated (Naughton, 2000). Also great flexibility in research approaches to CMC which studies examine this process from various interdisciplinary theoretical perspectives, with a focus on certain combinations of people, technology, processes or effects (December 1996).

Besides this; the CMC is multifunctional which means while it presents many functions to the humans, it accepts that the behaviors and perspectives with contents of the people might change. Lastly, the communication is multimodal which means, the used words can be expressed as well as the non-verbal words at the same moment. For instance; when a negative word is used and the sound increasing or hand movement supporting this action is the multimodal feature of the communication (Thurlow et al., 2004).

CMC becomes meaningful through many concepts coming together. According to CMC, the communication process is not static but dynamic. In other words, it is not only based on words but it also researches how the meanings behind the words might change from person to person in the society. Another characteristic is that the communication is transactional which means, it defines the communication as a process where both the receiver and the sender exist during when the sender-message-receiver roles change (Walther, 2011).

As a result, those mentioned four characteristics are intertwined with each other for the continuation of communication process. CMC mediates those features into the interpersonal communication via computers. In other words, it transmits them. This study points out the transmission of those four branches of IPC into computer based communication networks via CMC which were SCM, LS, GAF, and HEI.

2.5.1 Sending and Receiving Clear Messages in CMC

Sending and receiving messages on CMC refers to any form of speech or communication via an electronic medium. It can be broadly divided into two forms: synchronous and asynchronous communications (Becker-Beck et al., 2005). Synchronous communication is kind of communication process that takes place in real time. In FtF communication is simultaneous; therefore, it is needed to be FtF in a specific time and place. This means that both parties are involved in communication together. A few examples are phone call, video call on FB, or Skype etc. (Althaus, 1997). Differently, asynchronous communication does not occur in real time. This means that the sender may not get an immediate response from the recipient right after sending the message. Most of the CMC platforms are asynchronous. Such as,

sending messages on Facebook through messenger application is asynchronous (Branon & Essex, 2001).

While the synchronized communication is defined happening at the same time as in FtF interactions, in CMC except for the real-time interactions that are synchronized communication can be asynchronized happening at different times (Hrastinski, 2008). The university students prefer more the richer media tools in IPC (Robinson & Stubberud, 2012) and hence, communication can be synchronous and asynchronous. However in CMC, humans can have FtF communication by using verbal and non-verbal communication factors through excluding time and place concepts in video calling applications (Liang & Walther, 2015). As a result, the real-time FtF communication becomes an extension of CMC.

2.5.2 "Listening" or "Reading" in CMC

As it has been mentioned earlier, this study focuses on listening as reading what the contacted individual would like to express instead of physically listening (Walther, 1996). With its other definition, a deep listening can be conducted on a CMC platform that people interact with. The deep listening is knowing the life status, conditions and sensitivities of communicating people and to be able to give meaning to the expressions accordingly (Laryea, 2018). The ability to listen to an individual or to read what is meant is related to the perception capacity of the communicators (Greifeneder et al., 2017). According to this; the communication type in CMC is assumed as text-based and listening means the interacted individual perceives the texts with the writer's emotions which mean reading to the other party. This means, the FtF communication is upgraded in CMC and the communication becomes hyperpersonal (Walther et al., 2015). So, the hyperpersonal communication shows

that the individual represents completely and perfectly him/herself in CMC and also it shows how the other people interpret these representations from their perspectives. As a result, those interactions form an integrity with both CMC and traditionally in FtF communication.

2.5.3 Sending and Receiving "Feedback" in CMC

Feedback is conceptualized in different ways in the literature. According to Cissna and Sieburg (1981), affirming others' responses recognizes and confirms the person's sense of self. Disapproving responses reject the message and deny the other's experience or withdraw the person's participation. Reis and Shaver's (1988) model of the process of interpersonal intimacy argues that a partner's affirmative response to self-disclosure makes the person feels accepted and understood, whereas a disapproving response weakens the person's sense of self. The current focus on feedback that approves or disapproves of evaluative comments highlights how such comments can be particularly important for the receiver's self-esteem (eg, Thomaes et al., 2010; Valkenburg et al., 2006).

The CMC platforms cause great convenince for the content developers for providing means for sending and receiving feedback (Bueno-Alastuey, 2013). The interactive feedback can be either positive or negative which can strengthened with the visual material provided by the used platforms. Those visual icons are called emoticons (Derks et al., 2007). The emoticons are added in the sentences to help individuals understand the positive feedback easily. The positive feedback in which the emoticons are not used might cause the messages to be undefinable by individuals. The individuals' activating the visual memory paves the way for an easy interpretation of the sent message. Those advantages provided by the CMC, support

the real-time FtF communication happen similarly on the computer-based platforms (Derks, Bos, et al., 2008).

2.5.4 Handling Emotional Interactions in CMC

In this study, the communication of emotions is defined as expression, sharing and definition of the feelings of interacting individuals (Harris & Paradice, 2007). The emotions are divided into two as; openly expressed and implicitly expressed emotions (Postmes et al., 2000). As it has been mentioned earlier, in FtF communication, being able to show those emotions through non-verbal features such as; body gestures is the physical dimension of expressing emotions. Phrases are probably the most frequently quoted non-verbal clues in text-based CMC. It focuses on the facial expressions of ordinary characters that often express these sequences. Blink a nonverbal message like a smile :-) wink ;-) or a sad face :-((Provine et al., 2007).

FtF interaction depends largely on non-verbal cues. These hints are absent in text-based CMC. Expressions can function as non-verbal representations that suggest facial expression and thus increase the exchange of emotional information by providing additional social cues beyond those found in the verbal text of a message (Derks et al., 2008). In CMC, particularly in text-based communication, facial information has been partially replaced by the emoticons to express different emotional situations using text-based representations of facial expressions (Jibril & Abdullah, 2013).

Furthermore, the emotional expression can be analyzed in CMC in its social dimension (Lo, 2008). The social dimension makes the individuals question how much the individuals exist in CMC because the personal information can be filtered

in the CMC. However, as there are very few studies on the existence of individuals, the physical and social existence of the individual was thought as partly equal in FtF and the CMC. In this study, the social existence of individuals in both FtF and CMC is thought to be similarly visible (Derks, Fischer, et al., 2008).

2.6 New Media as a New Communication Platform

The driving force behind the online relationships is people's need to connect with others. Communication technologies turn into media environments as people start using tools to support social practices. As Postman (1985) states "a technology… is merely a machine" it "becomes a medium as it employs a symbolic code, as it finds its place in a particular social setting" (p.86).

As Barnes (2008) claims, social media is interpersonal media which support the personal relations in new and unique means. It is "the relationship facilitated between people through the use of machines to foster the building of social networks and a network society" (p.29); not the involvement between human and machines which makes social media authoritative (Barnes, 2008).

Social media is a subset of new media and the nature of social networking is what distinguishes social media as a separate category within new media (Penn, 2016). According to Penn (2016), while Blogs, YouTube, streaming and e-books can be categorized as "new media"; Facebook, Twitter, Snapchat and LinkedIn can be the examples of social media. The reason why social media and new media cannot be used interchangeably is the fact that, according to him, new media can be created without being social, but (by definition) social media cannot be created without new media.

According to Cohn (2011), social media is the use of web-based and mobile technologies to turn communication into an interactive dialogue. He explains social networking as a social structure with people who are joined by a common interest. He also distinguishes social media by defining social media as a place where you can transmit information to other people and as a mean of communication. For him, social media enables everybody to exchange content that others can share, in turn, with their online connections. On the other hand, according to him the main purposes of social networking, is to connect with other people and it is about mutual communication.

New media as a set of social networks that enable individuals to communicate through computer-based platforms (Flew,2007). As he and his colleague (Flew & McElhinney, 2006), claim the rapid growth of new media has strengthened communication between people. Internet-based platforms that enable users to get out of the geography where they live in have brought globalization along with e-social life. Through websites, SNS, blogs, and sites that support photo and video sharing, users have had the chance to express themselves in e-social environments. The elimination of time and space limitations in communication by new media platforms has reduced the importance of physical relationships and made e-social relationships more (Happer & Philo, 2013).

2.6.1 E-social Platforms: Social Network Sites and Social Networking

Social Network Sites (SNS) are internet-based websites that allow users to communicate with their current or new friends over the platforms they prefer (Brandtzæg & Heim, 2011).

boyd and Ellison (2007) emphasize that the terms “Social Network Sites” and “Social Networking” are used in the same sense in the daily language, but there are conceptual differences between these two terms. SNS are platforms used to communicate with others they know. But Social Networking is used when users interact with others who they are not familiar with in real life; yet, using social media platforms they meet new people. In the present study, both SNS and Social Networking are included.

The SNS started as a real-time messaging websites over the Internet. ICQ and MSN Messenger have been named as the most popular websites throughout the years in 1996 to 2004 (Leung, 2002). The first instant messaging website was ICQ in 1996 and right after that in 1999 MSN messenger was released. Besides instant messaging, MSN messenger was also launched to offer free Hotmail account to the users (Rupley, 2004). For instant messaging sites, you had to go to the computer and log in to the system and show your friends in your list that you are online. The early developments of Web 2 instant messaging websites had several restrictions. Thus, mobile phone technology was developing rapidly at those times. Under the conditions of early Web 2 technology, the instant messaging websites had not been used on mobile phones yet. Therefore, chat sites could only be accessed from Internet connection and computers.

According to Rice University, University of Maryland, and Max Plank Institute for Software Systems (2007), SNS have five major characteristics. These are:

1) User-Oriented: Before the Web2 technology that we use today, websites were provided in one way by a user to update their content and to read these updates by site visitors. The new updates were provided by the webmaster. In online social

networks, each user started to create their contents. The topics of the contents can be expanded and updated by anyone involved in the discussion. This is the main factor that enables SNS to be dynamic and increase the number of users.

2) Interactivity: Another feature of today's the SNS is based on interactivity. SNS have technology far beyond instant messaging. It creates an interactive environment like Facebook and other SNS where you can communicate with peers or having activities allowing both sides to enjoy it.

3) Community-Based: One of the most important features of modern SNS is that they are community-oriented. Groups committed to common values, such as communities or social groups around the world also come together in social networks. They are sub-communities such as the group on the social media networks of the school you graduated from or social groups of people who share the same opinions.

4) Relationships: In Web 2 technology, relationships develop in social networks. The more you interact, the more you are at the center of social networks. When you share content, not only your friends on your list, but also the people they interact with, are aware of your content. Each share of your content reaches more people than you think.

5) Emotions: Another unique feature of Web 2 technology is that it provides emotionally safe environment. Knowing that you can always reach your friends in modern social networks makes it easier to overcome your emotional frustration. SNS, which ensures that they are always in interaction with their friends, have shown

that the users who have gone through a difficult period emotionally overcome this process more easily (Mislove et al., 2007).

With the development of Web 2, the technology connects people through the Internet. Also, computer and smartphone use have also increased (Reilly, 2009). SNS provided people with opportunities to be quick, easy, and active on Web 2 platforms (Parise & Guinan, 2008). People can create their profiles on SNS platforms via an Internet connection and share the information, texting each other, video calling, audio sharing, etc. People in online platforms can also get new friendships on these networks or reach relatives or friends who they do not see for a long time (Kavanaugh et al., 2005; Subrahmanyam et al., 2008).

SNS are e-social platforms that focus on developing and expressing social interactions among people who tend to share the same activities or interests (Kuss & Griffiths, 2017; Lin & Lu, 2011). SNS include tons of websites that are accessible to those who have an account to interact with a preferential group of people. Sharing is a feature that is used most frequently and enables it to be spread quickly. There are many options to share with other users on your friend's list. For example; people can share links from all types of articles, images, videos, or contents from other networks. Meanwhile, SNS provide a multimedia feature, hyper-textuality, packet switching, and elasticity of synchrony as mentioned earlier in the first chapter (Richter & Koch, 2008). However, SNS have promoted a peculiar way for communication through applying the web community as a combining apparatus to speed up interactions, which leads SNSs to indicate an interactive and vigorous community for users (Chang et al., 2015).

2.6.2 Facebook as One of the Most Popular SNS

In 2004, Facebook (FB) entered into our lives with new interactive features as marking the development of SNS. It is an undeniable fact that numerous SNS are actively used by digital natives and digital immigrants in today's technology especially, FB (Clement, 2020a).

In 2004, FB was launched by Zuckerberg and his friends. After that Facebook, became the most visited website in the world (Kirkpatrick, 2012). Facebook website, which is free of charge, can be downloaded to smartphones, computers, and tablets. It is a practical social media network that is very simple to use (Nadkarni & Hofmann, 2012; Qiyun Wang et al., 2012; R. E. Wilson et al., 2012).

FB was first established sixteen years ago in 2004. FB is a dynamic website that has evolved and keeps its users active by adding new features every year. These are the early features first developed in 2004:

- Search for people at school
- Find out who is in your classes
- Look up your friends' friend
- See a visualization of your school network (Glass & Hall, 2008).

In 2006, mini-feed feature was introduced by Zuckerberg. Thus, FB users were enabled to follow profile updates in the friend lists more easily. After that in 2007, anyone over thirteen years old was able to register on FB with their e-mail account. Furthermore, in 2009 FB started to serve to mobile phones as a downloadable application and also real-time News Feed was introduced (Rivera et al., 2010).

After 2010, FB has become even more popular with its renewed features. These are:

- Users could add cover photo;
- Timeline has been added;
- Photo sharing application;
- In 2011, FB users could be able to make live video calls through FB chat;
- In 2011 FB had privacy tools for posts. Posts could be as public or only for friends;
- In 2011, FB Messenger for mobile phones was introduced;
- In 2012, FB bought Instagram and FB accounts could connect to the Instagram accounts as well.
- In 2013, FB bought WhatsApp text-based messaging application.

In 2015, FB launched Messenger for the web application (Brügger, 2015). After a year 'like button' with reactions (like, love, haha, wow, sad, and angry) and 'FB live' have been added. In 2017, FB has reached two billion users (J. Clement, 2020b). After that stories could be shared on FB in 2018 (Page, 2018). In 2019, FB Messenger users could communicate directly with WhatsApp and Instagram users (Feldman, 2019).

PEW research center conducted a set of studies that prove that the majority of the people have an active FB account and it is one of the most popular SNS around the world (Duggan et al., 2015; Monica Anderson, 2018; Perrin & Anderson, 2019; Pew Research Center, 2018). One of the results obtained in a set of comprehensive studies is the relationship between SNS and trust. SNS users aim to establish a trust relationship with the other party while interacting on the Internet and in this sense,

they find FB more successful than other sites. 43% of the respondents who participated in the research said that a user who uses Facebook more than once a day, among other sites, is "trustworthy" (Hampton et al., 2011). Also, FB has more than 936 million active users daily (Facebook Inc, 2018).

Particularly, Facebook ranked among the most used SNS among the other websites. It has been and also currently noted that its population has blown up to over 950 million members (Clement, 2020a). SNS are rapidly growing up, these platforms have enthusiasm to serve eagerly for their members (Rauch et al., 2014). The estimated users' numbers in 2012 were 900 million (Köseoğlu, 2012). According to recent studies FB is still the top online platform among tertiary students'(Chaffey, 2019).

FB has several options for attracting especially digital natives, such as newsfeed, wall, friends, live stream sharing, like and reactions, message and inbox, dynamic texting, etc (Caers et al., 2013). Thus, FB has become an indispensable part of tertiary students' daily lives (Arteaga Sánchez et al., 2014).

FB has effects on academic purposes for example; multitasking skills are positively affected by FB (Judd, 2014; Kabilan et al., 2010; Selwyn, 2009). Furthermore, FB and other SNS provide broad time and space to encourage socialization process for tertiary students (Barkhuus & Tashiro, 2010; Deandrea et al., 2012).

Socialization is a vital part of tertiary students' daily lives (Kirschner & Karpinski, 2010). Recently, FB is one of the reachable and accessible ways for socialization easily, thus FB has obtained most of the students' attention (Hamat et al., 2012;

Kalpidou et al., 2011; Manago et al., 2012; Valenzuela et al., 2008). Tertiary students prefer spending most of their time on SNS; in other words, they use social media platforms to fulfill socialization needs.

FB is the kind of SNS that has various features which allow people to interact with each other (Elliott & Polyakova, 2014). It is a useful website where you can create your own friends' list, open your profile to anyone who is a FB user, or check with your private security settings (Park & Baek, 2018).

In general, FB is a website where people share contents and these contents are returned with comments and reactions (Hoyle et al., 2017). FB has major features which are interactive text, status update, subscribe, emoticons with mood faces, comments on posts, video call, live stream, etc. (Cvijikj & Michahelles, 2011).

On the other hand, in addition to the extensive use of digital natives, digital immigrants also use FB actively to communicate with their families, keep up with innovations, and fulfill socialization needs (Fietkiewicz, 2017). In addition to these, digital immigrants and digital natives are different in terms of technology use and social media aptitude (Nikou et al., 2020). However, as it has been stated earlier, digital immigrants are parents of digital natives. Due to this situation, digital natives use FB to be in contact with their family. Digital immigrants are also active users on FB. As a result of all these, FB has claimed that it has blown up millions of users.

FB is selected as the e-social environment in this study and the IPCS in four dimensions (sending clear messages, listening, giving and getting feedback, and handling emotional interactions) were investigated on FB.

The first one, as sending clear messages on FB was mentioned in the previous studies about hospitality management, restaurant marketing researches, nursing education, in classroom performance of students in education (Demirbilek & Talan, 2018; Kwok & Yu, 2013; Shipman et al., 2012) also, texting habits of adolescents on FB (Garmy, 2014).

The second one is listening on FB which investigated physical listening in the studies about musical preferences and personality, mobile applications for listening in foreign language education, and marketing research (Nave et al., 2018; Powell et al., 2016; Read & Kukulska-Hulme, 2015) also Technology Assisted Language Learning (TALL) was developed for language skills of students. Also, TALL boosted ESL students' listening skills via FB (Ahmad, 2016). In this study, the listening was discussed as reading what the individuals meant who are in interaction. As it has been earlier, listening is not listening physically but perceiving the thoughts that are unexpressed (Walther, 1996).

The third one is giving and getting feedback on FB mentioned in the studies which were conducted about FB's like button, library information and tool services, and leadership skills and technical writing (Dhir et al., 2019) also FB provides giving and getting feedback on student's projects by instructors (Demirbilek, 2015). Moreover, students' feedbacks are important while learning foreign languages (Rahimi et al., 2015) .

The last one is handling emotional interactions on FB in the studies which have been conducted about personality traits, users' emotions, college students' depression and psychological distress (Bazarova et al., 2017; Ferrara & Yang, 2015; Sas et al., 2009)

also, in virtual environment individuals can reflect their emotions without any judgement (de la Peña & Quintanilla, 2015). Furthermore people convey their emotions on FB through emoticons. Research about emoticons mostly analyzed what satisfies people to use emoji's during communication process and how people reflect their moods via emoticons (Brito et al., 2019; Fleuriet et al., 2014; Gallud et al., 2018; S. Herring & Dainas, 2017; Settanni & Marengo, 2015; Tchokni et al., 2014; Vashisht & Thakur, 2014).

There has been dearth of research on IPCS in the four sub-branches in the communication and media studies literature. In general, studies have been done in the field of education and in the field of health communication. This research is in a preliminary position for the IPCS research area.

2.7 Emerging Generation: Digital Natives

The development of technology has brought great changes with itself. With the improvement of computers, the introduction of a new model of smart phones in every day use, in addition to the introduction of various kinds of technological devices, people are classified as digital immigrants and digital natives (Prensky, 2001; Horan, 2011).

Digital immigrants' definition has been used to describe people who were born before 1980. Digital immigrants were born in the less dominant era of technology. Therefore, the distinction between digital natives and digital immigrants has taken place in the literature since Prensky (2001).

Digital immigrants started to use the Internet and computer systems after childhood (Vodanovich et al., 2010). Digital immigrants see that their adaptation to technology

is slower and sometimes not at all. However, that is not general for all digital immigrants. Some digital immigrants are undoubtedly good at using technology to beat the digital natives (Hoffmann et al., 2014).

On the other hand, digital natives are a very creative generation. Their perceptions are very open and their adaptations to technological developments are undoubtedly very strong (Palfrey & Gasser, 2011). Since they were born in a period when technology and electronic devices were dominant, their upbringing and attitude on life are also different from the previous generation. Digital natives, who grew up in the world of technology, were trying to get their families used to technology while also learning about their traditional ways of life. Thus, digital immigrants are parents of digital natives. Digital natives are active users of many social media platforms. But the platforms in which they interact with their peers are different. The platforms where they interact with their families are also different.

The term “Digital Natives” seeks to explain people who were born after 1980 that were grown up surrounded by technologic innovations and who tend to be more skilled technologically unique different from those enchanted by the individuals of the previous generation (Marciniak, 2010; Prensky, 2001). Besides this, another name of this generation is “The Millennials” (Borchert, 2000). Digital natives were born into a world where technology exists, and learning patterns and chat channels have always been through technology. Their ability to quickly track changes in their age groups and to cope with many tasks at the same time regards to the advantages of technology.

“Google Generation” is also known as the term which describes digital natives. Since the most used and favorite search engine of this generation is Google, this term is used frequently (Nicholas et al., 2011). The fact is that they have experience in these various digital technologies.

Digital natives are divided into groups as follows (Zur & Walker, 2011). The first one is the avoiders. Members of this group who stubbornly reject technology, even though they were born in the digital world, however, they behave differently from their age groups. While their age groups are busy with SNS and applications, they do not prefer to use these applications. A plain cell phone is enough for them.

The second one is the minimalists who are aware of the technology. Also, it is necessary to know how to use it (Tkalac Verčič & Verčič, 2013). They use Google comfortably to meet their socialization needs. They have a social media account that they check once or twice a day. But they use all kinds of technology as much as their needs (Verčič & Verčič, 2013).

The third one is enthusiastic respondents. It is a subgroup that defines many digital indigenous people. Members of this group are adapted to the technology in a very convenient way and to the each new technology where they can use the technological device. Any type of information he/she is curious about, s/he searches on the Internet first. As digital natives, they enjoy using not only smartphones but also tablet computers. They can stay online all day and follow every new development instantly through the Internet. In this way, many organizations (birthday party invitations or working within the groups, etc.) can be activated more quickly over the Internet.

Digital natives are exposed to have cultivated high-tech digital skills and learning more quickly options for proper education system (Kirschner & De Bruyckere, 2017). Since today's tertiary students were born in 2001, this research focused on tertiary students as digital natives because they prefer more communication with others mostly via online platforms (Wankel, 2009). This study explores whether digital natives see social media applications as an extension of their lives in terms of constructing IPC.

The term digital native' is used for the generation born in years when the digital technologies are dominant (Marciniak, 2010). For an individual to be digital, s/he should be aware of the technology firstly and to be able to perceive it. The digital natives is the generation which know how and when to use the technology (Qian Wang et al., 2013). Besides, this generation has the capacity to access to the sources fast in order to reach the information. The digital natives use the Web 2.0 technologies multifunctionally. In other words, they can write e-mails and have video conferences at the same time (Koutropoulos, 2011). They are effective on social media networks for instance, to communicate especially on computer-based web sites is more practical for digital natives (Bennett et al., 2008). As a result of this, the digital natives prefer the social network sites excessively in order to socialize. This study evaluates the socialization of digital natives with their friends, families and other people on FB (as one of the social media networks) in terms of IPCS.

2.7.1 SNS Usage among Digital Natives

One of the important effects of SNS has been the acceleration of the socialization process of digital natives. Tertiary students prefer to use smartphones and social media applications while interacting with their company (Alson & Misagal, 2016).

Another study about social media use among tertiary students explains that having strong external relations, sensitivity, and receptivity to involvement have been indicated to be certainly related to the intensive social media use (Hughes et al., 2012; J. L. Wang et al., 2012). Social media supports sending clear messages, listening, giving and getting feedback, and handling with emotional interactions through various kinds of applications and devices.

In SCM, tertiary students can send messages via social media applications (Lepp et al., 2016). Also, they spend more time interacting with people through texting (Hanson et al., 2010). In LS, FB is used for group discussions as an educational purpose (AlSaleem, 2018). Also, it can be managed for users' favorite playlists to be updated via Spotify application (Germain & Chakareski, 2013). FB is a kind of transactional communication model which enables users to give sensible feedback and getting feedback from listeners with an elasticity of synchrony (Grinberg et al., 2017). On FB, people can share posts, comment posts, or ignore posts then the users expect getting feedback at least on their posts (Saini et al., 2018). In HEI, Wood (2009) defines emotions by dividing into psychological and experience. People react psychologically, for example; smiled, shocked, be surprised, etc. FB has emoticons which allow users to demonstrate their emotions (Bazarova et al., 2015). It supports emotional interactions in the virtual environment as if they were in FtF communication (Farnadi et al., 2014; Kramer, 2012).

SNS are considered as the most updated and developed online systems, applications, and websites, which are also popular such as FB's being the most used SNS among tertiary students worldwide (Cheung et al., 2011). Among the highlights, FB makes it

a helpful instrument for educating and learning which are the cultivators of communication; the advancement of coordinated effort; dynamic support, data, and asset sharing among tertiary students and staff, and the help of analytical thinking (Mason, 2006).

SNSs enable access to people in reaching easily essential social needs such as; connected people, sharing information, switching ideas, and building private networks (Akter & Nweke, 2016). SNS provide access for online users to interact with their peers and friends anytime and anywhere. Thus, users are able to send private messages, follow peer updates, and share something with them at their own advantage. Being a member of one of the popular SNS may have changed users' behavior due to the influence of friends (Zhou & Li, 2014). Expanding the use of SNS and other social media applications became conceivable by developments in the domain of Communication and Media Studies and also it permits new technologies that it has empowered especially foreign students i.e. they have tended to use SNSs more than any time for sharing recent memories to stay interacted with their home countries (Hjorth & Arnold, 2013).

Earlier studies explain that users tend to share more their personal data virtually even if they have an active and person-to-person connection with their possible crowd (Kahveci et al., 2016). In an online society, (Chiu et al., 2006) claim that a warm and constant relationship through users develops the capacity of their information-sharing rate. (Ma et al., 2014) Additionally, he clarifies that the intensive SNS connections indicate the stronger motivation for sharing information on SNS's. Furthermore, SNS self-exposure affects the difference in subsequent interpersonal connections (Kwak et al., 2014). Introvert users will spend more hours on FB and have a high number of

friends and groups on SNS (Orr et al., 2009). Regular users of FB consider a high level of self-confidence than others who do not have a FB account (Ljepava et al., 2013). Also, FB use level is higher among freshmen, as students prefer interaction through virtual platforms. Therefore, senior students prefer the traditional way of communication, which means FtF (Özad & Uygarer, 2014). Nonetheless, researchers have discovered that 80% to 90% of students who are going to university or college (in the US) use FB intensively (Hargittai, 2007; Jones et al., n.d.; Matney et al., n.d.).

The present study investigates the four sub-branches (SCM, LS, GAF, and HEI). First of all, SCM through FB is accepted as an effective communication way for other people (Bannor et al., 2017). The second one is LS. FB is limited in the listening options because people can listen on FB only through video call, or sharing live streaming videos. FB is also used for educational purposes mostly by the teachers and one of the research suggested that students are positively affected by FB in terms of GAF through FB (Wichadee, 2013). Digital natives also, tend to be more adapted to positive emoticons on FB in terms of HEI (Ferrara & Yang, 2015).

Conclusions drawn from the literature review shows that obviously, the common opinion offered by all the research is that the digital natives are in contact with the social media via the social media applications or tools which have direct positive relationships with SNS and that they use more than one social media tool the end of the day again the use of FB among digital natives is very high overall.

2.8 Can E-Social Platforms Be the Extensions of Social Communication Platforms?

McLuhan was influenced by his teacher Harold Innis during the period when he worked on media and communication. McLuhan made prophecies in relation how communication technologies affect our sense organs and emotions. At this point, if we consider that Innis investigated effects of media and communication technologies on cultural elements, Marshall McLuhan completely complemented Innis' studies.

McLuhan has always been critical of technological advancement and argued that every new technology created turning points in people's lives. He argued that the invention of Gutenberg's printing press, which has historical significance, transformed people into introverted, book-embedded communities. However, media technologies have eliminated the concept of time-space, brought people together again and thus the concept of global village has developed (McLuhan, 2011).

Marshall McLuhan introduced the concept of "Global Village" in order to explain the effects of the media on people and the expectations of people from the media or how people live an integrated life with media (Levinson, 1993). After the availability of electrical energy, McLuhan compared the recent innovation world through the global village perspective in which dynamic transfer of information transmission occurs. The global village concept was coined by McLuhan (1964) which discovered new technologies connecting people together. The concept of the Global Village of McLuhan has turned into reality over the years thus today’s electronic environment is dominated mostly by Google and FB (Huesch et al., 2016; Taylor, 2013). These SNS’s connect billions of people together on the social networking systems on the

cloud. Recently, Internet technologies support societies to interact with each other via common SNS's (Tokunaga, 2009). In favor of globalization to the IPC developed by Internet technologies, different societies learned each other's traditions and ethical values with the development of technology and SNS have brought new innovations every day and ensured the communities are transferred to be online (Marturano, 2011).

On the other hand, one of the most important works of McLuhan is called as Understanding Media: The Extensions of Man (1964). In this book McLuhan mentions that the media tools are like an extension of the body of people such as our hands are the extension of our arms then the media tools have become extensions of our hands (Euchner, 2016).

McLuhan, who developed the idea of "Technological Determinism" sought to explain the society as technological advancements are tools that affect people from outside. He argues that these tools shape people's cultures and change the way of life. He defends the idea that people's perspectives start to change as technologies develop. At this point, he emphasizes that the tool is more important than the content with the phrase "medium is the message".

McLuhan puts forth the fact that a connection was established between the development of societies and the development of technology. Every innovation in technology means a future development or even progress for societies (Licht, 1959). According to McLuhan's ideas in 1964, McLuhan has foreseen the future as social media tools will be an extension of people.

The aim of this study is to examine whether new communication platforms, which are social media channels, are perceived differently from social life in the context of communication. To summarize the main argument of the study; if there is no difference between IPCS in the two environments; this is an indication that the two environments are articulating and CMC has an extension of FtF.

2.9 Theoretical Framework

The major theories used in this study are the Social Information Processing and Uses and Gratifications Theories. As it has been mentioned above tertiary students use various social media platforms especially FB. To gratify several needs such as education, interpersonal relationships, surfing, entertainment, social networking, etc. Also, SIP Theory points out that the CMC may replace equal to FtF communication. SIP predicts that interpersonal relations on CMC can be as successful as FtF communication.

2.9.1 Social Information Processing Theory

Social Information Processing (SIP) Theory was coined by Joseph Walter in 1992 as a theory of interpersonal communication. SIP claims that improving computer-mediated interpersonal communication (eg texting, chat rooms, or e-mails, etc.) takes time compared to FtF communication. In addition, he argues that when CMC develops sufficiently, it would be as good as FtF communication. SIP Theory evaluates the behavior of individuals against external factors in the context of the individual's own social environment (Salancik & Pfeffer, 1978).

According to Walther, the SIP Theory was developed basically through assumptions. Firstly, the individuals have the need to belong to a group and desire to socialize. Besides this, the interpersonal communication is assumed to be based on

interpersonal interaction. Moreover, the individuals use verbal and non-verbal communication and written language for mutual interaction. Under the light of these suggestions, the SIP Theory emphasizes that the CMC can be similar to FtF communication (Walther, 2015).

When the SIP Theory was first introduced in 1992, the CMC platforms were very new and old-fashioned compared to today's technology where the individuals could have mutual interactions. The dominant systems of that era were previously mentioned as Web 1 technologies and their contents were mostly written. Therefore, interpersonal communication took more time than the FtF communication (Olaniran et al., 2011).

The use of CMC has grown rapidly in the last decade. Among the reasons for this development is an increase in online communication (Asemah et al., 2013). SIP Theory goes beyond models of social influence and relational interaction by arguing that meanings in communication activities are not only mediated by past interactions and time (Walther, 1992; Walther & Burgoon, 1992); rather, the meanings also depend on the culture. Additionally, SIP Theory recognizes that social presence and media richness or the ability of a media to support or carry multiple cues affect media perception. In turn, this perception of the environment is embedded and reinforced by culture. So social presence, media richness and media appropriateness are important issues because they emphasize media (Rice, 1993).

SIP Theory, takes into consideration a relational discrepancy perspectives of CMC Walther (1995). On the other hand, the important difference between CMC and FtF communications is due to transmission acceleration rather than the quantity of

knowledge medium for communicating information between factors affecting such transfers differ (Sumner & Ramirez, 2017).

In general, SIP Theory is particularly affected by: cultural factors (e.g. perception, social influence, norms, expectation, meaning negotiation etc.), besides the three main factors that affect the reconstruct message. First, the dialog is displayed contextually, the environment and individuals' perceptions of environmental impact effects communication behavior. Second, the culture considered an important component of the environment, affecting perceptions and shapes behaviours. Third, meanings represent the essence created values and shared insights while communicating defining social interaction (Gudykunst & Kim, 1992).

To sum up, CMC based social media platforms provide opportunity for interpersonal communication to develop and they support individuals to have a parallel like FtF interaction (Heinemann, 2011). In order to have suitable media conditions, the communicators benefit from the social media platform applications (instant messaging, video conference, voice message, etc.). As a result, the communicators can establish stronger social relationships with each other (Davis & Agrawal, 2018).

2.9.1.1 Research into Social Information Processing (SIP) Theory

SIP Theory is related into research about time-related instant messages in Communication Studies and has shown that time is a crucial dimension of the message in both traditional (social) and e-social communication. SIP Theory points out that communicators in e-social environment exchange social information through chronemic hints (Kalman, et al, 2013).

Another study examines online dating websites in Japan, in order to discover developments in CMC through online dating experience. SIP Theory supports Japanese online daters' achievement providing hints for social information that the dating platforms provided (Farrer & Gavin, 2009).

In health communication, SIP Theory has been used to explore how nurses respond to their patients (Sheldon & Ellington, 2008). SIP Theory has been postulated as an examination on how human minds affect behavioral responses in social contexts. More broadly, SIP considers that mental processes involve social understanding, which is the subject of moral field research, but goes far beyond that. These operations include selective attention to social cues, attribution of intention, setting goals, accessing behavioral writings from memory, decision making, and behavioral animation (Rabiner & Dodge, 2004).

On the other hand, SIP Theory links social computing, social competence, and school readiness. These are explored in a short-term longitudinal study with a sample of 198 preschool children. Data on social computing supports the hypothesis that, through child interviews, data on the social competence of the child, social information processing and social competence are related to school readiness (Ziv, 2013).

Furthermore, based on SIP Theory, another research discusses the impact of coaching leadership behavior on employees' in-role performance and the mediating role of role ambiguity and social alertness. Through the study and analysis of 224 employees, coaching leadership behavior has a significant positive impact on employees' in-role performance (Huang, 2019). Moreover, SIP Theory suggests that employees' work attitudes and behaviors are shaped according to how they try to

understand their work environment and how they interact with each other and exchange information (Salancik & Pfeffer, 1978).

In the literatue, SIP Theory has been studied in terms of health communication, education, romantic relationships, and leadership behavior. It has not been studied in the context of IPCS. The present study aims to fill the gap in the literature.

2.9.2 Uses & Gratifications Theory

Uses and Gratifications Theory (UGT) sought to explore why people actively seek out specific media to meet specific needs. There are three objectives in categorizing UGT: 1) How people use mass media to gratify their needs. “What do people do with the media”? 2) What are the essential elements for individuals’ media use, and 3) Positive and negative effects of individuals media use (Siraj, 2007).

In fact, UGT assumes that audience members actively search for the mass media to gratify individuals’ needs. This is called audience-centered approach. Audience actively search out for media channels they pursue to be able to gratify at least one of fundamental needs. Thus, people may feel more well-informed when they have learnt specific facts and anecdotes from media. By searching out media, individuals satisfies a need to be more knowledgable. Eventually, media leads audience to one or more gratification (Urista et al., 2009).

UGT falls under which people are not poor individuals who suffer from what the media impose, but rather those who use the media and satisfy their various needs from it.

First of all, Herzog and Lazarsfeld (1944) sought to answer how media are exposed to people. Then Herzog, who was trying to understand the popularity of radio soap operas that were very popular at that time, had interviews with numerous soap opera fans. Herzog observed that the radio soap operas were filled some spiritual gaps in the audience and divided them into three categories. These are: emotional release, wishful thinking, educational approach. After that; Herzog and Lazersfeld added the following term to literature; “Gratifications” (Cantril, 1942).

UGT created that perception of what satisfactions the audience obtained from the mass media. Katz in 1959 mentioned this in his study “What people do with the media?” and he set out to find an answer to his question and it gave a new direction to mass communication into a very strong question by talking about the approach of UGT as a new beginning for communication research with Katz’s different perspective (Katz, 1959). UGT focuses on people’s needs and how people gratify their needs through social media channels.

UGT gives clear understanding of how individuals seek out gratifications from media. UGT falls into psychological and emotional needs persuade user preferences when using media sources, and admitted the effects those lead from demands, intentions, and attitudes (Joinson, 2008; Katz et al., 1974). UGT divided into into five main needs, these are: survelliance, personal identity, personal relationships, relationships with the media, and using the media within relationships (Rubin, 2000).

McQuail (2010) summarized UGT researches on television in the 1960s and 1970s as follows: 1) Media and content selection is generally rational and geared towards specific content hence the target audience is active. 2) Audience members are aware

of media needs arising in personal and social conditions and able to express them in terms of motivation. 3) Cultural and aesthetic features of the content, attracting more viewers than the satisfaction of various personal and social needs. 4) Most of the factors involved for audience formation (p.424).

While the concept of "media" previously referred to a handful of mass media such as newspapers, radio, television and film, the current media understanding is broader and reflects the proliferation of new communication technologies recently. Today's media ranges from a large number of devices (smartphones and robots) to channels (Internet and cable) to places on these channels (SNS and home shopping) and / or devices (smart phone applications) allowing users not to do them. Interactions are not only with these "media" (human-computer interaction) but also through CMC to communicate with other users (Sundar & Limperos, 2013).

Within the light of these ideas, mass media through various platfroms such as, social media channels are able to reach millions of people with defeated distances, established direct relationship with the audience (Settle, 2018).

The shift of the media and media industry over the years reformed and reshaped into new forms and UGT gained more strength with interactivity provided by Web 2 technology (Ko et al, 2005). Internet-based SNS, changed procedures for audiences to absorb and receive what from media. The interaction contributed to the means of penetrating instant feedback that creates and reflects social conditions. This also provided an UGT-mediated form of IPC (Smock et al., 2011).

Audiences use media to gratify information about current trends, breaking news, daily updates while other audiences seek satisfaction about entertainment needs and socialization needs (Payne et al, 2003). UGT is a convenient theoretical framework for tertiary students' inescapeable endorsement of SNS. UGT helps to explain that users may continue to be engaged with SNS if their gratifications and satisfactions are fulfilled by such new tools (Ku, Chu et al., 2013).

Through the use of social media interpersonal relationships have been transferred from being passive to active users, interpersonal connectivity cultivating keep in touch with other people in online networks. Social media users gain gratifications from the media such as, fun and enjoyment from interacting with others on SNS (Pai & Arnot, 2013).

2.9.2.1 Research into Uses and Gratifications Theory

In the present study, UGT helps to shed light on why and how users are motivated to use FB. According to Hossain & Kim & Jahan (2019), the "like" feature on FB emerged as a widely used paralinguistic tool for communication, and will likely increase in importance as an indicator of positive feelings towards others' posts. Also, findings show that the most obvious motivations for users to like behaviors are enjoyment, information seeking, social interaction, and subjective norms, which then reinforce their continued intention towards FB. The results also revealed that subjective norms strongly contributed to projections of liking behavior and continuous use intention.

According to Ifineado (2016), students rely heavily on SNS. UGT categories of self-discovery, entertainment, social improvement, and sustain interpersonal connectivity through the construct of behavioral objectives which were found to have positive

effects on students' ubiquitous endorsement of SNS. The use of social media by digital natives has developed interactive behavior in this context (Brännback et al., 2017).

Another research about UGT concludes that what needs university students gratify from social media or types of social media channels and fulfill the psychological and social needs of university students (Cantril, 1942; O′Donohoe, 1994).

Moreover, one of the research about UGT supported the idea that the audience passionately prefer and use the social media channels in keeping up with their distinct wishes. It defines "how and why of social media use". From this point of view, while active audience spends time on the social media channels for individual aspires eventually they gain various gratifications such as; socialization, entertainment, interpersonal relationships from social media use (Stafford et al., 2004).

In another study about how the university students are satisfied with the FB, it has been found out that; the students satisfied their six gratifications through FB. They are; love, sharing, socialization, entertainment, social enlightenment and following the fashion. Also, the instant messaging on the Messenger application of FB is essential in terms of positive development and their sustainability in relationships (Quan-Haase & Young, 2010).

UGT is used to develop gratifications through the Internet which considers Web 2 platforms which conceptualized as real-like (Ballew et al., 2015). UGT uses to evaluate the needs that Internet use gratifies. In the 21st century, this theory assumes

that users as active. Users use the Internet for their goal-oriented needs. In this context, the Internet is used to meet the biological and social needs of people. The widespread use of social media meets the users' needs for Web 2 (Ng, 2020). SNS are considered as an online society shaped with major websites.

Another study explained what motivates tertiary students to use FB heavily. Tertiary students mainly use FB for socialization needs. Since international students prone a nomadic life for educational purposes, their addresses and places of residence are not rigid. However, FB is a tool that allows them to maintain their social relations without interruption and also FB supports people to be in interaction with their peers, family, and other people (Gwena et al., 2018).

FB influences millions of users throughout the world, among numerous users who had been engaged in these websites, some of them are also integrated FB into their daily lives (Raacke & Bonds-Raacke, 2008; Tufekci, 2008). These websites are based on interaction, formation and, continuity; both with current users from a group of friends or interacting with people with common or same activities (boyd & Ellison, 2007). The fundamental assumption of UGT is that people will search out media channels among many of them that satisfies their needs and advantages to high-level gratifications (Haridakis & Humphries, 2019; Lariscy et al., 2011).

According to another study, social media engagement and which uses of social media motivates users are explained in terms of UGT. Users mostly prefer FB to gratify their needs. These are social connections, surfing, status updating, social investigation, escapism, socialization, share problems, social interaction, following new trends, etc. (McCay-Peet & Quan-Haase, 2016).

Another approach to UGT explains to understand how people pick media to fulfill their necessities, enabling one to acknowledge satisfaction, for example, information upgrade, excitement and unwinding, social collaboration, and reward or compensation (Ko et al., 2005). It was one of the first paradigms to examine the effective aspect of the audience in media preferred by recommending that individuals effectively search for, classify with and apply media to achieve peculiar gratification needs (Ku et al., 2013).

Burke and Kraut (2011) also explore that strength attachment expands via applying orderly communication items (e.g. posts, comments, messages) and wasting transmitted gratifications (e.g. status updates, photos). Another study proposes that individuals will keep on being connected with SNSs if their satisfaction and requirements are satisfied by such instruments (Malik et al., 2016).

UGT has shed light on studies in different fields within the scope of social sciences. In mass communication research, UGT has been used to explain usability and functionality on consumer behavior in terms of SNS (Korhan & Ersoy, 2016). Another study suggests that sponsored advertisements whether the adverts fulfilled users' needs or negatively affected them (Plume & Slade, 2018). Moreover, UGT has been applied to political participation and political expression on media use (Chen & Chan, 2017).

In EMU, UGT has been conducted in the researches about the university students. One of researches was about SNS provided a platform where users can communicate themselves in a variety of ways. Users upload photos, tag their loved ones or friends,

or just comment on a situation. Based on UGT users get satisfaction from such interactions (Oloo, 2013).

Another research was about rise of FB's popularity in the world, FB's multitasking activities have also led to an increase in popularity. EMU students' have ability to multi-tasks on FB which shows that they have similar views about activities (Taiwo, 2014). Another research was about based on the UGT, it aimed to investigate the extent to which tertiary students use SNS in particular FB and also, Twitter, to satisfy their news-receiving needs (Mesole, 2014).

Moreover, SNS is a major technological achievement expanding people's daily interaction and turning the world into a massive virtual platform for communication. One of the biggest advantages of SNS is that it reduces the distance between people in different parts of the world. The data obtained from 115 Kazakh students at EMU reveal that in addition to FB, Kazakh students use alternative SNS to meet their socialization needs. Moreover, students prefer to communicate with family and friends using different platforms (Sharipova, 2017).

As it has been mentioned earlier, digital natives gratify their needs through FB. Such as the "like" feature of FB motivates the users' social and psychological needs positively. Also, digital natives' socialization, entertainment, IPC needs are satisfied with FB. In addition, digital natives gratify goal-oriented needs, multi-task support and news-receiving needs through FB.

The present study considers tertiary students who have an interest in the Internet. FB has been considered as a social media channel through which tertiary students gratify

their socialization needs. In this context, this research seeks out to explore whether the needs of SCM, LS, GAF, and HEI are met within the framework of the UGT.

Chapter 3

METHODOLOGY

This chapter consists of information about the methodology of the research, research design and research model, population and sample, data collecting procedures, and reliability, validity, and ethical concern of the study. As it has been mentioned earlier, the research was conducted at the EMU in 2018. The study has been conducted through a survey prepared by Learning Dynamics, in 2002. After obtaining the necessary permission, the instrument has been applied. It seeks to collect information IPCS on real and e-social environments. It consists of three sections. The first one seeks to collect information on demographic characteristics. The second one examines the traditional (FtF) communication process. The third one examines the communication process in social media (FB). In the study, the differences between real and e-social environments of the participants are explored through inferential statistics.

3.1 Research Methodology

This study is conducted in line with quantitative research (Nathan & Scobell, 2012b). Quantitative research is the process of analyzing the collected numerical data by using appropriate methods (Caldas, 2003; L. A. Wilson, 2019). This research type is used in social sciences directly test a phenomena based on collecting data, analyzing data, and testing hypotheses besides that refining, improving, and extending the theory. To sum up, information must be definable, measureable, and testable.

Quantitative research concerns about discovering facts about social phenomena. Also, that phenomenon assumes measurable reality. Furthermore, the data is collected through measuring a phenomena and analysis is conducted via numerical comparisons and statistical inferences. In addition, data are reported through statistical analysis (Tuli, 2011).

For this study, descriptive and inferential statistics are (Stapor, 2020) preferred. Descriptive statistics has been given as analysis of data. Data have been defined in two methods; as measures of central tendency and measures of spread methods. In this study as descriptive statistics in order to have the value of the measure of central tendency the mean and standard deviation have been used and in order to show data dispersion the standard deviation have been used (Hayhoe et al., 2020). On the other hand; the inferential statistics is conducted through analysis of variance (ANOVA), paired sample t-tests which were done to adapt the obtained results of data into the general population. Quantitative research methods are applied to the present study to understand whether there is a statistically significant difference of tertiary students' IPCS in both social (real) and e-social (FB) environments. The goal is testing concepts and patterns known from theory using empirical data.

It seeks to collect objective data on the target situation based on quantitative approach. In this process, the study looks at whether the results obtained by reducing the concepts into the variables would support the hypotheses which are put forth at the beginning. To do this, it gathers evidence, tests them, and checks whether they can be generalized.

3.2 Research Design and Research Model

This is a case study of international tertiary students who study at the FCMS in EMU in 2018. Case study is the one of the research designs used in social sciences (Eisenhardt, 1989; Gerring, 2006). Case studies can be used both in qualitative or quantitative research in which the researcher discovers a single item or a case surrounded by an event, process, or social group. Researcher gathers particular information by using a diversity of data collection procedures during a continuous duration of time (Tight et al., 2016).

The present case study aims to follow three steps. These are to: describe, explain, and evaluate the case. Quantitative case studies lean on quantitative evidence and multiple sources inspired by previous theories (Yin, 2013). The present study framed by the research model as follows:

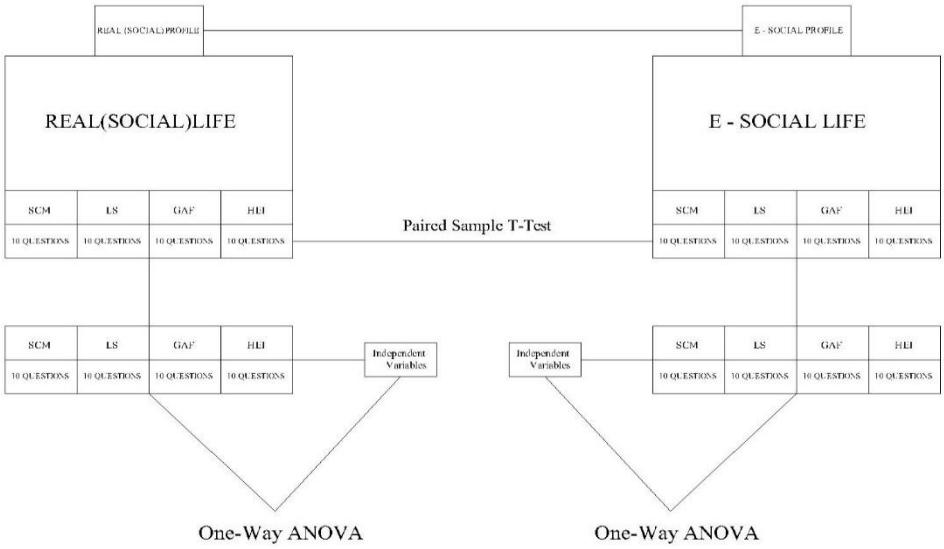

Figure 4. The Research Model of the Present Study

Research model of the present study in Figure 2 shows that the investigation has been done through three main parts. The first one is designed to gather personal information of respondents based on nine demographic questions. The second one, has been designed to measure IPCS in real (social) environment. IPCS in real environment has been divided into four main dimensions. These are: sending clear messages, listening, giving and getting feedback, and handling emotional interactions. Every dimension has ten questions. Moreover, the third one is designed to measure IPCS in e-social (FB) environment. IPCS in e-social (FB) environment has been divided into four main dimensions. These are: sending clear messages, listening, giving and getting feedback, and handling emotional interactions. Every dimension has ten questions similar to questions on real environment. Paired sample t-test is used to measure the differences between social and e-social environments. One-way ANOVA is used to measure the differences between demographic questions and dependent variables.

The basis of the study is to measure and evaluate the IPCS of tertiary students in real and e-social environments. The IPCS inventory of Learning Dynamics (2002) which has examined IPCS in four categories is revised for Facebook. There are ten questions in each section for real life. After that, respondents answered another forty questions which are divided into four categories and each category has ten questions for e-social (FB) environment as well.

3.3 Population and Sample

For the present study, students who study at the FCMS have been preferred. Turkish and Turkish Cypriot students have not been included in the study. Also, students studying at the FCMS are divided into three groups as undergraduate, graduate, and

doctoral students. Furthermore, FCMS has four Departments. These are: Cinema and Television, New Media and Journalism, Public Relations and Advertising, and Visual Art and Visual Communication Design.

It is presumed that these students are more conscious on communication skills. International students have shown preference for they communicate with their parents over FB for FB is the most popular SNS among adults (Brandtzæg et al., 2010; Johnston et al., 2013; Saunders & Eaton, 2018).

Based on the above decision, in the year 2018 at the FCMS at the EMU there were 435 international students. Hence, from the population of the study, 224 students are chosen from. Systematic random sampling have been preferred for sample selection and every second student was given the survey. Almost 50% of the population participated in the study.

3.4 Data Collection Instrument

In the study, the Inventory of Interpersonal Communication Skills from Learning Dynamics (2002) has been chosen. The inventory consists of four sub-sections. To the inventory, nine demographic questions are added (see Appendix A). Data for the study have been collected online from English speaking international students of FCMS at the EMU in 2018-2019 fall semestre. In a nutshell, IPCS inventory has been adopted to evaluate real and e-social IPCS of international university students who study at the FCMS, in the EMU 2018 (see Appendix A).

The instrument that has been adopted for the study consists of three parts. The first nine questions, as it has been mentioned earlier, are added to collect demographic

information of the participants. These are: gender, nationality, department, degree, marital status, where do you live?, sexual orientation, and religion.

The second section consists of forty questions on real, traditional, IPCS of participants. Questions in this section comprise four issues, each of which consisted ten questions. These are: sending clear messages, listening, giving and getting feedback, and handling emotional interactions. The third section also consists of forty questions designed in a similar manner. In order to investigate e-social environment (FB).

The responses of the inventory consist of “usually”, “sometimes”, and “seldom”. In some questions, such as 1,2,4,5,11,13,14,17,18,20,21,25,26,27,28,29,31,32,33,36,39 and 40, "0" score was given to "usually", "1" score was given to "sometimes" was given a and "3" score was given to "seldom". At the rest of the questions, scoring was reverse. The questions of the inventory were adapted to FB, to determine the level of communication skills of the respondents in this e-social network.

Every section has ten questions, for example; in section one, questions related to sending clear messages were asked to the students. Some of these questions are: “Is it difficult for you to talk to other people?”, “In conversation, do your words usually come out the way you would like?”, “Do others seem interested and attentive when you are talking to them?” etc. Then the same questions are modified for FB. For example; “Is it hard for you to talk to other people on FB”, “In conversation, do your words commonly come out the way you would like on FB?”, “Do others seem interested and attentive when you are talking to them on FB?” etc.

In the next section, questions related to Listening (LS) have been asked to the students. Some of these questions are: “In conversation, do you tend to do more talking than the other person does?”, “Do you find yourself not paying attention while in conversation with others?”, “In conversation, do you let the other person finish talking before reacting to what she/he says?” etc. Then, the same questions have been modified for FB; “In conversation, do you tend to do more talking than the other person does on FB?”, “Do you find yourself not paying attention while in conversation with others on FB?”, “In conversation, do you let the other person to finish talking before reacting to what she/he says on FB?” etc.

Then, the third section is about Giving and Getting Feedback (GAF). The questions included in the questionanaire are: “Is it difficult to hear or accept constructive criticism from the other person?”, “Do you find it difficult to compliment or praise others?”, “Do others remark that you always seem to think you are right?” etc. Some of these questions have been modified for FB as; “Is it difficult to hear or accept constructive criticism from the other person on FB?”, “Do you find it difficult to compliment or praise others on FB?”, “Do others remark that you always seem to think you are right on FB?” etc.

The last section is about Handling Emotional Interactions (HEI). The questions included the questionnaire are: “Does it upset you a great deal when someone disagrees with you?”, “Are you satisfied with the way you handle differences with others?”, “Do you apologize to someone whose feelings you may have hurt?” etc. Some of these questions have been modified for FB as; “Does it upset you a great deal when someone disagrees with you on FB?”, “Are you satisfied with the way you

handle differences with others on FB?", "Do you apologize to someone whose feelings you may have hurt on FB?" etc.

Finally, the result of the scores obtained in the research have been categorized in the 1 > 15 range as the "areas of communication skills that need improvement", in the 16 > 21 range as the "areas of communication skills that need more consistent attention" and· in the 22 > 30 range as the "areas of strength or potential strength".

3.5 Data Collection & Analysis

As it has been mentioned earlier, international students who study at the FCMS in EMU have been reached and given the survey. To sum up, the data of the study were collected online from international tertiary students who study at FCMS in EMU fall semester 2018-2019. Data collection has been analyzed both in descriptive statistics and minimum, maximum, mean, and standard deviations of IPCS in social and e-social environments. Also, inferential statistics applied as ANOVA and samples paired t-tests on SPSS 22.0 version.

First of all, according to the scoring table of the inventory, the IPCS profiles of international tertiary students have been statistically calculated and evaluated. Subsequently, correlation tables in real and e-social environments have been statistically calculated and evaluated. After that, with sample paired t-tests, whether there are statistical differences in the four sub-branches of IPCS (sending clear messages, listening, giving and getting feedback, and handling emotional interactions) in real (social) and e-social (FB) environments are calculated. Finally, using one-way ANOVA test, data have been calculated and evaluated statistically

whether there was a difference between IPCS (real and FB environments) and independent variables.

3.6 Reliability, Validity, and Ethical Concerns

The reliability test of the IPCS and e-IPCS scales were performed and Crombach's Alpha (1951). It is frequently used in social sciences to measure reliability of variables, interval estimation, hypothesis testing, and sample size planning (Bonett & Wright, 2015). The value of IPCS in social platform was noted as .816, Cronbach's Alpha of IPCS in e-social environment (Facebook) was calculated as .917 (see table 1-2).

Table 1. Reliability Statistics for Social Environment

Cronbach's Alpha	N of Items
0.816	40

Table 2. Reliability Statistics for E- Social Environment

Cronbach's Alpha	N of Items
0.917	40

The findings obtained are shown to be between 0.80 and 1. In Table 1, 0.816 Cronbach's Alpha at the forty question reliability test of the IPCS inventory. With this result, it can be said that the survey is highly reliable. On the other hand, IPCS inventory adapted for the e-social environment (FB) and Cronbach's Alpha result is 0.916. Since this value is between 0.80 and 1, it can be said that IPCS inventory is highly reliable (see Table 2).

The present study has validity. Before the actual data collection procedure, the inventory was sent to ten students outside the population of the study (Faculty of

Architecture) in order to understand whether questions were clear or not. According to the pilot study, questions were understandable and clear. This IPCS inventory is retrieved from open access source website (https://numerons.files.wordpress.com/2012/04/11-interpersonal-communication-skills-inventory.pdf) then EMU ethical committee has been approved the research inventory on 2017 (see Appendix C).

Chapter 4

FINDINGS & ANALYSIS

This chapter consists of findings and analysis of the data obtained from the respondents of the research. In other words, in this Chapter, first of all, findings are shown below then analysis followed. Using SPSS 22.0 version; descriptive statistics of demographic questions, mean, mod, and standard deviations of variables, paired samples t-tests of IPCS (real and FB environments), one-way ANOVA are presented.

4.1 Findings

This section presents descriptive analysis of the data. First, descriptive analysis of independent variables, and then dependent variables will be presented. After that there is a comparison of means of independent variables and IPCS/ e-IPCS scores. Moreover, it includes the correlation between IPCS/e-IPCS scores. This will be followed by presentation of the differences between IPCS in the social and e-social environment.

4.1.1 Frequency of Demographic Variables

The present study has nine demographic questions which seek to collect information on about the respondents. These are: gender, age, nationality, department, education level, and marital status, place of living, sexual orientation, and religion.

4.1.1.1 Frequency of Independent Variables

Table 3. Descriptive Analysis of Variable: Gender

Variable	Frequency	Percent
Female	114	50.89
Male	110	49.11
Total	224	100.00

According to the gender distribution of this research, Table 3 shows that 114 of the respondents (50.89%) are female and 110 (49.11%) are male. It is clearly seen that gender distribution of respondents is almost equal.

Table 4. Descriptive Analysis of Variable: Nationality

	Frequency	Percent
Nigerian	84.00	37.49
Arab	61.00	27.23
Iranian	41.00	18.31
Other (Indonesian and Pakistani)	32.00	14.29
Russian	6.00	2.68
Total	224	100.00

As it has been mentioned earlier, the present study focuses on international students. In Table 4, the nationality distribution of respondents are given. According to this, 37.49% are Nigerian, 27.23% are Arab, 18.31% are Iranian, 14.29% are other belong to nationalities such as Indonesian and Pakistani, 2.68% Russian. Nationality distribution of students outlines that respondents come from different countries which leads that all respondents are international students.

Table 5. Descriptive Analysis of Variable: Age

Variable	Frequency	Percent
18 and below	8.00	3.57
19-22	133.00	59.38
23-26	64.00	28.57
27 and above	19.00	8.48
Total	224	100.00

This question is asked to find out the age distribution of the respondents. In Table 5, 3.57% of the respondents are 18 and below age level, 59.38% are 19-22 age level, also 28.57% 23-26 are age level, and the last one 8.48% are 27 and above age level. The research is based on the respondents who are digital natives. It is clearly seen that more than half of the respondents are between 19-22 age level. Therefore, it can be said that almost all of the respondents are digital natives.

Table 6. Frequency of Department

	Frequency	Percent
Public Relations and Advertising	90.00	40.18
Cinema and Television	66.00	29.46
Visual Art and Visual Communication Design	63.00	28.13
New Media and Journalism	5.00	2.23
Total	224	100.00

In Table 6, Department of international tertiary students who study at the FCMS is EMU are explored. 40.18% of the students study Public Relations and Advertising; 29.46% of the students study Cinema and Television; 28.13% of the students study Visual Art and Visual Communication Design; 2.23% of the students study New Media and Journalism. It is seen that most of the respondents study at the Public Relations and Advertising department of FCMS in 2018 fall semester. After that followed by Department of Cinema and Television, Visual Art and Visual Communication Design, and New Media and Journalism.

Table 7. Frequency of Education Level

	Frequency	Percent
Bachelor	199.00	88.84
Master	17.00	7.59
PhD	8.00	3.57
Total	224	100.00

The Table 7, demonstrates the frequency statistics of the education level of the respondents. It shows that of 88.84% of the respondents study Bachelor degree, 7.59% are Master students, and 3.57% are Ph.D. candidates. It is clearly seen that most of the participants are international undergraduate students of the FCMS at EMU.

Table 8. Frequency of Marital Status

	Frequency	Percent
Single	204.00	91.07
Engaged	10.00	4.46
Married	10.00	4.46
Total	224	100.00

Table 8 shows the frequency statistics of marital status. According to the results, 91.07% of the respondents are single, 4.46% of the respondents are engaged, and 4.46% of the respondents are married. The majority of the international students who study at FCMS at EMU are single. Single students may have a greater desire to socialize with their peers.

Table 9. Frequency of Place of Living

	Frequency	Percent
Rental house	100.00	44.64
Dormitory	92.00	41.07
Homestay	29.00	12.95
Other (host family or relatives)	3.00	1.34
Total	224	100.00

In addition, Table 9 demonstrates the frequency statistics where respondents live. 44.64% of them prefer living in a rental house, also 41.07% lives in a dormitory, besides, 12.95% stay at home, and 1.34% other stay either with a host family or with

relatives. It is clearly seen that the international students of FCMS at EMU mostly prefer to stay in rented houses and dormitories.

Table 10. Frequency of Sexual Orientation

	Frequency	Percent
Straight	187.00	83.48
Other (LGBT+)	13.00	5.80
Bisexual	9.00	4.02
Gay	7.00	3.13
Asexual	4.00	1.79
Lesbian	2.00	0.89
Pansexual	2.00	0.89
Total	224	100.00

Table 10 outlines sexual tendencies of the respondents. According to descriptive statistics of sexual orientation; 83.48% are straight, 5.80% of the respondents are in the category of other (LGBT+ transsexual, queer), 4.02% are bisexual, 3.13% are gay, 1.79% are asexual, 0.89% are lesbian, and 0.89% are pansexual. It is clearly seen that majority of the respondents are straight.

Table 11. Frequency of Religion

	Frequency	Percent
Muslim	106.00	47.32
Christian	77.00	34.38
Atheist	21.00	9.38
Deist	15.00	6.70
Alevi’s Muslim	3.00	1.34
Jewish	2.00	0.89
Total	224	100.00

Table 11 demonstrates the religious beliefs of the respondents. According to the results, 47.32% of the respondents are Muslim, 34.38% of the respondents are Christian, 9.38% of the respondents are Atheist, 6.70% of the respondents are Deist, 1.34% of the respondents are Alevi’s Muslim (Alevi’s use as sectarian because

Alevi's people also belongs to the Muslim community but they describes themselves as Alevi's), 0.89% of the respondents are Jewish. Therefore, 48.66 % of the respondents are Muslim.

4.1.2 Frequency of IPCS Profiles for Social and E-Social Environments

Table 12. Frequency of IPCS Profiles – for the Social Environment

		Frequency	Percent
PSCM	need improvement	42	18.75
	more consistent attention	146	65.17
	potential strength	36	16.07
	Total	224	100
PLS	need improvement	40	17.85
	more consistent attention	136	60.71
	potential strength	47	20.98
	Total	223	99.55
Missing	System	1	0.44
PGAF	need improvement	42	18.75
	more consistent attention	129	57.58
	potential strength	53	23.66
	Total	224	100
PHEI	need improvement	43	19.19
	more consistent attention	135	60.26
	potential strength	46	20.53
	Total	224	100

Table 12 demonstrates IPCS profiles of the respondents in the social environment. SCM demonstrates that 18.75% of the respondents need to improve their IPCS. After that 65.17% of the respondents need more consistent attention on IPCS, and 20.98% of the respondents have strength or potential strength on IPCS.

LS appears as the second dimension of IPCS. 17.85% of the respondents need to improve their IPCS, after that 60.71% of the respondents need more consistent

attention on IPCS, and 2.23% of the respondents have strength or potential strength on IPCS.

According to GAF skills in social environment 18.75% of the respondents need to improve their IPCS. 57.68% of the respondents need more consistent attention on their IPCS, and 23.66% of the respondents have strength or potential strength on IPCS.

HEI shows that 19.19% of the respondents need to improve IPCS on real (social) environment. Also, 60.26% of the respondents need more consistent attention on IPCS, and 20.53% of the respondents have strength or potential strenght on IPCS.

Table 13 shows the profiles of tertiary students' IPCS in the e-social environment (FB). The scores obtained by the respondents are shown in the adapted form for FB of the IPCS questionnaire that examined in four different areas.

In SCM in e-social environment section scores, it indicates that 18.75% of the respondents need to improve their IPCS on FB. Also, 65.17% of the respondents need more consistent attention on IPCS for FB, and 16.07% of the respondents have strength or potential strength IPCS on FB.

According to LS in the e-social (FB) profile of the respondents, it is shown that 17.85% of the respondents need to improve their IPCS on FB. Also, 60.71% of the respondents need more consistent attention on IPCS of FB, and 20.98% of the respondents have strength or potential strength of IPCS on FB.

Table 13. Frequency of IPCS Profile – for E-Social Environment

		Frequency	Percent
PSCM	need improvement	42	18.75
	more consistent attention	146	65.17857
	potential strenght	36	16.07143
	Total	224	100
PLS	need improvement	40	17.85714
	more consistent attention	136	60.71429
	potential strenght	47	20.98214
	Total	223	99.55357
	System	1	0.446429
	Missing Total	224	100
PGAF	need improvement	42	18.75
	more consistent attention	129	57.58929
	potential strenght	53	23.66071
	Total	224	100
PHEI	need improvement	43	19.19643
	more consistent attention	135	60.26786
	potential strenght	46	20.53571
	Total	224	100

According to GAF results in the e-social environment (FB), it is shown that 18.75% of the respondents need to improve IPCS on FB. Also, 57.58% of the respondents need more consistent attention on IPCS of FB, and 23.66% of the respondents have strength or potential strength of IPCS on FB.

According to HEI results in the e-social environment (FB) skills, it is shown that 19.19% of the respondents need to improve IPCS on FB. Also, 60.26% of the

respondents need more consistent attention on IPCS of FB, and 20.53% of the respondents have strength or potential strength of IPCS on FB.

4.1.3 Descriptive Statistics of IPCS in Social Environment

This section presents the descriptive statistics of the Dependent variables. First, descriptive statistics of social environment as number minimum, maximum, mean, and standard deviations of SCM in social environment and then in e-social environment are given.

The Table 14 above shows descriptive statistics of SCM variables in social environment. SCM variables consist of ten questions. Respondents answered the questions as usually, sometimes, and seldom. According to $\bar{x}$ (mean) value the for first question ($\bar{x}$=2.07), for the second question ($\bar{x}$=2.00), for the third question ($\bar{x}$=1.86), for the fourth question ($\bar{x}$=1.89), for the fifth question ($\bar{x}$=1.92), for the sixth question ($\bar{x}$=1.76), for the seventh question ($\bar{x}$=1.75), for the eighth question ($\bar{x}$=1.76), for the ninth question ($\bar{x}$=1.69), and the last one is tenth question ($\bar{x}$=1.81).

Therefore, the respondents have got different points for each question. When the scores are calculated, some questions for example; 3rd, 6th, 7th, 8th, 9th, and 10th what if answered as "Usually", respondents have got the highest (max) score. Besides, for the 1st, 2nd, 4th, and the 5th questions if respondents answered as “Seldom” they have got the highest (max) score.

According to Table 14, responses’ mean values are between 1.6 and 2.2 as it is demonstrated above. This result indicates that, the respondents’ answer the questions mostly as “Sometimes”, since the mean values of the questions of SCM are between 1.6 and 2.2.

Table 14. Descriptive Statistics of SCM in Social Envionment

Descriptive Statistics

	N	Min.	Max.	$\bar{x}$	SD
1. Is it difficult for you to talk to other people?	224	1.00	3.00	2.0714	.80597
2. When you are trying to explain something do others tend to put words in your mouth or finish your sentences for you?	224	1.00	3.00	2.0089	.77512
3. In conversation do your words usually come out the way you would like?	224	1.00	3.00	1.8616	.76560
4. Do you find it difficult to express your ideas when they differ from the ideas of people around you?	224	1.00	3.00	1.8973	.72322
5. Do you assume that the other person knows what you are trying to say and leave it to him/her to ask you questions?	224	1.00	3.00	1.9286	.74225
6. Do others seem interested and attentive when you are talking to them?	224	1.00	3.00	1.7634	.71014
7. When speaking is it easy for you to recognize how others are reacting to what you are saying?	224	1.00	3.00	1.7545	.76790
8. Do you ask the other person to tell you how she/he feels about the point you are trying to make?	224	1.00	3.00	1.7634	.72884
9. Are you aware of how your tone of voice may affect others?	224	1.00	3.00	1.6964	.74375
10. In conversation do you look to talk about things of interest to both you and the other person?	224	1.00	3.00	1.8125	.76388
Valid n (listwise)	224				

Table 15. Descriptive Statistics of LS in Social Environment

Descriptive Statistics

	N	Min.	Max.	$\bar{x}$	SD
1. In conversation do you tend to do more talking than the other person does?	224	1.00	3.00	1.8929	.94092
2. In conversation do you ask the other person questions when you dont understand what they have said?	224	1.00	3.00	1.7768	.74821
3. In conversation do you often try to figure out what the other person is going to say before they have finished talking?	224	1.00	3.00	1.8170	.73812
4. Do you find yourself not paying attention while in conversation with others?	224	1.00	3.00	2.0402	.74761
5. In conversation can you easily tell the difference between what the person is saying and how he/she may be feeling?	224	1.00	3.00	1.8348	.71777
6. After the other person is done speaking do you clarify what you heard them say before you offer are sponse?	224	1.00	3.00	1.8393	.72809
7. In conversation do you tend to finish sentences or supply words for the other person?	224	1.00	3.00	1.8705	.70630
8. In conversation do you find yourself paying most attention to facts and details and frequently missing the emotional tone of the speakers' voice?	224	1.00	2.00	2.0179	1.52693
9. In conversation do you let the other person finish talking before reacting to what she/he says?	224	1.00	3.00	1.8527	.72166
10. Is it difficult for you to see things from the other person's point of view?	224	1.00	3.00	1.9464	.74976
Valid n (listwise)	224				

In Table 15 above demonstrates descriptive statistics of LS variables in social environment. LS variables also consist of ten questions. Respondents answered questions within the frequency limits of usually, sometimes, and seldom. According to $\bar{x}$ (mean) value for the first question is ($\bar{x}$=1.89), for the second question is ($\bar{x}$=1.77), for the third question is ($\bar{x}$=1.81), for the fourth question is ($\bar{x}$=2.04), for the fifth question is ($\bar{x}$=1.83), for the sixth question is ($\bar{x}$=1.83), for the seventh question is ($\bar{x}$=1.87), for the eight question is ($\bar{x}$=2.01), for the ninth question is ($\bar{x}$1.85), for the tenth question is ($\bar{x}$=1.94).

Consequently, respondents have received different points for each question. When the scores are calculated, some questions for example; 2^{nd}, 5^{th}, 6^{th}, and 9^{th} if questions answered as "Usually" by respondents, they have got the highest (max) score. Besides, some questions the scores are reversed such as; 1^{st}, 3^{rd}, 4^{th}, 7^{th}, 8^{th}, and the 10^{th} questions. If respondents answered as “Seldom” they have got the highest (max) score.

According to results, mean values of LS questions in social environment are between 1.6 and 2.2 as it demonstrates above. This result indicates that, the respondents answered the questions mostly as “Sometimes”, since the mean values of the questions of LS are between 1.6 and 2.2.

Table 16. Descriptive Statistics of GAF in Social Environment

Descriptive Statistics

	N	Min.	Max.	$\bar{x}$	SD
1. Is it difficult to hear or accept constructive criticism from the other person?	224	1.00	3.00	1.9063	.72443
2. Do you refrain from saying something that you think will upset someone or make matters worse?	224	1.00	3.00	1.8527	.74611
3. When someone hurts your feelings do you disscuss this with him/her?	224	1.00	3.00	1.9732	.74521
4. In conversation do you try to put yourself in the other person's shoes?	224	1.00	3.00	1.7589	.73045
5. Do you become uneasy when someone pays you a compliment?	224	1.00	3.00	1.9732	.77471
6. Do you find it difficult to disagree with others because you are afraid they will get angry?	224	1.00	3.00	2.0089	.76347
7. Do you find it difficult to compliment or praise others?	224	1.00	3.00	2.0089	.79793
8. Do others remark that you always seem to think you are right?	224	1.00	2.00	1.8348	.76612
9. Do you find that others seem to get defensive when you disagree with their point of view?	224	1.00	3.00	1.8929	.74397
10. Do you help others to understand you by saying how you feel?	224	1.00	3.00	1.7946	.71672
Valid n (listwise)	224				

In the Table 16 above outline of descriptive statistics of GAF variables in social environment are given. GAF variables also consist of ten questions. Respondents answered questions as usually, sometimes, and seldom. According to $\bar{x}$ (mean) value for the first question, mean value is between 1.6 and 2.2 ($\bar{x}$=1.90), for the second question mean value is between 1.6 and 2.2 ($\bar{x}$=1.85), for the third question mean

value is between 1.6 and 2.2 ($\bar{x}$=1.97), for the fourth question mean value is between 1.6 and 2.2 ($\bar{x}$=2.75), for the fifth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.97), for the sixth question mean value is between 1.6 and 2.2 ($\bar{x}$=2.00), for the seventh question mean value is between 1.6 and 2.2 ($\bar{x}$=1.83), for the eight question mean value is between 1.6 and 2.2 ($\bar{x}$=1.89), for the ninth question mean value is between 1.6 and 2.2 ($\bar{x}$1.82), for the tenth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.79).

Consequently, respondents have received different points for each question. When the scores are calculated, some questions for example; 2^{nd}, 3^{rd}, 4^{th}, and 10^{th} if questions answered as "Usually" by respondents, they have got the highest (max) score. Besides, some questions the scores are reversed such as; 1^{st}, 5^{th}, 6^{th}, 7^{th}, 8^{th}, and 9^{th} questions. If respondents answered as “Seldom” they have got the highest (max) score.

According to the results, mean values of GAF questions in social environment are between 1.6 and 2.2 as it is demonstrated above. This result indicates that, the respondents answered the questions mostly as “Sometimes”, since the mean values of the questions of LS are between 1.6 and 2.2.

Table 17. Descriptive Statistics of HEI in Social Environment

Descriptive Statistics					
	N	Min	Max	$\bar{x}$	SD
1. Do you have a tendency to change the subject when the other person's feelings enter into discussion?	224	1	3	1.8259	.70935
2. Does it upset you a great deal when someone disagrees with you?	224	1	3	1.9063	.74277
3. Do you find it difficult to think clearly when you are angry with someone?	224	1	3	1.8214	.73006
4. When a problem arises between you and another person can you discuss it without getting angry?	224	1	3	1.8125	.70273
5. Are you satisfied with the way you handle differences with others?	224	1	3	1.7857	.70779
6. Do you sulk for a long time when someone upsets you?	224	1	3	1.9062	.75475
7. Do you apologize to someone whose feelings you may have hurt?	224	1	3	1.7812	.77599
8. Do you admit that you are wrong when you know that you are/were wrong about something?	224	1	3	1.9062	.76654
9. Do you avoid or change the topic if someone is expressing his or her feelings in a conversation?	224	1	3	1.9821	.70211
10. When someone becomes upset do you find it difficult to continue the conversation?	224	1	3	1.8571	.70688
Valid n (list wise)	224				

Table 17 gives above outlines descriptive statistics of HEI variables in social environment. HEI variables also consist of ten questions. Respondents answer questions as usually, sometimes, and seldom. According to $\bar{x}$ (mean) value for the first question mean value is between 1.6 and 2.2 ($\bar{x}$=1.82), for the second question

mean value is between 1.6 and 2.2 ($\bar{x}$=1.90), for the third question mean value is between 1.6 and 2.2 ($\bar{x}$=1.82), for the fourth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.81), for the fifth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.78), for the sixth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.90), for the seventh question mean value is between 1.6 and 2.2 ($\bar{x}$=1.78), for the eight question mean value is between 1.6 and 2.2 ($\bar{x}$=1.90), for the ninth question mean value is between 1.6 and 2.2 ($\bar{x}$1.98), for the tenth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.85).

Therefore, respondents have received different points for each question. When the scores are calculated, some questions for example; 4^{th}, 5^{th}, 7^{th}, and 8^{th} are questions answered as "Usually" by respondents. They have got the highest (max) score. Besides, some questions the scores are reversed such as; 1^{st}, 2^{nd}, 3^{rd}, 6^{th}, 9^{th}, and 10^{th} questions. If respondents answered as “Seldom” they have got the highest (max) score.

Results indicate that, mean values of HEI questions in social environment are between 1.6 and 2.2 as it has been demonstrated above. This result shows that, the respondents answered the questions mostly as “Sometimes”, since the mean values of the questions of LS are between 1.6 and 2.2.

4.1.4 Descriptive Statistics of IPCS in E-Social Environment

Table 18. Descriptive Statistics of SCM in E-Social Environment

Descriptive Statistics					
	N	Min	Max	$\bar{x}$	SD
1. Is it difficult for you to talk to other people at Facebook?	224	1.00	3.00	2.0134	.85485
2. When you are trying to explain something do others tend to put words in your mouth or finish your sentences for you at Facebook?	224	1.00	3.00	2.0670	.72741
3. At Facebook conversations, do your words usually come out the way you would like?	224	1.00	3.00	1.8438	.78532
4. Do you find it difficult to express your ideas at Facebook when they differ from the ideas of people around you?	224	1.00	3.00	1.9821	.76916
5. Do you assume that the other person knows what you are trying to say and leave it to him/her to ask you questions at Facebook?	224	1.00	3.00	1.9866	.75454
6. Do others seem interested and attentive when you are talking to them at Facebook?	224	1.00	3.00	1.8080	.74191
7. When chatting is it easy for you to recognize how others are reacting to what you are saying at Facebook?	224	1.00	3.00	1.8527	.78134
8. At Facebook do you ask the other person to tell you how he/she feels about the point you are trying to make?	224	1.00	3.00	1.9866	.76046
9. Are you aware of how your discourses may affect others at Facebook?	224	1.00	3.00	1.9062	.74277
10. In conversation at Facebook do you look to talk about things of interest to both you and the other person?	224	1.00	3.00	1.9107	.73422
Valid n (listwise)	224				

Table 18 above show descriptive statistics of SCM variables in e-social environment (FB). SCM variables also consist of ten questions. Respondents answer questions as usually, sometimes, and seldom. According to $\bar{x}$ (mean) value for the first question mean value is between 1.6 and 2.2 ($\bar{x}$=2.01), for the second question mean value is between 1.6 and 2.2 ($\bar{x}$=2.06), for the third question mean value is between 1.6 and 2.2 ($\bar{x}$=1.84), for the fourth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.98), for the fifth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.98), for the sixth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.80), for the seventh question mean value is between 1.6 and 2.2 ($\bar{x}$=1.85), for the eight question mean value is between 1.6 and 2.2 ($\bar{x}$=1.98), for the ninth question mean value is between 1.6 and 2.2 ($\bar{x}$1.90), for the tenth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.91).

Therefore, the respondents have got different points for each question. When the scores are calculated, some questions for example; 3rd, 6th, 7th, 8th, 9th, and 10th what are answered as "Usually", respondents have got the highest (max) score. Besides, for the 1st, 2nd, 4th, and the 5th questions if respondents answered as “Seldom” they have got the highest (max) score.

Results indicate that mean values of SCM in e-social environment (FB) are between 1.6 and 2.2 as it has been demonstrated above. This result indicates that, the respondents answered the questions mostly as “Sometimes”, since the mean values of the questions of LS are between 1.6 and 2.2.

Table 19. Descriptive Statistics of LS in E-Social Environment

Descriptive Statistics

	N	Min	Max	$\bar{x}$	SD
1. In conversation at Facebook do you tend to do more talking than the other person does?	224	1.00	3.00	1.9866	.71172
2. In conversation at Facebook do you ask the other person questions when you do not understand what they have said?	224	1.00	3.00	1.7991	.72111
3. In conversations at Facebook do you often try to figure out what the other person is going to say before they have finished talking?	224	1.00	3.00	1.9286	.74826
4. Do you find yourself not paying attention while in conversation with others at Facebook?	224	1.00	3.00	2.0536	.75572
5. In conversation at Facebook can you easily tell the difference between what the person is saying and how he/she may be feeling?	224	1.00	3.00	1.8929	.76770
6. After the other person is done writing at Facebook, do you clarify what you understand them say before you offer are sponse?	224	1.00	3.00	1.9063	.72443
7. In conversation at Facebook do you tend to finish sentences or supply words for the other person?	224	1.00	3.00	2.0179	.75147
8. In conversation at Facebook do you find yourself paying most attention to facts and details and frequently missing the emotional tone of the speakers' discourses?	224	1.00	3.00	1.9554	.70728
9. In conversation at Facebook do you let the other person finish talking before reacting to what she/he says?	224	1.00	3.00	1.7634	.75898
10. Is it difficult for you at Facebook to see things from the other person's point of view?	224	1.00	3.00	1.9375	.74907
Valid n (listwise)	224				

In Table 19 above demonstrates descriptive statistics of LS variables in e-social environment (FB). LS variables also consist of ten questions. Respondents answer questions as usually, sometimes, and seldom. According to $\bar{x}$ (mean) value for the first question is ($\bar{x}$=1.98), for the second question is ($\bar{x}$=1.79), for the third question is ($\bar{x}$=1.92), for the fourth question is ($\bar{x}$=2.05), for the fifth question is ($\bar{x}$=1.89), for the sixth question is ($\bar{x}$=1.90), for the seventh question is ($\bar{x}$=2.01), for the eight question is ($\bar{x}$=1.95), for the ninth question is ($\bar{x}$1.76), for the tenth question is ($\bar{x}$=1.93).

Consequently, respondents have received different points for each question. When the scores are calculated, some questions for example; 2^{nd}, 5^{th}, 6^{th}, and 9^{th} if questions answered as "Usually" by respondents, they have got the highest (max) score. Besides, some questions the scores are reversed such as; 1^{st}, 3^{rd}, 4^{th}, 7^{th}, 8^{th}, and the 10^{th} questions. If respondents answered as “Seldom” they have got the highest (max) score.

According to results, mean values of LS questions in e-social environment (FB) are between 1.6 and 2.2 as it has been demonstrated above. This result indicates that, the respondents answered the questions mostly as “Sometimes”, since the mean values of the questions of LS are between 1.6 and 2.2.

Table 20. Descriptive Statistics of GAF in E-Social Environment

Descriptive Statistics of GAF in E-Social Environment					
	N	Min	Max	$\bar{x}$	SD
1. Is it difficult to hear or accept constructive criticism from the other person at Facebook?	224	1	3	1.9643	.76854
2. Do you refrain from saying something that you think will upset someone or make matters worse at Facebook?	224	1	3	1.9375	.75503
3. At Facebook when someone hurts your feelings do you discuss this with him/her?	224	1	3	1.9955	.81189
4. In conversation at Facebook do you try to put yourself in the other person's shoes?	224	1	3	1.8795	.76863
5. At Facebook do you become uneasy when someone pays you a compliment?	224	1	3	2.0357	.75678
6. At Facebook do you find it difficult to disagree with others because you are afraid they will get angry?	224	1	3	1.9643	.77435
7. At Facebook do you find it difficult to compliment or praise others?	224	1	3	1.9464	.80736
8. At Facebook do others remark that you always seem to think you are right?	224	1	3	1.9866	.76046
9.At Facebook do you find that others seem to get defensive when you disagree with their point of view	224	1	3	1.933	.76350
10. At Facebook do you help others to understand you by saying how you feel?	224	1	3	1.7634	.76487
Valid n (list wise)	224				

In Table 20 above outline that descriptive statistics of GAF variables in e-social environment (FB). GAF variables also consist of ten questions. Respondents answer questions as usually, sometimes, and seldom. According to $\bar{x}$ (mean) value for the first question mean value is between 1.6 and 2.2 ($\bar{x}$=1.96), for the second question mean value is between 1.6 and 2.2 ($\bar{x}$=1.93), for the third question mean value is between 1.6 and 2.2 ($\bar{x}$=1.99), for the fourth question mean value is between 1.6 and

2.2 ($\bar{x}$=2.87), for the fifth question mean value is between 1.6 and 2.2 ($\bar{x}$=2.03), for the sixth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.96), for the seventh question mean value is between 1.6 and 2.2 ($\bar{x}$=1.94), for the eight question mean value is between 1.6 and 2.2 ($\bar{x}$=1.98), for the ninth question mean value is between 1.6 and 2.2 ($\bar{x}$1.93), for the tenth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.76).

Consequently, respondents have received different points for each question. When the scores are calculated, some questions for example; 2nd, 3rd, 4th, and 10th if questions answered as "Usually" by respondents, they have got the highest (max) score. Besides, some questions' the scores are reversed such as; 1st, 5th, 6th, 7th, 8th, and 9th questions. If respondents answered as "Seldom" they have got the highest (max) score.

According to results, mean values of GAF questions in e-social environment are between 1.6 and 2.2 as it has been demonstrated above. This result indicates that the respondents answered the questions mostly as "Sometimes", since the mean values of the questions of LS are between 1.6 and 2.2.

Table 21. Descriptive Statistics of HEI in E-Social Environment

Descriptive Statistics					
	N	Min	Max	$\bar{x}$	SD
1. .At facebook do you have a tendency to change the subject when the other person's feelings enter into the discussion?	224	1	3	1.9717	.77554
2. At facebook does it upset you a great deal when someone disagrees with you?	224	1	3	1.9151	.75464
3. At facebook do you find it difficult to think clearly when you are angry with someone?	224	1	3	1.9330	.80437
4. When a problem arises between you and another person at facebook can you discuss it without getting angry?	224	1	3	1.8616	.75386
5. Are you satisfied with the way you handle differences with others at facebook?	224	1	3	1.9375	.77347
6. At facebook do you sulk for a long time when someone upsets you?	224	1	3	1.9643	.78435
7. At facebook do you apologize to someone whose feelings you may have hurt?	224	1	3	1.8125	.80562
8. At facebook do you admit that you are wrong when you know that you are/were wrong about something?	224	1	3	1.8258	.76342
9. At facebook do you avoid or change the topic if someone is expressing his or her feelings in a conversation?	224	1	3	1.9375	.77350
10. When someone becomes upset at facebook do you find it difficult to continue the conversation?	224	1	3	1.8616	.78576
Valid n (list wise)	224				

Table 21 demonstrate above that descriptive statistics of HEI variables in e-social environment (FB). HEI variables also consist of ten questions. Respondents answer questions as usually, sometimes, and seldom. According to $\bar{x}$ (mean) value for the first question mean value is between 1.6 and 2.2 ($\bar{x}$=1.97), for the second question

mean value is between 1.6 and 2.2 ($\bar{x}$=1.91), for the third question mean value is between 1.6 and 2.2 ($\bar{x}$=1.93), for the fourth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.86), for the fifth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.93), for the sixth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.96), for the seventh question mean value is between 1.6 and 2.2 ($\bar{x}$=1.81), for the eight question mean value is between 1.6 and 2.2 ($\bar{x}$=1.82), for the ninth question mean value is between 1.6 and 2.2 ($\bar{x}$1.93), for the tenth question mean value is between 1.6 and 2.2 ($\bar{x}$=1.86).

Therefore, respondents have received different points for each question. When the scores are calculated, some questions for example; 4^{th}, 5^{th}, 7^{th}, and 8^{th} if questions answered as "Usually" by respondents, they have got the highest (max) score. Besides, some questions the scores are reversed such as; 1^{st}, 2^{nd}, 3^{rd}, 6^{th}, 9^{th}, and 10^{th} questions. Respondents answered “Seldom” they have got the highest (max) score.

Results indicate that, mean values of HEI questions in e-social environment are between 1.6 and 2.2 as it demonstrates above. This result shows that, the respondents answered the questions mostly as “Sometimes”, since the mean values of the questions of LS are between 1.6 and 2.2.

4.1.5 Descriptive Statistics of IPCS Profiles in Social Environment

Table 22. Descriptive Statistics of IPCS Profiles in Social Environment

Descriptive Statistics					
	N	Min	Max	$\bar{x}$	SD
PSCM	223	1.00	3.00	1.9732	.59081
PLS	224	1.00	3.00	2.0314	.62522
PGAF	224	1.00	3.00	2.0491	.65084
PHEI	224	1.00	3.00	2.0134	.63160
Valid n (listwise)	224				

The Table 22 given above outline descriptive statistics of IPCS profiles of respondents in social environment. Respondents answer questions as usually, sometimes, and seldom. According to $\bar{x}$ (mean) value of SCM profiles of respondents is $\bar{x}$=1.97. Also, $\bar{x}$ (mean) value of LS profiles of respondents is $\bar{x}$=2.03. Moreover, $\bar{x}$ (mean) value of GAF profiles of respondents is $\bar{x}$=2.04. In addition, $\bar{x}$ (mean) value of HEI profiles of respondents is $\bar{x}$=2.01. Eventually, descriptive statistics of IPCS profiles of the respondents indicate that since mean values are between 1.6 and 2.2 which means that respondents answered questions mostly "Sometimes".

4.1.6 Descriptive Statistics of IPCS Profiles in E-Social Environment

Table 23. Descriptive Statistics of IPCS Profiles in E-Social Environment

Descriptive Statistics					
	N	Min	Max	$\bar{x}$	SD
PeSCM	224	1.00	3.00	2.0714	.66581
PeLS	224	1.00	3.00	2.0848	.64017
PeGAF	224	1.00	3.00	2.1161	.73045
PeHEI	224	1.00	3.00	2.0268	.72073
Valid n (listwise)	224				

Table 23 presented above descriptive statistics of IPCS profiles of respondents in e-social environment (FB). Respondents are answered questions as usually, sometimes, and seldom. According to $\bar{x}$ (mean) value of SCM (FB) profiles of respondents is $\bar{x}$=2.07. Also, $\bar{x}$ (mean) value of LS (FB) profiles of respondents is $\bar{x}$=2.08. Moreover, $\bar{x}$ (mean) value of GAF (FB) profiles of respondents is $\bar{x}$=2.11. In addition, $\bar{x}$ (mean) value of HEI (FB) profiles of respondents is $\bar{x}$=2.02. Eventually, descriptive statistics of IPCS in e-social environment profiles of the respondents indicate that since mean values are between 1.6 and 2.2, this means respondents mostly answered questions as "Sometimes".

4.1.7 Normality Test

Table 24. Normality Test of IPCS and E-IPCS Variables Sums

Kolmogorov-Smirnov[a]			
	Statistic	df	Sig.
SUMsoctotal	.069	224	.012
SUMesoctotal	.100	224	.000

[a]. Lilliefors Significance Correction

According to result obtained from the data, it has been revealed that the single sample Kolmogorov-Smirnov test conducted to determine whether the scores obtained in IPCS in social environment (p>, 05) and IPCS in e-social environment sums (p>, 05). The difference of the distribution from the normal distribution was not found significant. Eventually, scales show normal distribution.

4.1.8 Comparing Means of Independent Variables and IPCS Scores

This section displays one-way analysis of variance (ANOVA) results conducted for comparing means of independent variables and IPCS/e-IPCS scores. First of all, this section demonstrates nine demographic questions between IPCS sub-sections sums as well as SCM, LS, GAF, and HEI on real (social) environment.

4.1.8.1 Comparing Means of Gender and IPCS Items

Table 25. Comparing Means of Gender and IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
SCM	Between Groups	7.422	1	7.422	.577	.448
	Within Groups	2853.823	222	12.855		
	Total	2861.246	223			
LS	Between Groups	37.344	1	37.344	2.774	.097
	Within Groups	2988.866	222	13.463		
	Total	3026.210	223			
GAF	Between Groups	10.714	1	10.714	.755	.386
	Within Groups	3150.281	222	14.190		
	Total	3160.996	223			
HEI	Between Groups	16.433	1	16.433	1.267	.262
	Within Groups	2879.956	222	12.973		
	Total	2896.388	223			

Table 25 shows the results one-way within subjects (or repeated measures) ANOVA conducted to compare IPCS sums with gender. There was no statistically significant difference of gender between SCM on social environment at the p≤.05 level among sections of IPCS [F (1, 222) = 0.577, p = 0.448]. Also, there was no statistically significant difference of gender between LS on social environment at the p≤.05 level

among sections of IPCS [F (1, 222) = 2.774, p = 0.097]. Furthermore, there was no statistically significant difference of gender between GAF on social environment at the p≤.05 level among sections of IPCS [F (1, 222) = 2.755, p = 0.386]. In addition, there was no statistically significant difference of gender between HEI on social environment at the p≤.05 level among sections of IPCS [F (1, 222) = 1.267, p = 0.262]. Results show that IPCS are not affected the traditional way of communication through gender differences. Also, results demonstrate that females and males have similar IPCS on real (social) environment.

4.1.8.2 Comparing Means of Age and IPCS Items

Table 26. Comparing Means of Age and IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
SCM	Between Groups	30.973	3	10.324	.803	.494
	Within Groups	2830.273	220	12.865		
	Total	2861.246	223			
LS	Between Groups	11.954	3	3.985	.291	.832
	Within Groups	3014.256	220	13.701		
	Total	3026.210	223			
GAF	Between Groups	36.227	3	12.076	.850	.468
	Within Groups	3124.769	220	14.203		
	Total	3160.996	223			
HEI	Between Groups	20.771	3	6.924	.530	.662
	Within Groups	2875.617	220	13.071		
	Total	2896.388	223			

Table 26 shows that one-way within-subjects (or repeated measures) ANOVA was conducted between IPCS sums and age. There was no statistically significant difference of age between SCM in the social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 0.803, p = 0.494]. There has been no statistically significant difference of age between LS in the social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 0.291, p = 0.832]. Also; there has been no statistically significant difference of age between GAF on the social environment at

the p≤.05 level among sections of IPCS [F (3, 220) = 0.850, p = 0.468]. Additionally; there has been no statistically significant difference of age between HEI on social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 0.530, p = 0.662]. Results show that IPCS are not affected the traditional way of communication through age differences. Also, results demonstrate that the respondents have similar attitudes in terms of IPCS on real (social) environment.

4.1.8.3 Comparing Means of Nationality and IPCS Items

Table 27. Comparing Means of Nationality and IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
SCM	Between Groups	102.834	6	17.139	1.348	.237
	Within Groups	2758.412	217	12.712		
	Total	2861.246	223			
LS	Between Groups	98.631	6	16.439	1.218	.298
	Within Groups	2927.578	217	13.491		
	Total	3026.210	223			
GAF	Between Groups	23.888	6	3.981	.275	.948
	Within Groups	3137.108	217	14.457		
	Total	3160.996	223			
HEI	Between Groups	73.456	6	12.243	.941	.466
	Within Groups	2822.932	217	13.009		
	Total	2896.388	223			

Table 27 shows that one-way within subjects (or repeated measures) ANOVA was conducted to compare IPCS sums with nationality. There was no statistically significant difference of nationality between SCM on social environment at the p≤.05 level among sections of IPCS [F (6, 217) = 1.348, p = 0.237]. Also, there was no statistically significant difference of nationality between LS on social environment at the p≤.05 level among sections of IPCS [F (6, 217) = 1.218, p = 0.298]. Moreover, there was no statistically significant difference of nationality between GAF on social environment at the p≤.05 level among sections of IPCS [F (6, 217) = 0.275, p = 0.948]. Furthermore, there was no statistically significant difference between

nationality and HEI on social environment at the p≤.05 level among sections of IPCS [F (6, 217) = 0.941, p = 0.466]. The results indicate that international students of FCMS at EMU have similar IPCS on social (real) environment.

4.1.8.4 Comparing Means of Department and IPCS Items

Table 28. Comparing Means of Department and IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
SCM	Between Groups	38.979	3	12.993	1.013	.388
	Within Groups	2822.267	220	12.828		
	Total	2861.246	223			
LS	Between Groups	26.154	3	8.718	.639	.590
	Within Groups	3000.056	220	13.637		
	Total	3026.210	223			
GAF	Between Groups	9.836	3	3.279	.229	.876
	Within Groups	3151.159	220	14.323		
	Total	3160.996	223			
HEI	Between Groups	58.032	3	19.344	1.499	.216
	Within Groups	2838.357	220	12.902		
	Total	2896.388	223			

Table 28 shows the results of one-way within subjects (or repeated measures) ANOVA for comparing IPCS sums with the Department of international tertiary students study at FCMS at EMU in 2018. The findings of the study indicate that there was no statistically significant difference between Departments of the respondents and SCM in social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 1.013, p = 0.388]. Also, there was no statistically significant difference between departments of the study and LS in social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 0.639, p = 0.590].

Furthermore, there was no statistically significant difference between Departments of the study and GAF in social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 0.229, p = 0.876]. In addition, there was no statistically significant difference between departments of the study and HEI in social environment at the

p≤.05 level among sections of IPCS [F (3, 220) = 1.499, p = 0.216]. Results show that studying in different Departments in FCMS at EMU do not affect IPCS in social environment.

4.1.8.5 Comparing Means of Education Level and IPCS Items

Table 29. Comparing Means of Education Level and IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
SCM	Between Groups	40.145	2	20.072	1.572	.210
	Within Groups	2821.101	221	12.765		
	Total	2861.246	223			
LS	Between Groups	42.437	2	21.219	1.572	.210
	Within Groups	2983.772	221	13.501		
	Total	3026.210	223			
GAF	Between Groups	1.142	2	.571	.040	.961
	Within Groups	3159.853	221	14.298		
	Total	3160.996	223			
HEI	Between Groups	47.035	2	23.518	1.824	.164
	Within Groups	2849.353	221	12.893		
	Total	2896.388	223			

Table 29 shows the results of one-way within subjects (or repeated measures) ANOVA for comparing the IPCS sums with education level. There was no statistically significant difference between education level and SCM skills in social environment at the p≤.05 level among sections of IPCS [F (2, 221) = 1.572, p = 0.210]. Also, there was no statistically significant difference between education level and LS in social environment at the p≤.05 level among sections of IPCS [F (2, 221) = 1.572, p = 0.210]. Moreover, there was no statistically significant difference between education level and GAF in social environment at the p≤.05 level among sections of IPCS [F (2, 221) = 0.040, p = 0.961]. In addition, there was no statistically significant difference between education level and HEI in social environment at the p≤.05 level among sections of IPCS [F (2, 221) = 1.824, p = 0.164].

The results of the study show that education levels of international tertiarty students do not affect the IPCS through traditional way of communication.

4.1.8.6 Comparing Means of Marital Status and IPCS Items

Table 30.Comparing Means of Marital Status and IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
SCM	Between Groups	20.039	2	10.019	.779	.460
	Within Groups	2841.207	221	12.856		
	Total	2861.246	223			
LS	Between Groups	1.282	2	.641	.047	.954
	Within Groups	3024.927	221	13.687		
	Total	3026.210	223			
GAF	Between Groups	4.118	2	2.059	.144	.866
	Within Groups	3156.877	221	14.285		
	Total	3160.996	223			
HEI	Between Groups	49.315	2	24.657	1.914	.150
	Within Groups	2847.074	221	12.883		
	Total	2896.388	223			

Table 30 shows the results of one-way within subjects (or repeated measures) ANOVA conducted to compare the IPCS sums with marital status. There was no statistically significant difference between marital status and SCM on social environment at the $p \leq .05$ level among sections of IPCS [$F(2, 221) = 0.779$, $p = 0.460$]. Also, there was no statistically significant difference between marital status and LS on social environment at the $p \leq .05$ level among sections of IPCS [$F(2, 221) = 0.047$, $p = 0.954$]. Moreover, there was no statistically significant difference between marital status and GAF on social environment at the $p \leq .05$ level among sections of IPCS [$F(2, 221) = 0.144$, $p = 0.866$]. In addition, there was no statistically significant difference between marital status and HEI on social environment at the $p \leq .05$ level among sections of IPCS [$F(2, 221) = 1.914$, $p = 0.150$].

The results of the study indicate that marital status is not affected IPCS through the traditional way of communication of international tertiary students. Also, results demonstrate that respondents have similar IPCS on real (social) environment.

4.1.8.7 Comparing Means of Place of Living and IPCS Items

Table 31. Comparing Means of Place of Living and IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
SCM	Between Groups	33.627	3	11.209	.872	.456
	Within Groups	2827.619	220	12.853		
	Total	2861.246	223			
LS	Between Groups	18.929	3	6.310	.462	.709
	Within Groups	3007.281	220	13.669		
	Total	3026.210	223			
GAF	Between Groups	19.993	3	6.664	.467	.706
	Within Groups	3141.002	220	14.277		
	Total	3160.996	223			
HEI	Between Groups	2.699	3	.900	.068	.977
	Within Groups	2893.689	220	13.153		
	Total	2896.388	223			

Moreover, Table 31 shows the results of one-way within subjects (or repeated measures) ANOVA for comparing the IPCS sums with place of living. There was no statistically significant difference between place of living and SCM in social environment at the $p \leq .05$ level among sections of IPCS [$F(3, 220) = 0.872$, $p = 0.456$]. Also, there was no statistically significant difference between place of living and LS on social environment at the $p \leq .05$ level among sections of IPCS [$F(3, 220) = 0.462$, $p = 0.709$]. Furthermore, there was no statistical significant difference between place of living and GAF in social environment at the $p \leq .05$ level among sections of IPCS [$F(3, 220) = 0.467$, $p = 0.706$]. In addition, there was no statistically significant difference between place of living and HEI in social environment at the $p \leq .05$ level among sections of IPCS [$F(3, 220) = 0.068$, $p =$

0.977]. Results show that the places of the respondents live does not affect IPCS through the traditional way of communication in SCM, LS, GAF, and HEI.

4.1.8.8 Comparing Means of Sexual Orientation and IPCS Items

Table 32. Comparing Means of Sexual Orientation and IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
SCM	Between Groups	129.776	6	21.629	1.718	.118
	Within Groups	2731.469	217	12.587		
	Total	2861.246	223			
LS	Between Groups	167.284	6	27.881	2.116	.053
	Within Groups	2858.925	217	13.175		
	Total	3026.210	223			
GAF	Between Groups	47.400	6	7.900	.551	.769
	Within Groups	3113.595	217	14.348		
	Total	3160.996	223			
HEI	Between Groups	190.341	6	31.723	2.544	.021
	Within Groups	2706.047	217	12.470		
	Total	2896.388	223			

In Table 32, the results of one-way within subjects (or repeated measures) ANOVA conducted to compare IPCS sums with sexual orientation are presented. There is no statistically significant difference between sexual orientation and SCM in social environment at the $p \leq .05$ level among sections of IPCS [$F(6, 217) = 1.718$, $p = 0.118$]. Also, there is almost statistically significant difference between sexual orientation and LS in social environment at the $p \leq .05$ level among sections of IPCS [$F(6, 217) = 2.116$, $p = 0.053$]. However, there is no statistically significant difference between sexual orientation and GAF in social environment at the $p \leq .05$ level among sections of IPCS [$F(6, 217) = 0.551$, $p = 0.769$].

Besides, there was statistically significant difference between sexual orientation and HEI in social environment at the $p \leq .05$ level among sections of IPCS [$F(6, 217) = 2.544$, $p = 0.021$].

The results show that sexual orientations of the respondents do not affect IPCS through the traditional way of communication in SCM, LS, and GAF. On the other hand, sexual orientations of the respondents are affected their HEI skills on social environment.

4.1.8.9 Comparing Means of Religion and IPCS Items

Table 33. Comparing Means of Religion and IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
SCM	Between Groups	26.757	5	5.351	.412	.840
	Within Groups	2834.489	218	13.002		
	Total	2861.246	223			
LS	Between Groups	78.640	5	15.728	1.163	.328
	Within Groups	2947.570	218	13.521		
	Total	3026.210	223			
GAF	Between Groups	100.808	5	20.162	1.436	.212
	Within Groups	3060.187	218	14.038		
	Total	3160.996	223			
HEI	Between Groups	34.769	5	6.954	.530	.754
	Within Groups	2861.619	218	13.127		
	Total	2896.388	223			

In table 33, the results of one-way within subjects (or repeated measures) ANOVA conducted to compare IPCS sums with religion are presented. There was no statistically significant difference between religion and SCM in social environment at the $p \leq .05$ level among sections of IPCS [$F(5, 218) = 0.412$, $p = 0.840$]. Also, there was no statistically significant difference between religion and LS in social environment at the $p \leq .05$ level among sections of IPCS [$F(5, 218) = 1.163$, $p = 0.328$]. Furthermore, there was no statistically significant difference between religion and GAF in social environment at the $p \leq .05$ level among sections of IPCS [$F(5, 218) = 1.436$, $p = 0.212$]. Moreover, there was no statistically significant difference between religion and HEI in social environment at the $p \leq .05$ level among sections of IPCS [$F(5, 218) = 0.530$, $p = 0.754$].

Findings show that the religious beliefs of international tertiary students do not affect IPCS through the traditional way of communication in SCM, LS, GAF, and HEI.

4.1.9 Comparing Means of Independent Variables and E-IPCS Scores

This section demonstrates whether there is statistically significant difference between independent variables and IPCS sums on FB. These are: SCM, LS, GAF, and HEI in e-social environment (FB).

4.1.9.1 Comparing Means of Gender and E-IPCS Items

Table 34. Comparing Means of Gender and E-IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
eSCM	Between Groups	1.226	1	1.226	.062	.803
	Within Groups	4372.202	222	19.695		
	Total	4373.429	223			
eLS	Between Groups	.217	1	.217	.012	.915
	Within Groups	4164.766	222	18.760		
	Total	4164.982	223			
eGAF	Between Groups	37.286	1	37.286	1.637	.202
	Within Groups	5056.745	222	22.778		
	Total	5094.031	223			
eHEI	Between Groups	18.971	1	18.971	.936	.334
	Within Groups	4501.582	222	20.277		
	Total	4520.554	223			

In Table 34 above, there is the results of one-way within subjects (or repeated measures) ANOVA that has been conducted to compare gender and IPCS for e-social environment sums. There is no statistically significant difference between gender and SCM in FB at the $p \leq .05$ level among sections of IPCS [$F(1, 222) = 0.062$, $p = 0.803$]. Also, there has been no statistically significant difference between gender and LS in FB at the $p \leq .05$ level among sections of IPCS [$F(1, 222) = 0.062$, $p = 0.915$]. Moreover, there has been no statistically significant difference between gender and GAF in FB at the $p \leq .05$ level among sections of IPCS [$F(1, 222) = 1.637$, $p = 0.202$]. In addition, there has been no statistically significant difference

between gender and HEI in FB at the p≤.05 level among sections of IPCS [F (1, 222) = 1.936, p = 0.334]. Results show that gender differences of international tertiary students do not affect IPCS on FB in terms of SCM, LS, GAF, and HEI skills.

4.1.9.2 Comparing Means of Age and E-IPCS Items

Table 35. Comparing Means of Age and E-IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
eSCM	Between Groups	34.504	3	11.501	.583	.627
	Within Groups	4338.924	220	19.722		
	Total	4373.429	223			
eLS	Between Groups	113.013	3	37.671	2.045	.108
	Within Groups	4051.969	220	18.418		
	Total	4164.982	223			
eGAF	Between Groups	162.319	3	54.106	2.414	.068
	Within Groups	4931.712	220	22.417		
	Total	5094.031	223			
eHEI	Between Groups	42.394	3	14.131	.694	.556
	Within Groups	4478.159	220	20.355		
	Total	4520.554	223			

The Table 35 shows that when one-way within subjects (or repeated measures) ANOVA that has been conducted to compare age and IPCS for e-social environments sums. There has been no statistically significant difference between age and SCM in e-social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 0.583, p = 0.627]. Also, there has been no statistically significant difference between age and LS in e-social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 2.045, p = 0.108]. Furthermore, there has been no statistically significant difference between age and GAF in e-social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 2.414, p = 0.068]. In addition, there has been no statistically significant difference between age and HEI in e-social environment at the p≤.05 level among sections of IPCS [F (3, 220) = 0.694, p =

0.506]. Results show that age intervals of international tertiary students do not affect IPCS on FB in terms of SCM, LS, GAF, and HEI skills.

4.1.9.3 Comparing Means of Nationality and E-IPCS Items

Table 36. Comparing Means of Nationality and E-IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
eSCM	Between Groups	69.592	6	11.599	.585	.742
	Within Groups	4303.837	217	19.833		
	Total	4373.429	223			
eLS	Between Groups	118.335	6	19.723	1.058	.389
	Within Groups	4046.647	217	18.648		
	Total	4164.982	223			
eGAF	Between Groups	280.367	6	46.728	2.106	.054
	Within Groups	4813.664	217	22.183		
	Total	5094.031	223			
eHEI	Between Groups	177.616	6	29.603	1.479	.186
	Within Groups	4342.938	217	20.014		
	Total	4520.554	223			

Table 36 demonstrates the results of one-way within subjects (or repeated measures) ANOVA that was conducted to compare nationality and IPCS for e-social environment sums. There has been no statistically significant difference between nationality and SCM in e-social environment at the $p \leq .05$ level among sections of e-IPCS [F (6, 217) = 0.585, p = 0.742]. Also, there has been no statistically significant difference between nationality and LS in e-social environment at the $p \leq .05$ level among sections of e-IPCS [F (6, 217) = 1.058, p = 0.389]. Moreover, there has been no statistically significant difference between nationality and GAF in e-social environment at the $p \leq .05$ level among sections of e-IPCS [F (6, 217) = 2.106, p = 0.054]. In addition, there has been no statistically significant difference between nationality and HEI in e-social environment at the $p \leq .05$ level among sections of e-IPCS [F (6, 217) = 1.479, p = 0.186]. According to results obtained from the data, it has been revealed that international tertiary students who study at FCMS in EMU from different countries do not affect SCM, LS, GAF, and HEI skills in FB.

4.1.9.4 Comparing Means of Department and E-IPCS Items

Table 37. Comparing Means of Department and E-IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
eSCM	Between Groups	60.149	3	20.050	1.023	.383
	Within Groups	4313.280	220	19.606		
	Total	4373.429	223			
eLS	Between Groups	53.872	3	17.957	.961	.412
	Within Groups	4111.110	220	18.687		
	Total	4164.982	223			
eGAF	Between Groups	127.348	3	42.449	1.880	.134
	Within Groups	4966.683	220	22.576		
	Total	5094.031	223			
eHEI	Between Groups	77.200	3	25.733	1.274	.284
	Within Groups	4443.353	220	20.197		
	Total	4520.554	223			

The Table 37 above indicates the results of one-way within subjects (or repeated measures) ANOVA that was conducted to compare Departments and IPCS for e-social environment sums. There has been no statistically significant difference between Departments and SCM on e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (3, 220) = 1.023$, $p = 0.383$]. Moreover, there has been no statistically significant difference between Departments and LS in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (3, 220) = 0.961$, $p = 0.412$]. Furthermore, there has been no statistically significant difference between Departments and GAF in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (3, 220) = 1.880$, $p = 0.134$]. In addition, there has been no statistically significant difference between Departments and HEI in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (3, 220) = 1.274$, $p = 0.284$]. According to the results obtained from the data, international tertiary students who study at FCMS in EMU from different Departments do not affect IPCS on FB.

4.1.9.5 Comparing Means of Education Level and E-IPCS Items

Table 38. Comparing Means of Education Level and E-IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
eSCM	Between Groups	25.929	2	12.964	.659	.518
	Within Groups	4347.500	221	19.672		
	Total	4373.429	223			
eLS	Between Groups	52.618	2	26.309	1.414	.245
	Within Groups	4112.364	221	18.608		
	Total	4164.982	223			
eGAF	Between Groups	140.399	2	70.199	3.132	.046
	Within Groups	4953.632	221	22.415		
	Total	5094.031	223			
eHEI	Between Groups	8.642	2	4.321	.212	.809
	Within Groups	4511.912	221	20.416		
	Total	4520.554	223			

The Table 38 above shows the results of one-way within subjects (or repeated measures) ANOVA which was conducted to compare the education levels and IPCS for e-social environment sums. There has been no statistically significant difference between education levels and SCM in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(2, 221) = 0.659$, $p = 0.518$]. Moreover, there has been no statistically significant difference between education levels and LS in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(2, 221) = 1.414$, $p = 0.245$]. In addition, there has been no statistically significant difference between education levels and HEI in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(2, 221) = 0.212$, $p = 0.809$].

Besides, there has been statistically significant difference between education levels and GAF in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(2, 221) = 3.132$, $p = 0.046$].

According to the results obtained from the study, there is only statistically significant difference at GAF and education level of the respondents. This might indicate that digital natives may learn giving feedback through the tertiary education.

4.1.9.6 Comparing Means of Marital Status and E-IPCS Items

Table 39. Comparing Means of Marital Status and E-IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
eSCM	Between Groups	25.495	2	12.748	.648	.524
	Within Groups	4347.933	221	19.674		
	Total	4373.429	223			
eLS	Between Groups	1.837	2	.919	.049	.952
	Within Groups	4163.145	221	18.838		
	Total	4164.982	223			
eGAF	Between Groups	19.610	2	9.805	.427	.653
	Within Groups	5074.422	221	22.961		
	Total	5094.031	223			
eHEI	Between Groups	13.482	2	6.741	.331	.719
	Within Groups	4507.072	221	20.394		
	Total	4520.554	223			

Table 39 shows the results of one-way within subjects (or repeated measures) ANOVA that has been conducted to compare marital status and IPCS for e-social environment sums. There has been no statistically significant difference between marital status and SCM in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (2, 221) = 0.648$, $p = 0.524$]. Moreover, there has been no statistically significant difference between marital status and LS in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (2, 221) = 0.049$, $p = 0.952$]. Furthermore, there has been no statistically significant difference between marital status and GAF in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (2, 221) = 0.427$, $p = 0.653$]. In addition, there has been no statistically significant difference between marital status and HEI in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (2, 221) = 0.331$, $p = 0.719$]. According to the results obtained

from the data, marital status of international tertiary students who study at FCMS at EMU does not influence SCM, LS, GAF, and HEI on FB.

4.1.9.7 Comparing Means of Place of Living and E-IPCS Items

Table 40. Comparing Means of Place of Living and E-IPCS Items

		Sum of Squares	Df	Mean Square	F	Sig.
eSCM	Between Groups	7.456	3	2.485	.125	.945
	Within Groups	4365.972	220	19.845		
	Total	4373.429	223			
eLS	Between Groups	110.460	3	36.820	1.998	.115
	Within Groups	4054.522	220	18.430		
	Total	4164.982	223			
eGAF	Between Groups	52.696	3	17.565	.767	.514
	Within Groups	5041.335	220	22.915		
	Total	5094.031	223			
eHEI	Between Groups	34.674	3	11.558	.567	.637
	Within Groups	4485.879	220	20.390		
	Total	4520.554	223			

The Table 40 shows the results of one-way within subjects (or repeated measures) ANOVA that is conducted to compare place of living and IPCS for e-social environment sums. There has been no statistically significant difference between place of living and SCM in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (3, 220) = 0.125$, $p = 0.945$]. Also, there has been no statistically significant difference between place of living and LS in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (3, 220) = 1.998$, $p = 0.115$]. Furthermore, there has been no statistically significant difference between place of living and GAF in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (3, 220) = 0.767$, $p = 0.514$]. In addition, there has been no statistically significant difference of place of living and HEI in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F (3, 220) = 0.567$, $p = 0.637$].

According to the results obtained from the data, there has been no statistically significant difference between living places of international tertiary students who study in FCMS at EMU and SCM, LS, GAF, and HEI skills on FB.

4.1.9.8 Comparing Means of Sexual Orientation and E-IPCS Items

Table 41. Comparing Means of Sexual Orientation and E-IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
eSCM	Between Groups	35.474	6	5.912	.296	.938
	Within Groups	4337.955	217	19.991		
	Total	4373.429	223			
eLS	Between Groups	109.305	6	18.218	.975	.443
	Within Groups	4055.677	217	18.690		
	Total	4164.982	223			
eGAF	Between Groups	224.958	6	37.493	1.671	.129
	Within Groups	4869.073	217	22.438		
	Total	5094.031	223			
eHEI	Between Groups	136.460	6	22.743	1.126	.348
	Within Groups	4384.094	217	20.203		
	Total	4520.554	223			

In table 41, the outline of one-way within subjects (or repeated measures) ANOVA for comparing sexual orientation and IPCS for e-social environment sums has been presented. There has been no statistically significant difference between sexual orientation and SCM in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(6, 217) = 0.296$, $p = 0.938$]. Also, there has been no statistically significant difference between sexual orientation and LS in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(6, 217) = 0.975$, $p = 0.443$]. Furthermore, there has been no statistically significant difference between sexual orientation and GAF in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(6, 217) = 1.671$, $p = 0.129$]. In addition, there has been no statistically significant difference between sexual orientation and HEI in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(6, 217) = 1.126$, $p = 0.348$].

According to results obtained from the data, there has been no statistically significant difference between sexual orientations of international tertiary students who study in FCMS at EMU and SCM, LS, GAF, and HEI skills on FB.

4.1.9.9 Comparing Means of Religion and E-IPCS Items

Table 42. Comparing Means of Religion and E-IPCS Items

		Sum of Squares	df	Mean Square	F	Sig.
eSCM	Between Groups	119.601	5	23.920	1.226	.298
	Within Groups	4253.828	218	19.513		
	Total	4373.429	223			
eLS	Between Groups	49.431	5	9.886	.524	.758
	Within Groups	4115.551	218	18.879		
	Total	4164.982	223			
eGAF	Between Groups	138.429	5	27.686	1.218	.302
	Within Groups	4955.603	218	22.732		
	Total	5094.031	223			
eHEI	Between Groups	77.312	5	15.462	.759	.581
	Within Groups	4443.241	218	20.382		
	Total	4520.554	223			

The Table 42 shows the results obtained from one-way within subjects (or repeated measures) ANOVA for comparing religion and IPCS for e-social environment sums. There has been no statistically significant difference between religion and SCM in e-social environment at the $p \leq .05$ level among sections of IPCS [$F(5, 218) = 1.226$, $p = 0.298$]. Also, there has been no statistically significant difference between religion and LS in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(5, 218) = 0.524$, $p = 0.758$]. Furthermore, there has been no statistically significant difference between religion and GAF in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(5, 218) = 1.218$, $p = 0.302$]. In addition, there has been no statistically significant difference between religion and HEI in e-social environment at the $p \leq .05$ level among sections of e-IPCS [$F(5, 218) = 0.759$, $p = 0.581$]. According to results, religious beliefs of international tertiary students who

study at the FCMS in EMU do not have any effect in SCM, LS, GAF, and HEI skills on FB.

4.1.10 Correlation between IPCS-E-IPCS Scores

One of the objectives of this research is to explore the differences between IPCS on social and e-social environments. It is stated as: "*Is there a statistically significant difference between "SCM", "LS", "GAF", and "HEI" in the social and e-social environments* (H_2).

Table 43. Correlation between IPCS – E-IPCS Scores

Correlations

		SUMSOC	SUMESOC
SUMSOC	Pearson Correlation	1	.508**
	Sig. (2-tailed)		.000
	N	224	224
SUMESOC	Pearson Correlation	.508**	1
	Sig. (2-tailed)	.000	
	N	224	224

**. Correlation is significant at the 0.01 level (2-tailed)

In Table 43 above, it is demonstrated that when Pearson product-moment correlation coefficient is computed to assess the relationship between the IPCS on social environment and IPCS on e-social environment (FB), there has been correlation between IPCS (SCM, LS, GAF, and HEI) in real (social) life and e-IPCS (SCM, LS, GAF, and HEI) on FB variables [r = 0.508, n = 224, p = 0.000].

4.1.10.1 Correlation between SCM Profile and E-SCM Profile

Table 44. Correlation between SCM Profile and E-SCM Profile

Correlations

		PSCM	PeSCM
PSCM	Pearson Correlation	1	.199**
	Sig. (2-tailed)		.003
	N	224	224
PeSCM	Pearson Correlation	.199**	1
	Sig. (2-tailed)	.003	
	N	224	224

**. Correlation is significant at the 0.01 level (2-tailed)

In the Table 44 above, it is demonstrated that when Pearson product-moment correlation coefficient was computed to assess the relationship between the SCM profiles in social environment and SCM profiles in e-social environment (FB), there has been correlation between SCM profiles in real (social) environment and SCM profiles in e-social environment (FB) variables [r = 0.199, n = 224, p = 0.003].

4.1.10.2 Crosstabs between SCM Profile and E-SCM Profile

Table 45. Crosstabs between SCM Profile and E-SCM Profile

			PeSCM			Total
			need improvement	more consistent attention	potential strenght	
PSCM	need improvement	Count	13	24	5	42
		% within PSCM	31.0%	57.1%	11.9%	100.0%
	more consistent attention	Count	22	87	37	146
		% within PSCM	15.1%	59.6%	25.3%	100.0%
	potential strenght	Count	7	13	16	36
		% within PSCM	19.4%	36.1%	44.4%	100.0%
Total		Count	42	124	58	224
		% within PSCM	18.8%	55.4%	25.9%	100.0%

In the Table 45 an outline of respondents' SCM profiles in social and e-social environments is presented. According to IPCS inventory results, respondents are categorized as need to improve their IPCS, need more consistent attention in IPCS, and they have strength or potential strength in IPCS. According to the results, 55.4% of the international tertiary students of FCMS at EMU in 2018 need to have more consistent attention in SCM skills both social and e-social environments. Eventually, most of the respondents can be categorized as they need to more consistent attention IPCS in social and e-social environments.

4.1.10.3 Correlation between LS and E-LS Profiles

Table 46. Correlation between LS and E-LS Profiles

Correlations

		PLS	PeLS
PLS	Pearson Correlation	1	.274**
	Sig. (2-tailed)		.000
	N	223	223
PeLS	Pearson Correlation	.274**	1
	Sig. (2-tailed)	.000	
	N	223	224

**. Correlation is significant at the 0.01 level (2-tailed).

In the Table 46 above, it is demonstrated that when Pearson product-moment correlation coefficient is computed to assess the relationship between the LS profiles in social environment and LS profiles in e-social environment (FB), there has been correlation between LS profiles in real (social) environment and LS profiles in e-social environment (FB) variables [r = 0.274, n = 224, p = 0.000].

4.1.10.4 Crosstabs between LS and E-LS Profiles

Table 47. Crosstabulation between LS and E-LS Profiles

PLS * PeLS Crosstabulation

			PeLS			Total
			need improvement	more consistent attention	potential strenght	
PLS	need improvement	Count	13	21	6	40
		% within PLS	32.5%	52.5%	15.0%	100.0%
	more consistent attention	Count	21	86	29	136
		% within PLS	15.4%	63.2%	21.3%	100.0%
	potential strenght	Count	3	23	21	47
		% within PLS	6.4%	48.9%	44.7%	100.0%
Total		Count	37	130	56	223
		% within PLS	16.6%	58.3%	25.1%	100.0%

In Table 47 outline of respondents' LS profiles in social and e-social environments are given. According to IPCS inventory results, respondents are categorized as need to improve their IPCS, need more consistent attention to IPCS, and they have strength or potential strength to IPCS. According to results, 58.3% of the international tertiary students of FCMS at EMU in 2018 need to have more consistent attention in LS skills both social and e-social environments. As a result, most of the respondents can be categorized as they need to more consistent attention IPCS in social and e-social environments.

4.1.10.5 Correlation between GAF and E-GAF Profiles

Table 48. Correlation between GAF and E-GAF Profiles

Correlations

		PGAF	PeGAF
PGAF	Pearson Correlation	1	.346**
	Sig. (2-tailed)		.000
	N	224	224
PeGAF	Pearson Correlation	.346**	1
	Sig. (2-tailed)	.000	
	N	224	224

**. Correlation is significant at the 0.01 level (2-tailed).

In the Table 48 above, it is demonstrated that when Pearson product-moment correlation coefficient is computed to assess the relationship between the GAF profiles in social environment and GAF profiles in e-social environment (FB). There has been correlation between GAF profiles in real (social) environment and GAF profiles in e-social environment (FB) variables [r = 0.346, n = 224, p = 0.000].

4.1.10.6 Crosstabs between GAF and E-GAF Profiles

Table 49. Crosstabs between GAF and E-GAF Profiles

PGAF * PeGAF Crosstabulation

			PeGAF			Total
			need improvement	more consistent attention	potential strenght	
PGAF	need improvement	Count	20	16	6	42
		% within PGAF	47.6%	38.1%	14.3%	100.0%
	more consistent attention	Count	23	67	39	129
		% within PGAF	17.8%	51.9%	30.2%	100.0%
	potential strenght	Count	5	19	29	53
		% within PGAF	9.4%	35.8%	54.7%	100.0%
Total		Count	48	102	74	224
		% within PGAF	21.4%	45.5%	33.0%	100.0%

In the Table 49, respondents' GAF profiles in social and e-social environments is demonstrated. According to IPCS inventory results, respondents are categorized as need to improve their IPCS, need more consistent attention to IPCS, and they have strength or potential strength to IPCS. According to results, 45.5% of the international tertiary students of FCMS at EMU in 2018 need to have more consistent attention in GAF skills both social and e-social environments. Eventually, most of the respondents can be categorized as they need to more consistent attention IPCS in social and e-social environments.

4.1.10.7 Correlation between HEI and E-HEI Profiles

Table 50. Correlation between HEI and E-HEI Profiles

Correlations

		PHEI	PeHEI
PHEI	Pearson Correlation	1	.314**
	Sig. (2-tailed)		.000
	N	224	224
PeHEI	Pearson Correlation	.314**	1
	Sig. (2-tailed)	.000	
	N	224	224

**. Correlation is significant at the 0.01 level (2-tailed).

In the Table 50 above, the results obtained. When Pearson product-moment correlation coefficient is computed to assess the relationship between the HEI profiles in social environment and HEI profiles in e-social environment (FB) are presented. There has been correlation between HEI profiles in real (social) environment and HEI profiles in e-social environment (FB) variables [r = 0.314, n = 224, p = 0.000].

4.1.10.8 Crosstabs between HEI and E-HEI Profiles

Table 51. Crosstabs between HEI and E-HEI Profiles

PHEI * PeHEI Crosstabulation

			PeHEI			Total
			need improvement	more consistent attention	potential strenght	
PHEI	need improvement	Count	22	15	6	43
		% within PHEI	51.2%	34.9%	14.0%	100.0%
	more consistent attention	Count	25	79	31	135
		% within PHEI	18.5%	58.5%	23.0%	100.0%
	potential strenght	Count	8	14	24	46
		% within PHEI	17.4%	30.4%	52.2%	100.0%
Total		Count	55	108	61	224
		% within PHEI	24.6%	48.2%	27.2%	100.0%

The Table 51 shows respondents' HEI profiles in social and e-social environments. According to IPCS inventory results, respondents are categorized as need to improve their IPCS, need more consistent attention to IPCS, and they have strength or potential strength to IPCS. According to the results, 48.2% of the international tertiary students of FCMS at EMU in 2018 need to have more consistent attention in HEI skills both social and e-social environments. Eventually, most of the respondents can be categorized as they need to more consistent attention IPCS in social and e-social environments.

4.1.11 SCM, LS, GAF, and HEI Differences between Social and e-Social Environments (H_2-R_2)

Table 52. Descriptive Statistics and Paired-Samples t-Tests of the Differences; in SCM, LS, GAF and HEI between Social and e-Social Environments

	Social environment		e-Social environment			95% CI for Mean			
Outcome	M	SD	M	SD	n	Difference	r	T	Df
SCM	18.6	3.6	19.4	4.4	224	-.1449, -.149	.552	-2.42*	223
LG	18.9	3.7	19.2	4.3	224	-.971, .265	.425	-1.12	223
GAF	19.0	3.8	19.4	4.8	224	-1.019, .216	.485	-1.28	223
HEI	18.6	3.6	18.8	4.5	224	-.824, .405	.574	-.67	223

*. The mean difference is significant at the $P \leq 0.05$ level.

The second hypothesis of the study was: (*Is there a statistically significant difference between "SCM", "LS", "GAF", and "HEI" in the social and e-social environments,* H_2). Also, the second research question is: (*To what extend do the IPCS of tertiary students who study at the FCMS in EMU, in 2018?,* R_2).

A paired-samples t-test for comparing SCM, LS, GAF, and HEI between real (social) and e-social environments (FB). The results show in Table 42 above statistically significant difference between SCM and real (social) (M=18.6, SD=3.6) and e-social environments (M=19.4, SD=4.4) t(223)=-2.24, $p < 0.05$.). The results obtained from the data suggesting that respondents demonstrate more SCM skills in real (social) environment than e-social (FB) environment.

However, it is also noted that in Table 34 above, there has been positive correlation between SCM, LS, GAF, and HEI both social and e-social environments but there is no statistically significant difference between real (social) and e-social (FB)

environments for; LS t (223) =-1.12, p =.262, GAF t(223)=-1.28, p =.262 and HEI t(223)=-.673, p =.502.

According to the results, the IPCS of international tertiary students who study at the FCMS at EMU in 2018 do not affect LS, GAF, and HEI in real (social) and e-social (FB) environments except for SCM skills. SCM skills affected tertiary students IPC in both environments. Although, SIP was explained earlier in Chapter Two, it was claimed that CMC through IPC might have developed as FtF communication with the proliferation of computer-based social platforms. This study compares FtF communication through SCM, LS, GAF, and HEI in social and e-social environments in terms of IPCS and it is clearly seen that there has been no statistically significant difference for LS, GAF, and HEI which leads that these skills are as advanced as FtF communication. Moreover, SCM shows statistically significant difference social and e-social environments. Also it is clearly seen that SCM are not as developed as on FB.

On the other hand, present study evaluates UGT in the 21st century. As it has been stated in Chapter Two Internet has become evolutionary need for humans (Ng, 2020). Web 2 technologies may have fulfilled socialization needs of tertiary students. These are; sociological, psychological, and educational needs and they have been accomplished through social media tools especially, FB. As it has been mentioned earlier that UGT categories of self-discovery, entertainment, social improvement, and sustain interpersonal connectivity through the construct of behavioral objectives which were found to have positive effects on students' ubiquitous endorsement of SNS. According to the present study, there has been no statistically significant

difference between social and e-social envrionments in terms of LS, GAF, and HEI skills of international tertiary students who study at FCMS in EMU.

4.2 Analysis

In this section, the analysis of findings shown below in relation to demographic questions between four dimensions of IPCS and e-IPCS are given. In the findings section in Table 32, there has been statistically significant difference between HEI and social environment sums. Also, in Table 38 there has been statistically significant difference between GAF and educations levels. Besides, the rest of the findings show that there has been no statistically significant difference independent variables between IPCS both in social and e-social environments. However, in this section, one-way ANOVA is used to find out again which variable is significant among IPCS and e-IPCS.

4.2.1 Analysis of Comparing Means of Independent Variables and IPCS Scores in Social Environment

This section consisted of comparing means analysis with independent variables and IPCS/e-IPCS scores. In this section, IPCS and e-IPCS variables are consisted of fourty questions for each social and e-social environments then variables are analyzed one by one. First of all, this section is going to demonstrate nine demographic questions between IPCS sub-sections items: SCM, LS, GAF, and HEI in social life. The present study discovered earlier there has been no statistically significant difference mostly independent variables between IPCS scores sums. In this section, the present study is going to demonstrate comparing means of independent variables between IPCS items one by one.

4.2.1.1 Analysis of Comparing Means of Gender and IPCS Items

In statistical calculations made with independent paired sample t-tests, it is examined whether there is a statistically significant difference between dependent and independent variables. In this context, the independent variables are male and female. The t-test was applied to the independent variables to demonstrate normal distribution feature. It was investigated whether there was statistically significance difference between male and female regarding the use of IPCS in social environment which consisted of forty questions in the questionnaire.

Table 53. Comparing Means of the Social Environment Variables and Gender

Levene's Test for Equality of Variances			T-Test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
ICS-SL-v2	0.313	0.576	-2.259	222	0.025 *	-0.232	0.103
ICS-SL-v18	0.192	0.661	-3.203	222	0.002 **	-0.306	0.096

*. The mean difference is significant at the $p \leq 0.05$ level.
**. The mean difference is significant at the $p \leq 0.01$ level.

An independent-samples t-test is conducted to compare social environment variables for males and females. There is statistically significant difference in the scores for the second question in SCM “When you are trying to explain something, do others tend to put words in your mouth, or finish your sentences for you?” (M= -0.232, SD= 0.103) conditions; t (222) = -2.259, p = 0.576. The mean difference is significant at the $p \leq 0.05$ level.

Also, eighteenth question in LS “In conversation, do you find yourself paying most attention to facts and details, and frequently missing the emotional tone of the speakers’ voice?” (M= -0.306, SD= 0.096) conditions; t (222) = 3.203, p = 0.661.The

mean difference is significant at the $p < 0.01$ level. In this study, the independent samples t-tests conducted independent variables and IPCS items in social environment show that there has been statistically significant differences between the second question of SCM and eighteenth question of LS.

4.2.1.2 Analysis of Comparing Means of Age and IPCS Items

In the Table 54 shows the results obtained from the data below, one way within subjects (or repeated measures) ANOVA for comparing age levels between IPCS variables in social environment.

Table 54. Comparing Means of the Social Environment Variables and Age

		Sum of Squares	df	Mean Square	F	Sig.
	Within Groups	139.867	220	0.636		
ICS-SL-v2	Between Groups	6.657	3	2.219	3.834	0.011 *
	Within Groups	127.326	220	0.579		
	Within Groups	129.836	220	0.590		
ICS-SL-v4	Between Groups	4.781	3	1.594	3.134	0.026 *
	Within Groups	111.857	220	0.508		
	Within Groups	110.272	220	0.501		
ICS-SL-v7	Between Groups	5.258	3	1.753	3.055	0.029 *
	Within Groups	126.237	220	0.574		
ICS-SL-v8	Between Groups	5.369	3	1.790	3.481	0.017 *
	Within Groups	113.091	220	0.514		
	Within Groups	114.579	220	0.521		
ICS-SL-v20	Between Groups	4.854	3	1.618	2.954	0.033 *
	Within Groups	120.503	220	0.548		
ICS-SL-v21	Between Groups	4.693	3	1.564	3.063	0.029 *
	Within Groups	112.339	220	0.511		
	Within Groups	131.706	220	0.599		
ICS-SL-v26	Between Groups	6.386	3	2.129	3.789	0.011 *
	Within Groups	123.596	220	0.562		
ICS-SL-v27	Between Groups	5.679	3	1.893	3.055	0.029 *
	Within Groups	136.303	220	0.620		
	Within Groups	128.610	220	0.585		
ICS-SL-v39	Between Groups	3.999	3	1.333	2.768	0.043 *
	Within Groups	105.930	220	0.481		

*. The mean difference is significant at the $p \leq 0.05$ level.

According to the data from the Table 37 above, in the second question from SCM is "When you are trying to explain something, do others tend to put words in your mouth, or finish your sentences for you?". There has been statistically significance difference at the p≤.05 level [F (3, 220) = 3.834, p = 0.011].

Moreover, the fourth question in SCM is "Do you find it difficult to express your ideas when they differ from the ideas of people around you?" There has been statistically significance difference at the p≤.05 level [F (3, 220) = 3.134, p = 0.026]. In addition, the seventh question in SCM is "When speaking, is it easy for you to recognize how others are reacting to what you are saying?" There has been statistically significant difference at the p≤.05 level [F (3, 220) = 3.055, p = 0.029].

Furthermore, the eighth question in SCM is "Do you ask the other person to tell you how she / he feels about the point you are trying to make?" There has been statistically significant difference at the p≤.05 level [F (3, 220) = 3.481, p = 0.017].

On the other hand, the twentieth question in GAF is "Is it difficult for you to see things from the other person's point of view?" There has been statistically significant difference at the p≤.05 level [F (3, 220) = 2.954, p = 0.033].

In the twenty-first question in GAF is,"Is it difficult to hear or accept constructive criticism from the other person?" There has been significance at the p≤.05 level [F (3, 220) = 3.063, p = 0.029]. In the twenty-sixth question in GAF is "Do you find it difficult to disagree with others because you are afraid they will get angry?" There has been statistically significant difference at the p≤.05 level [F (3, 220) = 3.789, p = 0.011].

In the twenty-seventh question in GAF is "Do you find it difficult to compliment or praise others?" There has been statistically significant difference at the p≤.05 level [F (3, 220) = 3.055, p = 0.029]. In the thirty-ninth question in HEI is "Do you avoid or change the topic if someone is expressing his or her feelings in a conversation?" There has been statistically significant difference at the p≤.05 level [F (3, 220) = 2.768, p = 0.043].

According to the results obtained from the data, IPCS of the respondents are examined one by one between SCM, LS, GAF, and HEI there has been statistically significant difference in SCM and GAF mostly.

4.2.1.3 Analysis of Comparing Means of Education Level and IPCS Items

The Table 55 below examines whether there is a statistically significant difference between the respondents' IPCS and education levels in the social environment or not. According to the findings, statistically significant difference was found in six variables in SCM, GAF, and HEI.

Table 55. Comparing Means of the Social Environment Variables and Education Level

		Sum of Squares	df	Mean Square	F	Sig.
ICS-SL-v1	Between Groups	6.533	2	3.267	5.219	0.006 **
	Within Groups	138.324	221	0.626		
ICS-SL-v2	Between Groups	7.102	2	3.551	6.185	0.002 **
ICS-SL-v4	Between Groups	6.122	2	3.061	6.121	0.003 **
	Within Groups	110.516	221	0.500		
ICS-SL-v7	Between Groups	4.609	2	2.305	4.014	0.019 *
	Within Groups	126.886	221	0.574		
ICS-SL-v21	Between Groups	3.812	2	1.906	3.721	0.026 *
	Within Groups	113.219	221	0.512		
ICS-SL-v37	Between Groups	4.098	2	2.049	3.478	0.033 *
	Within Groups	130.184	221	0.589		

*. The mean difference is significant at the p ≤ 0.05 level.
**. The mean difference is significant at the p ≤ 0.01 level.

In sending clear messages section, the first question is "Is it difficult for you to talk to other people?" There is a statistically significant difference at the p≤.01 level [F (2, 221) = 5.219, p = 0.006], then, the second question is "When you are trying to explain something, do others tend to put words in your mouth, or finish your sentences for you?" There is a statistically significant difference at the p≤.01 level [F (2, 221) = 6.185, p = 0.002] Also, the fourth question is "Do you find it difficult to express your ideas when they differ from the ideas of people around you?" There is a statistically significant difference at the p≤.01 level [F (2, 221) = 6.121, p = 0.003] and the seventh question is "When speaking, is it easy for you to recognize how others are reacting to what you are saying?" There is a statistically significant difference at the p≤.01 level [F (2, 221) = 4.014, p = 0.019]. Another statistically significant variable belongs to GAF section. Twenty-first question; “Is it difficult to hear or accept constructive criticism from the other person?” There is a statistically significant difference at the p≤.05 level [F (2, 221) = 3.721, p = 0.026]. The last variable which is statistically significant for social environment is in HEI section. The thirty-seventh question; “Do you apologize to someone whose feelings you may have hurt?” There is a statistically significant difference at the p≤.05 level [F (2, 221) = 3.478, p = 0.033]. According to the results, when the education level and FtF IPCS of the respondents are examined, the statistically significant difference is found in SCM mostly.

4.2.1.4 Analysis of Comparing Means of Marital Status and IPCS Items

The Table 56 below demonstrates comparison means of between marital status and IPCS’s variables.

Table 56. Comparing Means of the Social Environment Variables and Marital Status

		Sum of Squares	df	Mean Square	F	Sig.
ICS-SL-v24	Between Groups	5.425	2	2.713	5.279	0.006 **
	Within Groups	113.557	221	0.514		

**. The mean difference is significant at the $p \leq 0.01$ level.

According to the data, there is a statistically significant difference in the twenty-fourth question that was “In conversation, do you try to put yourself in the other person’s shoes?” It belongs to GAF and there is a statistically significant difference at the $p \leq .01$ level [$F(2, 221) = 5.279$, $p = 0.006$]. According to the results, when the marital status and FtF IPCS of the respondents are examined, the statistically significant difference is found only in GAF skills.

4.2.1.5 Analysis of Comparing Means of Living Place and IPCS Items

In Table 57 below shows comparison means of social environment variables and living places.

Table 57. Comparing Means of the Social Environment Variables and Living Place

		Sum of Squares	df	Mean Square	F	Sig.
ICS-SL-v13	Between Groups	4.568	3	1.523	2.865	0.038 *
	Within Groups	116.928	220	0.531		

*. The mean difference is significant at the $p \leq 0.05$ level.

From the findings obtained, statistically significant difference was found in the LS. The thirteenth question of the LS is "In conversation, do you ask the other person questions when you don't understand what they've said?" There is statistically significant difference at the $p \leq .01$ level [$F(3, 220) = 2.865$, $p = 0.038$]. According to the results, when the living places and IPCS of the participants on social environment are examined, the statistically significant difference is found only in LS skills.

4.2.1.6 Analysis of Comparing Means of Sexual Orientation and IPCS Items

In the Table 58 below, comparison of means of the social environment variables and sexual orientations are shown.

Table 58. Comparing Means of the Social Environment Variables and Sexual Orientation

		Sum of Squares	df	Mean Square	F	Sig.
ICS-SL-v10	Between Groups	8.222	6	1.370	2.439	0.027 *
	Within Groups	121.903	217	0.562		
ICS-SL-v12	Between Groups	7.497	6	1.249	2.311	0.035 *
	Within Groups	117.342	217	0.541		
ICS-SL-v21	Between Groups	7.347	6	1.225	2.423	0.028 *
	Within Groups	109.684	217	0.505		
ICS-SL-v40	Between Groups	8.076	6	1.346	2.826	0.011 *
	Within Groups	103.353	217	0.476		

*. The mean difference is significant at the $p \leq 0.05$ level.

According to the results, there is statistically significant difference in the SCM. On the tenth question; “In conversation, do you look to talk about things of interest to both you and the other person?” There is statistically significant difference at the $p \leq .05$ level [F (6, 217) = 2.439, p = 0.027] Also, the twelfth question in LS, “In conversation, do you ask the other person questions when you don’t understand what they’ve said?” There is statistically significant difference at the $p \leq .05$ level [F (6, 217) = 2.311, p = 0.035]. In the third section which is called GAF on the twenty-first question “Is it difficult to hear or accept constructive criticism from the other person?” There is statistically significant difference at the $p \leq .05$ level [F (6, 217) = 2.423, p = 0.028] Last one was HEI, on fortieth question “When someone becomes upset, do you find it difficult to continue the conversation?” There is statistically significant difference at the $p \leq .05$ level [F (6, 217) = 2.826, p = 0.011]. According to the results, when the living places and FtF IPCS of the respondents are examined, the statistically significant difference is found in SCM, LS, GAF, and HEI skills.

4.2.2 Analysis of Comparing Means between Independent Variables and E-IPCS Scores

This section is going to demonstrate nine demographic questions between e-IPCS sub-sections items. SCM, LS, GAF, and HEI in e-social environment on FB. The present study indicate that there is no statistically significant difference in sub-sections between independent variables and e-IPCS scores sums earlier. In this section, the present study is going to demonstrate comparing means of independent variables and e-IPCS items one by one.

4.2.2.1 Analysis of Comparing Means of Gender and e-IPCS Items

The Table 59 below shows the results of whether gender distribution of this research and IPCS on e-social environment (FB) are statistically significant difference or not among forty questions.

Table 59. Comparing Means of the E-Social Environment Variables and Gender

Levene's Test for Equality of Variances			T-Test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
ICS-eSL-v5	1.796	0.182	-2.056	222	0.041 *	-0.206	0.100
ICS-eSL-v28	0.068	0.795	-2.221	222	0.027 *	-0.224	0.101

*. The mean difference is significant at the $p \leq 0.05$ level.

According to the results, statistically significant difference is found in the fifth and the twenty-eighth questions. There is a statistically significant difference in the scores for the second question (M= -0.206, SD= 0.100) conditions; t (222) = -2.056, p = 0.041 and eighteen question (M= -0.224, SD= 0.101) conditions; t (222) = 2.221, p = 0.101. This means that there is a statistically significant difference in SCM and GAF sections and e-social environment (FB). IPCS survey on FB shows that there is statistically significant difference among gender distribution in two questions.

The first question was “Do you assume that the other person knows what you are trying to say, and leave it to him/her to ask you questions on FB?” Statistically significant difference was found on p≤0.01 level this belongs to SCM on e-social environment (FB). The second question is “Do others remark that you always seem to think you are right on FB?” Statistically significant difference is found on p≤ 0.01 on that question which belongs to GAF section of e-social environment on FB.

As a result, independent sample t-test has been applied to the data. For each question, it is checked whether there is any statistically significant difference between gender and IPCS on FB. The first question is found in the LS and second question is found in GAF sections.

4.2.2.2 Analysis of Comparing Means of Age and e-IPCS Items

The Table 60 outlines below outlines respondents’ age levels and IPCS on e-social environment (FB) for forty questions.

Table 60. Comparing Means of the E-Social Environment Variables and Age

		Sum of Squares	df	Mean Square	F	Sig.
ICS-eSL-v1	Between Groups	7.589	3	2.530	3.582	0.015 *
	Within Groups	155.371	220	0.706		
	Within Groups	115.539	220	0.525		
ICS-eSL-v13	Between Groups	6.954	3	2.318	4.326	0.005 **
	Within Groups	117.903	220	0.536		
	Within Groups	128.700	220	0.585		
ICS-eSL-v16	Between Groups	4.313	3	1.438	2.806	0.041 *
	Within Groups	112.719	220	0.512		
ICS-eSL-v25	Between Groups	6.056	3	2.019	3.650	0.013 *
	Within Groups	121.658	220	0.553		
ICS-eSL-v27	Between Groups	6.058	3	2.019	3.189	0.025 *
	Within Groups	139.299	220	0.633		
ICS-eSL-v36	Between Groups	4.943	3	1.648	2.873	0.037 *
	Within Groups	126.182	220	0.574		

*. The mean difference is significant at the p ≤ 0.05 level.
**. The mean difference is significant at the p ≤ 0.01 level.

A one-way between subjects ANOVA is conducted to compare the e-social environment items and age conditions. According to the data, in SCM section, statistically significance difference ($p \leq 0.05$) is found on first question “Is it difficult for you to talk to other people on Facebook?” There is a statistically significant difference at the $p \leq .05$ level [$F(3, 220) = 3.582$, $p = 0.015$].

On LS section, two questions are found to indicate the presence of the statistically significant difference. The first one is in the thirteenth question; “In conversation, do you often try to figure out what the other person is going to say before they’ve finished talking on Facebook?” There is statistically significant difference at the $p \leq .01$ level [$F(3, 220) = 4.326$, $p = 0.005$]. The second one is the sixteenth question; “After the other person is done speaking, do you clarify what you heard them say before you offer a response on Facebook?” There is the statistically significant difference at the $p \leq .05$ level [$F(3, 220) = 2.806$, $p = 0.041$]

The third section is GAF. The mean values shown are statistically significant difference ($p \leq 0.05$) for two questions. One of them was twenty-fifth question; “Do you become uneasy when someone pays you a compliment on Facebook?” There is statistically significant difference at the $p \leq .05$ level [$F(3, 220) = 3.650$, $p = 0.013$]. Also, the second one is the twenty-seventh question; “Do you find it difficult to compliment or praise others on Facebook?” There is statistically significant difference at the $p \leq .05$ level [$F(3, 220) = 3.189$, $p = 0.025$].

The fourth section is HEI. There is question found out statistically significant difference at $p \leq 0.05$ level which is thirty-sixth question; “Do you sulk for a long time when someone upsets you on Facebook?” There is statistically significant difference

at the p≤.05 level [F (3, 220) = 2.873, p = 0.032]. According to the results, when the age and IPCS of the respondents on e-social environment (FB) are examined, the statistically significant difference is found in LS and GAF skills.

4.2.2.3 Analysis of Comparing Means of Nationality and e-IPCS Items

The Table 61 below shows, the results of whether independent variables and IPCS items are statistically significant different or not in the e-social environment (FB) among forty questions according to nationality of the respondents.

Table 61. Comparing Means of the E-Social Environment Variables and Nationality

		Sum of Squares	df	Mean Square	F	Sig.
ICS-eSL-v1	Between Groups	10.423	6	1.737	2.471	0.025 *
	Within Groups	152.537	217	0.703		
ICS-eSL-v5	Between Groups	8.230	6	1.372	2.507	0.023 *
	Within Groups	118.730	217	0.547		
	Within Groups	126.048	217	0.581		
ICS-eSL-v35	Between Groups	7.276	6	1.213	2.240	0.041 *
	Within Groups	117.470	217	0.541		

*. The mean difference is significant at the p ≤ 0.05 level.

According to the data obtained, the first question on SCM section is "Is it difficult for you to talk to other people on Facebook?" There is statistically significant difference at the p≤.05 level [F (6, 217) = 2.471, p = 0.025]. Also, the fifth question is "Do you assume that the other person knows what you are trying to say, and leave it to him / her to ask you questions on Facebook?" There is statistically significant difference at the p≤.05 level [F (6, 217) = 2.507, p = 0.023] In addition, thirty-fifth question from HEI section is "Are you satisfied with the way you handle differences with others on Facebook?" There is statistically significant difference at the p≤.05 level [F (6, 217) = 2.240, p = 0.041]. According to the results, when the nationality and e-social (FB) environment IPCS of the respondents are examined, the statistically significant difference is found in SCM and HEI skills.

4.2.2.4 Analysis of Comparing Means of Education Level and e-IPCS Items

The Table 62 demonstrates below whether there is statistically significant difference between the education level and the e-social environment (FB) variables or not.

Table 62. Comparing Means of the E-Social Environment Variables and Education level

		Sum of Squares	df	Mean Square	F	Sig.
ICS-eSL-v1	Between Groups	5.164	2	2.582	3.616	0.028 *
	Within Groups	157.796	221	0.714		
	Within Groups	131.153	221	0.593		
ICS-eSL-v25	Between Groups	4.642	2	2.321	4.168	0.017 *
	Within Groups	123.072	221	0.557		
ICS-eSL-v26	Between Groups	7.997	2	3.998	7.029	0.001 **
	Within Groups	125.717	221	0.569		
ICS-eSL-v27	Between Groups	5.044	2	2.522	3.972	0.020 *
	Within Groups	140.313	221	0.635		
ICS-eSL-v32	Between Groups	6.029	2	3.015	6.092	0.003 **
	Within Groups	109.359	221	0.495		

*. The mean difference is significant at the $p \leq 0.05$ level.
**. The mean difference is significant at the $p \leq 0.01$ level.

In SCM section first question is "Is it difficult for you to talk to other people?" There is statistically significant difference at the $p \leq .05$ level [$F(2, 221) = 3.616$, $p = 0.028$]. The twenty-fifth question is on GAF: "Do you become uneasy when someone pays you a compliment?" There is statistically significant difference at the $p \leq .05$ level [$F(2, 221) = 4.168$, $p = 0.017$].

In twenty-sixth question is "Do you find it difficult to disagree with others because you are afraid they will get angry"? There is statistically significant difference at the $p \leq .01$ level [$F(2, 221) = 7.029$, $p = 0.001$]. Also, twenty-seventh question is "Do you find it difficult to compliment or praise others?" There is statistically significant difference at the $p \leq .05$ level [$F(2, 221) = 3.972$, $p = 0.020$]. Moreover, thirty-second

question in HEI is "Does it upset you a great deal when someone disagrees with you?" There is statistically significant difference at the p≤.01 level [F (2, 221) = 6.092, p = 0.003]. According to the results, when the education level and IPCS in e-social environment of the respondents are examined, the statistically significant difference is found in GAF skills mostly.

4.2.2.5 Analysis of Comparing Means of Marital Status and e-IPCS Items

The Table 63 shows below that comparing means of the marital status and e-social environment (FB) variables of the respondents.

Table 63. Comparing Means of the E-Social Environment Variables and Marital Status

		Sum of Squares	df	Mean Square	F	Sig.
ICS-eSL-v25	Between Groups	5.534	2	2.767	5.005	0.007 **
	Within Groups	122.180	221	0.553		

**. The mean difference is significant at the p ≤ 0.01 level.

There is only one variable from GAF section which is twenty-fifth question; “Do you become uneasy when someone pays you a compliment?” There is statistically significant difference at the p≤.01 level [F (2, 221) = 5.005, p = 0.007]. According to the results, when the marital status and IPCS in e-social environment (FB) of the respondents are examined, the statistically significant difference is found only in GAF skills.

4.2.2.6 Analysis of Comparing Means of Living Place and e-IPCS Items

The Table 64 outlines below, comparing means of living places and e-social environment (FB) variables are shown.

Table 64. Comparing Means of the E-Social Environment Variables and Living Place

		Sum of Squares	df	Mean Square	F	Sig.
ICS-eSL-v26	Between Groups	6.075	3	2.025	3.491	0.017 *
	Within Groups	127.639	220	0.580		
ICS-eSL-v37	Between Groups	4.667	3	1.556	2.865	0.038 *
	Within Groups	119.458	220	0.543		

*. The mean difference is significant at the $p \leq 0.05$ level.

According to the findings obtained, there is statistically significant difference in the third section which is called GAF on the twenty-sixth question; "Do you find it difficult to disagree with others because you are afraid they will get angry?" There is statistically significant difference at the $p \leq .05$ level [$F(3, 220) = 3.491$, $p = 0.017$].

Also, thirty-seventh question on HEI was "Do you apologize to someone whose feelings you may have hurt?" There is statistically significant difference at the $p \leq .05$ level [$F(3, 220) = 2.865$, $p = 0.038$]. According to the results, when the living places and IPCS in e-social environment (FB) are examined, the statistically significant difference is found in GAF and HEI skills.

4.2.2.7 Analysis of Comparing Means of Sexual Orientation and e-IPCS Items

The Table 65 shows below, comparing means of the sexual orientation and e-social environment (FB) variables are shown.

Table 65. Comparing Means of the E-Social Life Variables and Sexual Orientation

		Sum of Squares	df	Mean Square	F	Sig.
ICS-eSL-v12	Between Groups	8.648	6	1.441	2.915	0.009 **
	Within Groups	107.311	217	0.495		
ICS-eSL-v30	Between Groups	9.017	6	1.503	2.685	0.016 *
	Within Groups	121.443	217	0.560		

*. The mean difference is significant at the $p \leq 0.05$ level.
**. The mean difference is significant at the $p \leq 0.01$ level.

According to the findings obtained, there is statistically significant difference in the LS on the twelfth question; “In conversation, do you ask the other person questions when you don’t understand what they’ve said on Facebook?” There is statistically significant difference at the p≤.01 level [F (6, 217) = 2.915, p = 0.009].

Also, third section which is called GAF on the thirtieth question; “Do you help others to understand you by saying how you feel on Facebook?”. There is statistically significant difference at the p≤.05 level [F (6, 217) = 2.685, p = 0.016]. According to the results, when the sexual orientations and IPCS on e-social environment (FB) of the respondents are examined, the statistically significant difference is found in LS and GAF skills.

4.2.2.8 Analysis of Comparing Means of Religion and e-IPCS Items

The Table 66 shows below, comparing means of the religion preferences of the respondents and e-social environment (FB) variables are shown.

Table 66. Comparing Means of the E-Social Environment Variables and Religion

		Sum of Squares	df	Mean Square	F	Sig.
ICS-eSL-v4	Between Groups	9.495	5	1.899	3.381	0.006 **
	Within Groups	122.434	218	0.562		
ICS-eSL-v9	Between Groups	8.821	5	1.764	3.367	0.006 **
	Within Groups	114.210	218	0.524		
ICS-eSL-v10	Between Groups	6.594	5	1.319	2.530	0.030 *
	Within Groups	113.620	218	0.521		
ICS-eSL-v27	Between Groups	8.928	5	1.786	2.853	0.016 *
	Within Groups	136.429	218	0.626		
ICS-eSL-v38	Between Groups	6.553	5	1.311	2.349	0.042 *
	Within Groups	121.657	218	0.558		

*. The mean difference is significant at the p ≤ 0.05 level.
**. The mean difference is significant at the p ≤ 0.01 level.

According to the findings obtained, there is statistically significant difference in the first section is SCM on the fourth, ninth, and tenth questions; “Do you find it difficult to express your ideas when they differ from the ideas of people around you on Facebook?” There is statistically significant difference at the p≤.01 level [F (5, 218) = 3.381, p = 0.006]. Also, “Are you aware of how your tone of voice may affect others on Facebook?” There is statistically significant difference at the p≤.01 level [F (5, 218) = 3.367, p = 0.006]. In addition, tenth question is “In conversation, do you look to talk about things of interest to both you and the other person on Facebook?” There is statistically significant difference at the p≤.05 level [F (5, 218) = 2.530, p = 0.030].

On the GAF section twenty-seventh question is “Do you find it difficult to compliment or praise others on Facebook?” There is statistically significant difference at the p≤.05 level [F (5, 218) = 2.853, p = 0.016].

The last one is on the fourth section which is called HEI on thirty-eighth question “Do you admit that you are wrong when you know that you are /were wrong about something on Facebook?” There is statistically significant difference at the p≤.05 level [F (5, 218) = 2.349, p = 0.042]. According to the results, when the religion preferences and e-social environment (FB) variables of the respondents are examined, statistically significant difference is found in SCM skills mostly.

Chapter 5

CONCLUSION

The information included in this chapter aims to provide a summary of the study, conclusions drawn from the study, and suggestions for further research.

5.1 Summary of the Study

The purpose of the study is to measure digital natives' who study FCMS at EMU in 2018's IPCS in the real and e-social environments under four sub-sections. These are: SCM, LS, GAF, and HEI.

One of the key points of this research is related to how FB as an e-social environment gratifies the IPC needs of tertiary students concerning IPCS both in social and e-social environments. Also, this study seeks to shed light on the IPCS profiles of tertiary students in social and e-social environments.

Through examining the use of IPCS both in social and e-social environments by the tertiary students; this study aims to measure IPCS scores of the digital natives'. In a nutshell, this study seeks to shed light on the four aspects of communication in traditional FtF communication and the virtual communication.

This study is the first in the field of Communication and Media Studies, revealing the difference between IPCS used by tertiary students in social and e-social environments in four different dimensions.

As it has been mentioned in Chapter Two, the present study covers the definition and conceptualization of communication, FtF interpersonal communication, four components (SCM, LS, GAF, and HEI) of IPCS in social (real) environment. In addition, early IPC models (Linear, Interactional, and Transactional models), and Web 1, Web 2, and Web 3 technologies. Moreover, CMC as a new channel of IPC, four components (SCM, LS, GAF, and HEI) of IPCS in e-social (FB) environment, new media as a new communication platform, emerging generation: "Digital Natives" and SNS usage among "Digital Natives", and can e-social platforms be the extentions of social communication platform. Furthermore, theoretical framework is covered up with SIP Theory and research into SIP Theory, UGT and research into UGT.

For the present study, descriptive and inferential statistics have been used. In this study as descriptive statistics are used in order to have the value of the measure of central tendency through the minimum, maximum, mean and standard deviation. This is done in order to show data dispersion. Moreover, the inferential statistics has been conducted through analysis of variance (ANOVA), paired sample t-tests which have been done to adapt the obtained results of data into the general population. Quantitative research methodology is applied to the present study to understand whether there has been statistically significant difference in tertiary students' IPCS in both social (real) and e-social (FB) environments.

The two hypotheses the present study tried to answer are:

H1. Is there a statistically significant difference between interpersonal communication skills profiles of tertiary students between social and e-social environments?

H2. Is there a statistically significant different between IPCS of tertiary students with respect to "sending clear messages", "listening", "giving and getting feedback", and "handling emotional interactions"?

According to the first hypothesis, results of the study indicate that there has been correlation between real (social) and e-social environments. Also, IPCS profiles of international tertiary students studying at FCMS at EMU have been determined. According to data obtained for the study, respondents need to have more consistent attention in IPCS (H_1).

On the other hand, the second hypothesis has revealed the differences between real and e-social environment. Samples paired t-test was applied in the IPCS in four sections. Statistically significant difference was found only in SCM. On the other hand, there has been no statistically significant difference in the rest three sections in LS, GAF, and HEI (H_2).

The demographic data in the study have been tested in four different sub-branches (SCM, LS, GAF, and HEI) of IPCS with one-way ANOVA. In the findings obtained, it was observed that gender was not an important factor in real life in the context of IPCS. Also, statistically significant difference has not been found in the e-social environment (FB) either. The second question was about the respondents' age. The

IPCS of the respondents' age range and traditional (social) environment have been evaluated. There has been no statistically significant difference in IPCS of respondents among the age levels and IPCS items in real life. Also, on FB, there has been no statistically significant difference in IPCS on the e-social environment.

Nationalities and IPCS in four dimensions of the respondents have been examined. There has been no statistically significant difference found in the LS section among four dimensions of IPCS in the real (social) environment. On FB, IPCS in four dimensions of the respondents have been examined. There has been no statistically significant difference in e-social environment (FB).

Respondents are from different Departments of the FCMS in the EMU (Cinema and Television, New Media and Journalism, Public Relations and Advertising, and Visual Art and Visual Communication Design). Results showed that the IPCS in social and e-social environments of the respondents have been examined for four dimensions (SCM, LS, GAF, and HEI) and in respect to Departments of the respondents. Results showed that statistically significant difference has not been found between IPCS and IPCS on FB.

According to education levels of respondents and IPCS and IPCS on FB, there have been no statistically significant difference found in SCM, LS, and HEI. However, there has been statistically significant difference between education levels and GAF skills of international tertiary students who study in FCMS at EMU in 2018.

Moreover, the marital status of the respondents and the IPCS and IPCS on FB in four dimensions (SCM, LS, GAF, and HEI) have been examined. According to results,

there has been no statistically significant difference found between marital status and SCM, LS, GAF, and HEI both social and e-social environments.

Furthermore, the present study examines respondents' place of living preferences between IPCS and IPCS on FB. There has been no statistically significant difference between SCM, LS, GAF, and HEI and social and e-social environments.

Moreover, sexual orientations of respondents and IPCS both social and e-social (FB) environments have been examined. There has been no statistically significant difference between SCM, LS, and GAF skills in social and e-social (FB) environments. Besides, there has been statistically significant difference between respondents' sexual orientations and HEI skills.

Finally, it is found out that with respect to international tertiary students' religious beliefs, there has been no statistically significant difference SCM, LS, GAF, and HEI neither in social nor in e-social (FB) environments.

In the early studies on the internet and social media, there have been differences between the users' social and e-social lives (Baym et al, 2004). Moreover, Internet users, at that time, the concept of digital natives had not yet been put forward, were aware of the distinction between real-life and virtual life which suggests that they are some kind of active users. There was a distinction between reality and virtual perception.

The extent to which all these technological revolutions have affected IPCS has become a field of new research. During this research, we had the opportunity to

discuss and negotiate this issue with various students, and we also questioned whether our digital natives preferred the traditional ways of communication or social media applications.

This study provides a new perspective on IPC research. In the light of the findings, it can be said that international tertiary students who study FCMS at EMU in 2018 prefer to communicate with their families, friends, and other people both FtF and online. We have discovered that new technologies take IPC to a different dimension and instead of creating two different worlds; it combines both FtF communication and online communication in one.

As it has been mentioned earlier in Chapter Two, the SIP Theory suggests that IPC as synchronized or asynchronized on CMC channels is different from the FtF communication and also, it presumes if the interpersonal communication on CMC develops it would be as successful as FtF.

Based on UGT, as it has been mentioned in Chapter Two, social media engagement and the uses of social media motivates users for new media are explained in terms of UGT. Users mostly prefer FB to gratify their needs. These are social connections, surfing, status updating, social investigation, escapism, socialization, share problems, social interaction, following new trends, etc. (McCay-Peet & Quan-Haase, 2016).

In the present study held, there has not been a difference found between the components of LS, GAF, and HEI on FB related to IPC with FtF and FB in terms of IPCS. Regards to this; as there has not any difference found in three areas in this study, the assumption of IPC being developed on CMC channels and approaching

close to FtF has been supported. Additionally, there has been statistically significant difference between SCM in FtF communication and FB in terms of IPCS. According to SIP theory; the IPC on CMC channels becomes later than the FtF communication which is confirmed for the sake of SCM.

5.2 Conclusions Drawn From the Study

In the present study, SIP and UGT Theories have been preferred to provide theoretical basis for the findings that have been obtained statistically from international tertiary students who study in the FCMS at EMU in 2018.

As it has been stated in the Chapter Two, SIP suggests that development of Web 2 tools reached high-level technology even though media channels undermine FtF communication. This allows the development of IPC due to the dynamic nature of Web 2, however, it presumes that the interpersonal relationships that develop in CMC can be as satisfying as FtF communication.

This study also evaluates IPCS in real and IPCS in e-social environment with respect to the UGT in the 21st century. It is a conceptualized fact that Web 2 technologies have reached a real-like aspect of human relations. Internet usage meets the social and evolutionary needs of users. As it has been stated in the Chapter Two, based on UGT, the present study evaluates the needs that Internet usage gratifies. Users use the Internet for goal-oriented purposes. Web 2 technologies meet the social and evolutionary needs of users. In this context, IPC is an evolutionary need for humans. With the introduction of dynamic and new features of Web 2 technologies that will satisfy the users at all times, IPC is no longer just FtF also, SNS supported real-like satisfactions for users.

Previous studies have been deeply discussed and focused on competition of FtF and online IPC. For instance, (Kraut et al., 1998) argued that low condition and weakened social relationships on the online platforms can be replaced for healthy (FtF) relationships on the other hand consumed time on online platforms may be turned out framing strong interpersonal connections (Baym et al., 2004). The online environment gives tertiary students the convenience and naturalness of communication as much as traditional communications (Ellis, 2001).

Besides, studies demonstrate that there is a lot of space in these issues in the literature and there is need for further research. Digital natives' personality, self-perception, and self-esteem have been affected by the Internet and social media platforms (Best et al., 2014; Bozoglan et al., 2013; Krämer & Winter, 2008; Pantic et al., 2017). All studies clearly show that Web 2 technologies begin to take the place of FtF communication methods.

Also, SNS have several positive effects. Particulary, FB gives access to a user to post information about oneself (Bruss & Hill, 2010). A photo, quite often demonstrating oneself, consumes a predominant space on the profile. Also, FB supported users to write self-introduction on their profiles. Also, friends can send messages, requests, and follows one another (Çetinkaya & Sütçü, 2018; Madge et al., 2009; Prescott et al., 2013; Roblyer et al., 2010; Rouis et al., 2011; Thalluri & Penman, 2015; Tong et al., 2008). Although listening skill in FB is weaker than FtF communication, FB is preferred by university students as an IPC channel which means that traditional communication has shifted to social media. While people preferred online socializations more thus these platforms gave them a limitless space and less stress compared with FtF communication (Caplan, 2003).

Under the light of previous studies (Eginli & Tas, 2018) our research has proved that students of EMU consider as digital natives need to more consistent attention their IPCS both social and e-social environment. IPCS is likely to develop in the world surrounded by technology, where communication tools are easier to communicate and more accessible. Pierce (2009) mentions that young people tend to use technological platforms as a substitute for FtF communication but based on the information we received from the survey results, it can be concluded that for new generation of young people which means digital natives, they need skills for their communication social and e-social environments (R_1-H_1).

Today's electronic environment is an indispensable part of our lives, a part of this period in which the Internet use is normalized, social media `sender`` and `receiver` s place on a slippery ground of the traditional media that let the audience to be passive users.

At this point, as McLuhan (1964) said, technology was created by mankind and it has become an indispensable part of his life. McLuhan mentioned that “Man becomes an extension of his technology”, and “Media and technologies the extensions of man”. When McLuhan made predictions about the future in 1964, he thought that media tools would be an extension of people. In other words, the present study interpreted McLuhan’s ideas as IPC through FB is articulated FtF communication.

According to SIP as it has been mentioned earlier, the FtF communication and the CMC communication have different nature. In addition to this, the FtF communication helps interactions to be developed which paves the way for assuming that the IPC would reach the same level as FtF through the development of CMC.

However, this study shows that for digital natives CMC communication process can be well as developed as FtF communication. One of the most important findings of this study is the claim that there has been statistically significant difference in the real environment and e-social environment of the participants in the SCM of IPCS.

This study aims to investigate the IPC preferences of international tertiary students who study FCMS at EMU. In addition, the present study determined IPCS profiles about four key areas of IPCS (SCM, LS, GAF, and HEI). As it has been explained earlier; eighty-nine questions were asked about IPCS usage on both real (social) and e-social environment and the results showed that respondents IPCS in real (social) and e-social environments need more consistent attention.

The findings of this study showed that the digital natives are strongly connected to the e-social environment and that real and e-social environments are no longer two separate platforms but unite in a single environment in today's world.

Previous studies that suggest people with strong IPCS have been found to be more likely to use SNS for socialization (Acar, 2008; boyd & Ellison, 2007; Holmes, 2011). However, the present study demonstrates that students presented real-like attitudes in e-social environment (FB) and there has been no statistically significant difference between traditional way of communication and e-social platforms except SCM.

However, the fact that Web 2 has diversified the ways of communication and the rich media tools have a dynamic structure together with technology have made the communication closer to the reality in the e-social environment. As a result, FB,

which is the most used SNS platform has not found any statistical significant difference between the real and e-social environments in terms of IPCS except SCM whereas it facilitates real-like IPC.

It is concluded that real and e-social environments are almost equivalent to one another. As far as the use of SNS by digital natives is concerned. This study has brought a new depth and distinctive perspective to Communication and Media Studies field particularly interpersonal communication with respect to the uses of SNS as an e-social environment. We hope that this detailed and emprical study for the four IPCS sub-branches (SCM, LS GAF, and HEI) and the IPCS profiles of digital natives will be used as a source for new studies by communication scholars.

According to author's opinions, IPCS is the basis of our family relationships, friendships, working environments, also every interactions with our daily life we use IPCS. Although, we know that we can maintain our interactions on FB and other SNS platforms, I believe that we need to improve our use of SNS especially FB in terms of IPCS. As the variety of social media tools used increase, the satisfactions obtained will increase in parallel and new gratifications will emerge. At this point, it is important that UGT continues to be addressed in new communication researches in the 21st century.

5.3 Suggestions for Further Research

This research is limited to Facebook. For further suggestions, the investigation can be done for other social media platforms or applications used by digital natives. Future studies would help us understand whether IPCS are perhaps weakened or strengthened through social media tools.

Although, this study examined the statistically significant differences of the IPCS in a social and e-social environments in fact, it goes a step further to interrogate McLuhan's perspective about media technologies. Since, McLuhan claimed in 1964 media tools are an extension of the human being. Actually through the development of Web 2 today, the Internet-based communication has become an extension of man. Future studies should focus on this.

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APPENDICES

Appendix A: Interpersonal Skills Inventory

INTERPERSONAL COMMUNICATION: NEW VS OLD

This research, briefly, will investigate on whether new communication technologies, thus SNSs -Facebook-, changed the face and nature of interpersonal communication or not.

Thank you for your cooperation.

Assoc. Prof. Dr. Bahire Ozad, Assoc. Prof. Dr. Tutku Akter, Ece Kahraman

SECTION 1 : Please answer the following questions

1) Gender:

a)Male b) Female

2) Nationality:

a) Nigerian b) Iranian c) Russian d) Arab e) Other (Indonesian and Pakistani)

3) Age:

a) 18 and below b) 19-22 c) 23-26 d) 27 and above

4) Department:

a) TV and Film Studies b) Public Relations and Advertising c) New Media and Journalism d) VACD

5) Degree:

a)Bachelor's b) Master's c) PhD

6) Marital Status:

a)Single b)Engaged c) Married d) Widow/Divorced

7)Where Do You Live:

a) Dormitory b) Rental House c) Homestay d) Other (host family or relatives)

8) Sexual Orientation:

a) Monosexual (Gay) b) Monosexual (Lesbian) c) Straight d)Bisexual e)Pansexual f) Polysexual (queer) g) Asexual h) Other (LGBT+)

Religion:

a) Christian b) Jewish c) Muslim d) Alevi's Muslim e) Deist f) Other (Atheist)

INTERPERSONAL SKILLS IN SOCIAL LIFE QUESTIONS	1(usually)	2	3(seldom)
1) Is it difficult for you to talk to other people?			
2) When you are trying to explain something,do others tend to put words inyour mouth, or finish your sentences for you?			
3) In conversation, do your words usually come out the way you would like?			
4) Do you find it difficult to express yourideas when they differ from the ideas of people around you?			
5) Do you assume that the other person knows what you are trying to say, and leave it to him/her to ask you questions?			
6) Do others seem interested and attentive when you are talking to them?			
7) When speaking, is it easy for you to recognize how others are reacting towhat you are saying?			
8) Do you ask the other person to tell youhow she/he feels about the point youare trying to make?			
9) Are you aware of how your tone of voice may affect others?			
10) In conversation, do you look to talk about things of interest to both you and the other person?			
11) In conversation, do you tend to do more talking than the other person does?			
12) In conversation, do you ask the other person questions when you don't understand what they've said?			
13) In conversation, do you often try to figure out what the other person isgoing to say before they've finished talking?			
14) Do you find yourself not paying attention while in conversation with others?			
15) In conversation, can you easily tell the difference between what the person is saying and how he/she may be feeling?			
16) After the other person is done speaking, do you clarify what you heard them say before you offer are sponse?			
17) In conversation, do you tend to finish sentences or supply words for the other person?			
18) In conversation, do you find yourself paying most attention to facts and details, and frequently missing the emotional tone of the speakers'voice?			
19) In conversation, do you let the other person finish talking before reacting to what she/he says?			
20) Is it difficult for you to see things from the other person's point of view?			
21) Is it difficult to hear or accept constructive criticism			

from the other person?			
22) Do you refrain from saying something that you think will upset someone or make matters worse?			
23) When someone hurts your feelings,do you discuss this with him/her?			
24) In conversation, do you try to put yourself in the other person's shoes?			
25) Do you become uneasy when someone pays you a compliment?			
26) Do you find it difficult to disagree with others because you are afraid they will get angry?			
27) Do you find it difficult to compliment or praise others?			
28) Do others remark that you always seem to think you are right?			
29) Do you find that others seem to get defensive when you disagree with their point of view?			
30) Do you help others to understand you by saying how you feel?			
31) Do you have a tendency to change the subject when the other person's feelings enter into the discussion?			
32) Does it upset you a great deal when someone disagrees with you?			
33) Do you find it difficult to think clearly when you are angry with someone?			
34) When a problem arises between you and another person, can you discuss it without getting angry?			
35) Are you satisfied with the way you handle differences with others?			
36) Do you sulk for a long time when someone upsets you?			
37) Do you apologize to someone whose feelings you may have hurt?			
38) Do you admit that you're wrong when you know that you are/were wrong about something?			
39) Do you avoid or change the topic ifsomeone is expressing his or her feelings in a conversation?			
40) When someone becomes upset, do you find it difficult to continue the conversation?			

INTERPERSONAL COMMUNICATION SKILLS IN E-SOCIAL LIFE	1(usually)	2	3(Seldom)
1) Is it difficult for you to talk to other people at Facebook?			
2) When you are trying to explain something,do others tend to put words in your mouth, or finish your sentences for you at Facebook?			
3) At Facebook conversations, do your words usually			

come out the way you would like?			
4) Do you find it difficult to express your ideas at Facebook when they differ from the ideas of people around you?			
5) Do you assume that the other person knows what you are trying to say, and leave it to him/her to ask you questions at Facebook?			
6) Do others seem interested and attentive when you are talking to them at Facebook?			
7) When chatting, is it easy for you to recognize how others are reacting to what you are saying at Facebook?			
8) At Facebook, do you ask the other person to tell you how she/he feels about the point you are trying to make?			
9) Are you aware of how your discourses may affect others at Facebook?			
10) In conversation at Facebook, do you look to talk about things of interest to both you and the other person?			
11) In conversation at Facebook, do you tend to do more talking than the other person does?			
12) In conversation at Facebook, do you ask the other person questions when you don't understand what they've said?			
13) In conversations at Facebook, do you often try to figure out what the other person is going to say before they've finished talking?			
14) Do you find yourself not paying attention while in conversation with others at Facebook?			
15) In conversation at Facebook, can you easily tell the difference between what the person is saying and how he/she may be feeling?			
16) After the other person is done writing, do you clarify what you understand them say before you offer are sponse?			
17) In conversation at Facebook, do you tend to finish sentences or supply words for the other person?			
18) In conversation at Facebook, do you find yourself paying most attention to facts and details, and frequently missing the emotional tone of the speakers' discourses?			
19) In conversation at Facebook, do you let the other person finish talking before reacting to what she/he says?			
20) Is it difficult for you at Facebook to see things from the other person's point of view?			
21) Is it difficult to hear or accept constructive criticism from the other person at Facebook?			
22) Do you refrain from saying something that you			

think will upset someone or make matters worse at Facebook?			
23) At Facebook when someone hurts your feelings,do you discuss this with him/her ?			
24) In conversation at Facebook, do you try to put yourself in the other person's shoes?			
25)At Facebook do you become uneasy when someone pays you a compliment			
26) At Facebook do you find it difficult to disagree with others because you are afraid they will get angry?			
27) At Facebook do you find it difficult to compliment or praise others?			
28) At Facebook do others remark that you always seem to think you are right?			
29) At Facebook, do you find that others seem to get defensive when you disagree with their point of view?			
30) At Facebook, do you help others to understand you by saying how you feel?			
31) At Facebook, Do you have a tendency to change the subject when the other person's feelingsenter into the discussion?			
32) At Facebook, does it upset you a great deal when someone disagrees with you?			
33) At Facebook, do you find it difficult to think clearly when you are angry with someone?			
34) When a problem arises between you and another person at Facebook, can you discuss it without getting angry?			
35) Are you satisfied with the way you handle differences with others at Facebook?			
36) At Facebook, do you sulk for a long time when someone upsets you?			
37) At Facebook, do you apologize to someone whose feelings you may have hurt?			
38) At Facebook, do you admit that you're wrong when you know that you are/were wrong about something?			
39) At Facebook, do you avoid or change the topic if someone is expressing his or her feelings in a conversation?			
40) When someone becomes upset at Facebook, do you find it difficult to continue the conversation?			

Appendix B: Interpersonal Communication Skills Inventory (Original)

INTERPERSONAL COMMUNICATION SKILLS INVENTORY

Purpose

This Interpersonal Communication Skills Inventory is designed to provide individuals with some insights into their communication strengths and potential areas for development. By answering each question candidly, an individual will receive a profile that displays their level of competence in four key communication areas.

How to Complete the Inventory

To complete this inventory, read each statement carefully and honestly assess how often the particular statement applies to you. For instance, in Section I - question number 1, if you sometimes find it difficult to talk to other people, you would place a check mark in the "Sometimes" column for question number 1. And for question 2, if others often tend to finish sentences for you when you are trying to explain something; you would check the "Usually" column and so on until you have completed all questions in all four sections of the inventory.

SECTION I

	USUALLY	SOMETIMES	SELDOM
1. Is it difficult for you to talk to other people?			
2. When you are trying to explain something, do others tend to put words in your mouth, or finish your sentences for you?			

3. In conversation, do your words usually come out the way you would like?			
4. Do you find it difficult to express your ideas when they differ from the ideas of people around you?			
5. Do you assume that the other person knows what you are trying to say, and leave it to him/her to ask you questions?			
6. Do others seem interested and attentive when you are talking to them?			
7. When speaking, is it easy for you to recognize how others are reacting to what you are saying?			
8. Do you ask the other person to tell you how she/he feels about the point you are trying to make?			
9. Are you aware of how your tone of voice may affect others?			
10. In conversation, do you look to talk about things of interest to both you and the other person?			

SCORE: SECTION I TOTAL _____

SECTION II

	USUALLY	**SOMETIMES**	**SELDOM**
11. In conversation, do you tend to do more talking than the other person does?			
12. In conversation, do you ask the other person questions when you don't understand what they've said?			
13. In conversation, do you often try to figure out what the other person is going to say before they've finished talking?			
14. Do you find yourself not paying attention while in conversation with others?			

15. In conversation, can you easily tell the difference between what the person is saying and how he/she may be feeling?			
16. After the other person is done speaking, do you clarify what you heard them say before you offer a response?			
17. In conversation, do you tend to finish sentences or supply words for the other person?			
18. In conversation, do you find yourself paying most attention to facts and details, and frequently missing the emotional tone of the speakers' voice?			
19. In conversation, do you let the other person finish talking before reacting to what she/he says?			
20. Is it difficult for you to see things from the other person's point of view?			

SCORE: SECTION II TOTAL _____

SECTION III

	USUALLY	SOMETIMES	SELDOM
21. Is it difficult to hear or accept constructive criticism from the other person?			
22. Do you refrain from saying something that you think will upset someone or make matters worse?			
23. When someone hurts your feelings, do you discuss this with him/her?			
24. In conversation, do you try to put yourself in the other person's shoes?			
25. Do you become uneasy when someone pays you a compliment?			

26. Do you find it difficult to disagree with others because you are afraid they will get angry?			
27. Do you find it difficult to compliment or praise others?			
28. Do others remark that you always seem to think you are right?			
29. Do you find that others seem to get defensive when you disagree with their point of view?			
30. Do you help others to understand you by saying how you feel?			

SCORE: SECTION III TOTAL _____

SECTION IV

	USUALLY	SOMETIMES	SELDOM
31. Do you have a tendency to change the subject when the other person's feelings enter into the discussion?			
32. Does it upset you a great deal when someone disagrees with you?			
33. Do you find it difficult to think clearly when you are angry with someone?			
34. When a problem arises between you and another person, can you discuss it without getting angry?			
35. Are you satisfied with the way you handle differences with others?			
36. Do you sulk for a long time when someone upsets you?			
37. Do you apologize to someone whose feelings you may have hurt?			
38. Do you admit that you're wrong when you know that you are/were wrong about something?			
39. Do you avoid or change the topic if someone is expressing his or her feelings in a conversation?			
40. When someone becomes upset, do you find it difficult to continue the conversation?			

SCORE: SECTION IV TOTAL _____

Inventory Scoring Key

Instructions: Go back and look over your responses to each question. In front of each question, write the appropriate score using the table below.

For example, if you answered "Seldom" to Question 1, you would get 3 points. Write the number 3 in front of Question 1 on the inventory. Proceed to score all other questions.

Each section contains 10 questions. After scoring all questions, go back to Section 1. Total the score of Section 1 and put that number on the line "Score Section 1 Total." Proceed to total all scores for all other sections.

Enter your score here: _____

SCORING KEY

Question	Usually	Sometimes	Seldom	Question	Usually	Sometimes	Seldom
1	0	1	3	21	0	1	3
2	0	1	3	22	3	1	0
3	3	1	0	23	3	1	0
4	0	1	3	24	3	1	0
5	0	1	3	25	0	1	3
6	3	1	0	26	0	1	3
7	3	1	0	27	0	1	3
8	3	1	0	28	0	1	3
9	3	1	0	29	0	1	3
10	3	1	0	30	3	1	0
11	0	1	3	31	0	1	3
12	3	1	0	32	0	1	3
13	0	1	3	33	0	1	3

14	0	1	3	34	3	1	0
15	3	1	0	35	3	1	0
16	3	1	0	36	0	1	3
17	0	1	3	37	3	1	0
18	0	1	3	38	3	1	0
19	3	1	0	39	0	1	3
20	0	1	3	40	0	1	3

Interpersonal Communication Profile

Interpretation: Look at your score for each section as one indication of the degree to which you effectively communicate. Plot your scores on the table below using an "X" for each section score. Draw a line to connect them column to column. This will create a profile of your strengths and opportunities for improvement.

- Scores in the 1 > 15 range indicate areas of your communication skills that need improvement.
- Scores in the 16 > 21 range indicate areas of communication skills that need more consistent attention.
- Scores in the 22 > 30 range indicate areas of strength or potential strength.

Area (s) of Strength:

_____

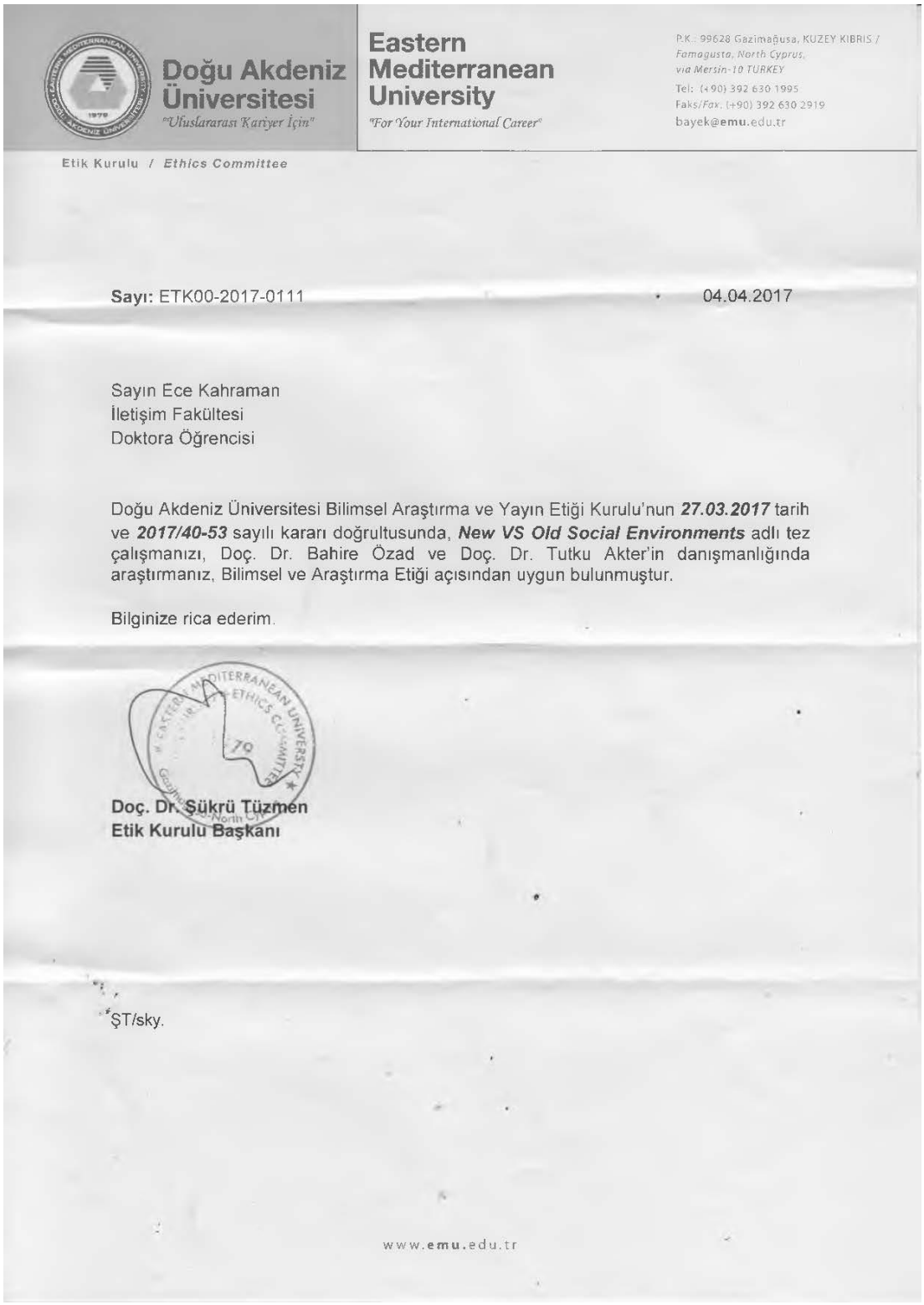
Area (s) of Improvement:

_____

Score Section I Total Sending clear messages	Score Section II Total Listening	Score Section III Total Giving and getting feedback	Score Section IV Total Handling Emotional Interactions
30	30	30	30
29	29	29	29
28	28	28	28

27	27	27	27
26	26	26	26
25	25	25	25
24	24	24	24
23	23	23	23
22	22	22	22
21	21	21	21
20	20	20	20
19	19	19	19
18	18	18	18
17	17	17	17
16	16	16	16
15	15	15	15
14	14	14	14
13	13	13	13
12	12	12	12
11	11	11	11
10	10	10	10
9	9	9	9
8	8	8	8
7	7	7	7
6	6	6	6
5	5	5	5
4	4	4	4
3	3	3	3
2	2	2	2
1	1	1	1

Appendix C: Ethical Concerns



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Doktora Öğrencisi

Doğu Akdeniz Üniversitesi Bilimsel Araştırma ve Yayın Etiği Kurulu'nun ***27.03.2017*** tarih ve ***2017/40-53*** sayılı kararı doğrultusunda, ***New VS Old Social Environments*** adlı tez çalışmanızı, Doç. Dr. Bahire Özad ve Doç. Dr. Tutku Akter'in danışmanlığında araştırmanız, Bilimsel ve Araştırma Etiği açısından uygun bulunmuştur.

Bilginize rica ederim.

Doç. Dr. Şükrü Tüzmen
Etik Kurulu Başkanı

ŞT/sky.

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