PREFERENCE FOR COMMUNICATION TECHNOLOGIES:

CHARACTERISTICS OF CHANNELS, USERS AND COMMUNICATION SITUATIONS

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Approval of the Graduate School of Social Sciences

_____
Prof. Dr. Meliha Altunışık
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Doctor of Philosophy.

_____
Prof. Dr. Nebi Sümer
Head of Department

This is to certify that we have read this thesis and in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Doctor of Philosophy.

_____
Prof. Dr. E. Olcay İmamoğlu
Supervisor

Examining Committee Members

Prof. Dr. E. Olcay İmamoğlu (METU, PSY) _____

Prof. Dr. Bengi Öner-Özkan (METU, PSY) _____

Prof. Dr. Deniz Şahin (Hacettepe University, PSY) _____

Prof. Dr. Tülin Gençöz (METU, PSY) _____

Yard. Doç. Dr. Türker Özkan (METU, PSY) _____

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Name, Last Name: Leman Pınar Tosun

Signature :

ABSTRACT

PREFERENCE FOR COMMUNICATION TECHNOLOGIES:

CHARACTERISTICS OF CHANNELS, USERS AND COMMUNICATION SITUATIONS

Tosun, Leman Pınar
Ph. D., Department of Psychology
Supervisor: Prof. Dr. E. Olcay İmamoğlu

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In the current study, it was aimed to explore young adults' communication technology preferences in friendships. With this aim, two survey studies were conducted on university students. In the first study 178 students and in the second study 343 students were surveyed. The findings of both studies demonstrated that (a) face-to-face communication was the most preferred communication,(b) preference for face-to-face communication was positively associated to preference for auditory communication, and negatively associated to preference for written communication, (c) several individual difference variables contributed to relative preferences for face-to-face over mediated communication in negative situations. General 'ndividual difference variables in relation to Relative Preferences were found to fit into a two-factor higher-order structure. The higher order constructs were Social Openness (the

factors tapping to individuals' motivation to engage in interpersonal interactions even when those interactions are challenging) and Individuated Functioning (the factors tapping to individuals' motivation for personal growth). Relative Preference increased with increases in Social Openness and in Individuated Functioning. Communicaiton-specific individual difference factors underling the associations among Social Openness, Individauted Functioning and Relative Preferences were explored. Results suggested that Social Openness –but not Individuated Functioning- was indirectly linked to Relative Preferences via Perceived Difficulty of Communication Situations (Study1); Social Openness was indirectly, and Individuated Functioning was both directly and indirectly linked to Relative Preferences via Difficulty in Handling Negative Situations (Study 2). Theoretical and practical implications of studies were discussed considering the previous literature.

Keywords: communication technologies, face-to-face communication, individual differences, friendship relations

ÖZ

İLETİŞİM KANALI TERCİHLERİ:

KANALLARIN, KULLANICILARIN VE İLETİŞİM DURUMLARININ ÖZELLİKLERİ

Tosun, Leman Pınar

Doktora, Psikoloji Bölümü

Tez Danışmanı: Prof. Dr. E. Olcay İmamoğlu

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Çalışmada, genç yetişkinlerin arkadaşlık ilişkilerinde teknoloji kullanımı tercihlerinin incelenmesi amaçlamıştır. Bu amaçla üniversite öğrencileri üzerinde iki anket çalışması yapılmıştır. Çalışmaların ilkinde 178, ikincisinde 343 üniversite öğrencisinden veri toplanmıştır. Her iki çalışmanın sonucunda katılımcıların yüz yüze iletişimi yazılı ve işitsel iletişime tercih ettikleri, yüz yüze iletişim tercihinin işitsel iletişim tercihi ile olumlu, yazılı iletişim tercihi ile olumsuz yönde ilişkili olduğu ve olumsuz iletişim durumlarında, çeşitli bireysel farklılık değişkenlerinin "Görece Tercih" (yüz yüze ve teknolojik iletişim tercih düzeyleri arasındaki fark) ile anlamlı ilişki içinde olduğu görülmüştür. Her iki çalışmada da Görece Tercih ile ilişkili olan bireysel

farklılık değişkenlerinin iki faktörlü bir üst düzey yapı içinde değerlendirilebileceği görülmüştür. Bu yapıyı oluşturan üst düzey faktörler, Sosyal Açıklık ve Kendileşmiş İşleyiş olarak adlandırılmıştır. Kişilerin Sosyal Açıklık ve Kendileşme İşleyiş düzeyleri ile yüz yüze iletişimi teknolojik iletişime tercih etme düzeyleri olumlu yönde ilişkilidiır. Ayrıca, birinci çalışmanın sonuçlarına göre, Sosyal Açıklık düzeyi arttıkça "Olumsuz İletişim Durumlarının Algılanan Zorluğu" azalır, ve bu azalış ile beraber, yüz yüze iletişimi teknolojik iletişime tercih etme artar. İkinci çalışmada da Sosyal Açıklık ve Kendileşmiş İşleyiş yüz yüze iletişimi teknolojik iletişime tercih etme ile olumlu yönde ilişkilidir. "Bu çalışmada, **"**Olumsuz Durumlarla Baş Etmede Güçlük" değişkeni, "Beden Dili ile Verilen Olumsuz Tepkilere Aşırı Duyarlılık" ve "Zor Görüşmelerden Önce Hazırlanmak için Zamana İhtiyaç Duyma" değişkenlerinden oluşan iki faktörlü bir yapı olarak ele alınmıştır. Sosyal Açıklık düzeyi arttıkça "Olumsuz Durumlarla Baş Etmede Güçlük" azalmış, bu azalma ile birlikte yüz yüze iletişimi teknolojik iletişime tercih etme düzeyi artmıştır. Kendileşmiş İşleyiş ve yüz yüze iletişimi teknolojik iletişime tercih etme düzeyi arasında ise hem doğrudan hem de "Olumsuz İçerikli Görüşmelerin Üstesinden Gelmede Güçlük" değişkeni yoluyla dolaylı ilişki bulunmuştur. Bulgular, kuramsal ve uygulamaya dönük doğurguları çerçevesinde tartışılmaktadır.

Anahtar Kelimeler: Teknolojik iletişim, yüz yüze iletişim,bireysel farklılıklar, arkadaşlık

To my family

Meral, Sait & Başak

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CHAPTER 1

INTRODUCTION

In today's complex communication environment, people have a wide variety of channels to choose from for interpersonal communication. With the advent of multiple channels (e.g. from cell phones to various internet channels), the understanding of what motivates individuals to communicate through one channel rather than another becomes increasingly important for regulation of interpersonal relationships. With this thesis, I aimed to enhance understanding of channel choice in friendships. For this purpose, I conducted two surveys on a university student sample. I focused on university students' channel preferences because university students are a segment of population who incorporate communication technologies into their everyday lives more easily, and spend more time to use them than the older segments of the society (PEW, 2009). In my first study, I investigated university students' channel preferences in relation to general individual difference factors (such as personality and self-orientations), and communication-specific characteristics (such as perceived difficulty of situations, attitudes and anxiety about face-to-face and technology-mediated communication). Since bringing together all individual difference factors and communication-specific factors that could be examined in relation to communication channel preferences was beyond the limits of my study, I included only a small part of them. After preliminary

examinations of variables in the study, I tried to integrate some individual difference factors associated to channel preferences into theoretically and empirically defensible higher-order constructs, and to demonstrate the links of these constructs with individuals' channel preferences through the mediation of a communication-specific variable, namely, perceived difficulty of communication situations. I conducted the second study to further explore this concept of perceived difficulty so that I can understand the mechanism linking individual difference factors to channel preferences; and to re-investigate the relationship between individual difference factors and communication channel preferences with the inclusion of some new variables in a larger sample of university students. In the first chapter, I presented a literature review that provides a theoretical basis for the two empirical studies described in the following chapters. In the second and third chapters I presented study 1 and study 2, respectively. In the fourth chapter, I provided a general discussion for both studies, and tried to demonstrate the contributions of these studies to the existing literature.

In the following sections of the current chapter, first, a brief summary of how communication technologies are entered into daily lives of lay people is presented, and the characteristics of those technologies that have gained the attention of social researchers as a topic of study are discussed. Next, the selected literature on the influences of individual difference factors, namely Big Five Model of Personality, Need-for-Cognition, and Balanced Integration Differentiation Model are provided. Lastly, characteristics of communication situations and the communication-specific attributes of individuals are presented as possible

determinants of how and why people choose to prefer to use face-to-face or mediated communication in a multichannel communication environment.

1.1 The Use of Communication Technologies in Interpersonal Relationships

Although face-to-face communication is the oldest communication method of human history, and it is still the dominant method for interpersonal communication in daily life, new communication tools that increase humans' capacity to communicate have rapidly integrated in social life. First, writing was invented, and then, telegraph and telephone were added to interpersonal communication channels. Last, mobile phones and internet channels (e.g., e-mail or instant messaging) entered into the lives of many people of the modern world as new and exciting communication tools. People use these communication channels for diverse purposes such as information seeking, entertainment, companionship, and interpersonal communication. At present, people predominantly use communication technologies for interpersonal communication (Gross, 2004; Lenhart, Madden, & Hitlin, 2005) although in the 1990s, people used them primarily for entertainment (Valkenburg & Soeters, 2001). When technological communication channels were first introduced to individuals' everyday life, they were something to play with, but in recent years, the use of technological communication channels has become a part of ordinary people's routine social functioning.

In many studies, the characteristics of face-to-face interaction have been compared with the characteristics of interactions through the technological

channels. McKenna et al. (2002) suggested four main differences between face-to-face and mediated communication:

1) Technological channels provide greater anonymity to its users,
2) Physical appearance loses its importance during technology-mediated interactions,
3) The users of technological channels gain greater control over time and pace of interactions,
4) It is easier to find similar others through the use of technological others.

Because of the characteristics listed above, communication technologies make it easy for individuals to meet and to develop relationship with *strangers*. However, communication technologies may also make it easy to maintain relationships among *people with existing ties.* Specifically, the second and third characteristics listed above may have implications not only for interactions between *strangers*, but also for interactions between *people with existing ties.* Many early studies focused on the use of communication technologies in the relationship with *strangers* although communication technologies have been commonly used to maintain and strengthen the existing relationships. There is a need to know about the influences of communication technologies on not only relationship formation, but also on maintenance of ongoing relationships. Some of the models developed in the area of mediated interpersonal communication explain how people form impressions of each other online and how users come to relate with each other during purely online relationships (Rabby & Walter, 2002). However, many purely online relationships cross over into face-to-face encounters; and many relationships begin face-to-face, and then are maintained via communication technologies. In most cases, mediated communication operates alongside face-to-face interaction to

maintain the relationship. Therefore, new explanatory models that recognize that off-line and on-line communication or "real" and "virtual" interactions co-exist within a relationship are needed. Rather than choosing between having a face-to-face or mediated relationship, individuals use multi-channels in each relationship. Sometimes, people may perceive face-to-face communication as more appropriate or easy, thus, although they have available mediated communication tools, they may look for an opportunity to have a face-to-face contact. Sometimes, people may choose mediated communication (e.g., sending e-mail or leaving a voice message) even when face-to-face contact is available because they think mediated communication is more appropriate or easy. The reason for choice of a mediated communication channel may be pragmatic (e.g., low cost, ease of use), but may be preferred for other reasons.

In the current study, I focus on non-pragmatic preferential reasons, and examine the characteristics of the communication situations and of the individuals to gain an understanding of factors that drive communication channel preferences. The basic assumption is that individuals make differential communication choices that reflect their personality characteristics and self orientations. There is an accumulation of information about which individual difference factors are related to communication channel preferences (e.g., Amichai-Hambuger, 2007). This study differs in that I focus on the processes that mediate between individual differences and channel preferences. More specifically, I test whether personal factors contribute to the choice of communication channels, and whether personal factors exert their influences through some *mediating factors*. The individuals' *perceptions*

of the difficulty of communication situation, *anxiety about communication technologies, and attitudes about communication technologies* are mediating factors investigated in the present study.

Researchers studying interpersonal communication are frequently asked whether the use of communication technologies in interpersonal relationships is helpful or harmful (Rabby & Walther, 2002). The research yields conflicting findings. I argue that there are too many unknowns about why people choose mediated communication, which makes it difficult to predict interpersonal outcomes from channel preferences. To make claims about interpersonal outcomes as a result of type of channels, there is a need to understand the antecedents of communication channel preferences. In the current study, I tried to answer "Who prefers what communication channel(s) and why?" Understanding the psychological mechanisms of communication channel preferences may provide a viable direction for the future studies investigating relational outcomes of using those channels.

1.1.1 Definition of Communication Technologies, and Their Properties

Communication technology involves a diverse set of hardware and software products which can be categorized in many different ways (Polkosky, 2008). The common point of those products is that they enable meaning exchange and relationship management between two or more partners. More simply, communication technology is a type of technology that enables human partners to converse. The most familiar examples of communication technology are e-mail, e-chat (text only and audiovisual versions), instant messaging, telephone and cellular phone. The distinctions across communication channels are presented in Table1 in a

simple way. As can be seen in Table 1, the channels can vary according to which forms of information they have the capacity to transmit (visual, auditory, tactile, textual); whether they require geographical co-presence of the communicators, and whether they are synchronous (involved persons interact at the same time; e.g., face-to-face, telephone, online chat) or asynchronous (involved persons interact at different times; e.g., e-mail, letter). Several other categorizations of communication channel properties, and researches on how these channels influence interpersonal communication have been reviewed somewhere else (See McGinn & Croson, 2004). Apart from mere categorization, these features have important implications for the preference of communication media by users.

Table 1. Properties of Communication Channels

	Face-to-Face	**Letter**	**Phone**	**E-mail**	**Text-only E-Chat**	**Audiovisual E-Chat**
Is it a synchronous channel?	Yes	No	Yes	No	Yes	Yes
Does it carry visual info?	Yes	No	No	No	No	Yes
Does it carry auditory info?	Yes	No	Yes	No	No	Yes
Does it carry textual info?	No	Yes	No	Yes	Yes	Yes
Does it require geographical co-presence?	Yes	No	No	No	No	No

1.1.2 Placing the Use of Communication Technologies into a Social Psychological Context

The classical definition of social psychology is the study of how people affect, and are affected by others (Allport, 1954; cited in Kraus & Fussel, 1996). As communication is the primary means by which people affect each other, it is reasonable to expect the study of communication to be one of the main topics in social psychology, but historically, this has not been so. Although communication is the mechanism by which social influence, small group interaction, social perception, attitude change, or interpersonal relations are processed (Kraus & Fussel, 1996), this research has not been grounded in the social psychology literature. However, some researchers argue that study of communication is inherently a social psychological process. For example, McGinn & Croson (2004) argued:

> "Social psychological research assumes, almost by definition, that the social context in which an interaction takes place will have important effects on the process and outcome of the interaction, thus, the medium for interaction is a natural source of variation in social psychological studies of interaction."

Yet, most of the research on the use of technological communication in interpersonal relationships are published in the multidisciplinary field called *computer-mediated communication (CMC) research* rather than being integrated in the mainstream social psychology literature. In CMC research, the influences of communication technologies on interpersonal relationships have been investigated with recognition of the idea that they are "relationship enablers," but also with the concern that those technologies may have negative effects and social outcomes on users (see Bargh & McKenna, 2004; Caplan, 2003; Kraut et al., 1998).

In the following section, some theoretical perspectives of CMC will be introduced to demonstrate to what extent each theory perspective emphasizes the

characteristics of communication channels and the characteristics of the users. Although those theories were developed in the discipline of CMC research, they should be considered a part of social psychology as well because they conceptualize communication as a social psychological phenomenon. According to Kraus and Fussel (1996), communication is a social psychological phenomenon when it is conceived as a process at the *intra*personal and *inter*personal levels. According to them:

> "At the *intra*personal level, communication involves processes that enable participants to produce and comprehend messages. At the *inter*personal level, communication involves processes that cause participants simultaneously to affect, and to be affected by, one another. The aim of psychological model is to explain how the two set of processes operate in concert." (p.657)

From this perspective, the CMC Models described in the next section deserve to be integrated to the main social psychological literature.

1.2 Theoretical Models Related to Communication Channel Preferences

Beginning in the 1970s, many theoretical models were developed to explain how communication technologies are used for interpersonal interactions, and how they influence the quality of relationships. Most of those theoretical models can be broadly categorized as either a *Cues-Filtered-Out Model*, or a *Cues-Filtered-In Model*. The earliest models were all *Cues Filtered-Out Models*, which were based on the following assumptions:

> 1) Communication technologies filter out communicative cues found in face-to-face communication.

2) Different technologies filter out or transmit different cues.

3) Substituting a technological communication channel for face-to-face communication will result in predictable changes in interpersonal and intrapersonal variables.

The earlier *Cues-Filtered Out* Models (e.g., Social Presence Model, Media Richness Model) used the reduction of cues to emphasize the inhibiting, depersonalizing effect of mediated communication, and thus to predict that face-to-face interaction would always be preferred. However, the latter models (e.g., The Task-Media Fit Model) emphasized the importance of the fit between the type of communication task, such as cognitive versus emotional, and the number of cues (e.g., visual, auditory, tactile, etc.) that the communication technology allows to transmit, and thus predict that mediated communication may sometimes be preferable to face-to-face communication. *Cues-Filtered-In* Models differ from *Cues-Filtered-Out* Models in the emphasis they put on the active role of individuals in the communication process. Instead of focusing only on the characteristics of technologies, *Cues-Filtered-In* Models also focus on the characteristics of the users and of their social environment. Thus, in those models, it was admitted that people may sometimes prefer mediated communication over face-to-face interaction depending on the characteristics of the users. All the models, whether they are Cues-Filtered In or Out, agree that all technology-mediated communication channels restrict the information available to people for establishing and maintaining social interactions, but they don't agree on the results of these restrictions. Also, although the Cues-Filtered Out perspective mentions the possible influences of communication channel characteristics on interpersonal and intrapersonal variables,

the Cues Filtered In perspective opens the discussion of possible influences of interpersonal and intrapersonal variables on communication channel preferences and uses.

1.2.1 Cues Filtered-Out Models

The basis of all *Cues Filtered-Out Models* is the *Social Presence Model*. *Social Presence* is defined as "the degree of salience of another person in an interaction and the consequent salience of an interpersonal relationship" (Short, Williams, & Christie, 1976). According to *Social Presence Model*, communication is possible by carrying various forms of information, such as auditory, visual or textual information. Each communication technology has a capacity to carry only some forms of information. For example, in a telephone call only auditory information is available, whereas a video conference transmits both auditory and visual information. The higher the number of forms that carries the information, the higher the "social presence" felt by the communicators. In an online chat session or an exchange of email messages, in which communication is restricted to the transfer of textual information, social presence is argued to be very low. According to the theory, when the social presence is low, communication will necessarily be very task-oriented and impersonal, leading to less positive perceptions among those who are interacting. Some early research showed that users of communication technologies rated them as impersonal (Short, et al., 1976), but other studies have

contradicted the notion that the channels with low social presence lead to less positive social perceptions (e.g., Chilcoat & DeWine, 1985).

A similar approach is the *Media Richness Model* developed by Daft and Lengel (1986). According to this approach, communication channels vary in their ability to reduce uncertainty and equiovocality in communication. Some channels facilitate feedback and communicate multiple types of information (visual, auditory, etc.), therefore allow non-ambiguous communication. Those channels are called "rich" channels. Face-to- face communication is the richest possible medium, whereas various forms of technological communication are relatively lean. *Social Presence* and *Media Richness Models* are similar approaches developed by two independent groups of researchers, one in Great Britain, and the other in the U.S. The *Social Presence Model* rank orders the communication channels by presence while the *Media Richness Model* rank orders them by richness. The channels fall in the same order whether they are arranged by presence or richness, with face-to-face interaction at the top and written communication at the bottom. Empirical findings, however, did not always support these theories. A handful of mediated theories showed that "lean" media can be effectively used in interpersonal interactions (e.g., Parks & Floyd, 1996; Rice & Love, 1987; Sproul & Kiesler, 1986).

A more recent *Cues-Filtered-In Model* is *Social Influence Model* (Fulk, 1993; Fulk, Schmitz, & Ryu, 1995; Fulk, Schmitz, & Steinfield, 1990; Schmitz & Fulk, 1991). It suggests that the perception of objective features may differ across individuals. The model is supported by the finding that the *perceived* media richness

is a significant predictor of actual media use (Schmitz and Fulk, 1991). And in a more recent study, *perceived* media usefulness was a better predictor of media use than the *perceived* richness (Fulk, Schmitz, & Ryu, 1995). From these studies it appears that individuals' perceptions of communication channels play a more important role than the objective characteristics of the channels in channel preferences.

Finally, the *Task-Media Fit Model* argues that people do not always choose the richest medium. Sometimes, the lean channels are perceived as more appropriate for communication. For example, in some contexts, sending a letter or an email message may be seen as more suitable than making a telephone call or meeting face-to-face. Research has shown that people prefer different forms of communication under different circumstances. The basis for the selection seems to have to do with socially constructed views of richness and usefulness (for a review see the article by Sherman, 2003).

1.2.2 Cues Filtered-In Models

One of the *Cues Filtered-In Model* is *Social Information Processing (SIP*, Walther, 1992). The model recognizes that certain kinds of social cues are missing in technology-mediated communication, but it also claims that if people are motivated to interact, they can overcome the limitations of technological communication channels. For example, although CMC has a slower communication rate due to its limitations of typing requirements, social context and

nonverbal cues, it is possible for CMC users to reach the same relational outcome as they reach in face-to-face communication when enough time is provided for message exchange. To build trust and to develop relationships either through face-to-face communication or CMC, uncertainty reduction is required. However, uncertainty reduction takes longer during CMC, because people have to transfer every detail into words. The more time constraints are eliminated, the more quickly people can reach same levels of intimacy with real life groups. Empirical studies support the argument that text-based CMC slows down the interaction, but it does not prevent it from occurring (Utz, 2000; Walther, Anderson, & Park, 1994; Walther, 1992; Walther, 1993). The shortcoming of this model is that it does not specify individual and situational differences in people's social motivations to overcome the challenges posed by CMC (Utz, 2000).

Another approach is the *Hyperpersonal Communication Model.* In contrast to the early models, *Hyperpersonal Communication Model* attempts to explain the positive effects of CMC. According to this model, CMC exceeds face-to-face communication in terms of "...heightened levels of intimacy, solidarity, and liking, p. 4-5" (Walther, 1996). In the model, it is suggested that in CMC context, people do not evaluate each other accurately. Reduced social cues in CMC lead people to have an idealized perception of others, and opportunity for selective self-perception in CMC leads people to present only positive information about themselves (Utz, 2000). The model is supported by empirical findings showing that strong friendships and even romantic relationships often develop through CMC (Parks, 2000; Turkle, 1995; Walther, 1996). The model focuses on interpersonal perception

through CMC, but it does not tell much about under what conditions CMC channels are preferred over other channels and by what type of people. It emphasizes the process in which two strangers get to know each other on the Internet. However, CMC is used as a support for daily face-to-face relationships more often than getting to know people with whom one previously had no face-to-face interaction, and the model does not tell much about such use of CMC. Also, *Social Information Processing* and *Hyperpersonal Communication Models* overlook the influence of individual differences on CMC use.

O'Sullivan (2000) developed an *Impression Management Model* to complement Walther's hyperpersonal model. The model specifies factors influencing self-presentation in face-to-face and mediated communication. The Impression Management Model assumes that

1) self-concept is the key factor influencing impression management activities, including goal formulation and interactional strategies.
2) threats to self-presentation lead individuals to select mediated communication channels.

This model supports past research suggesting that CMC offers individuals opportunities to strategically manage the ambiguity. Leaner rather than the richer channels can be used when individuals need to ambiguate embarrassing aspects in a negative communication situation, as a means of escaping from negative responses, or they may be used to benefit the other person, such that giving the other person greater control over when and how to respond.

Another *Cues Filtered-In Model* is the *Social Identification/Deindividuation Model* (or SIDE model, Postmes, Spears and Lea 1998; Postmes, Spears, Sakhel &

De Groot, 2001; Spears & Lea, 1994). The model is generally used to explain consequences of CMC use rather than to explain channel choice. It is based on Tajfel's (1978) Social Identity Theory, and it suggests that communication technologies make particular aspects of personal or social identity "salient". SIDE model was developed as a reaction to the idea that anonymity and reduced presence made communication technology socially impoverished (or "deindividuated"). According to the model, there are two types of anonymity in a CMC context: Anonymity of self to others (i.e. the lack of idendifiability) and anonymity of others to self (i.e. visual anonymity). The former leads to self-awareness and thus, to greater adherence to group norms when the social identity is salient. The latter allows one to express ones true mind, or authentic self, unfettered by concerns of self-presentation, and might lead to a reduction in conformity to group norms (Spears & Lea, 1994).

Another *Cues Filtered-In Model* is the *Uses and Gratification Model*. According to this model, people communicate to gratify their felt needs, which emanate from social and psychological conditions. Individuals' needs may be gratified by different communication channels (Weiser, 2002). These needs and the potential gratification of using each channel must be identified in order to understand individuals' communication channel preferences. Communication technologies can be functional alternatives to each other or to face-to-face communication (Pornsakulvanich, Haridakis & Rubin, 2008). According to Angleman (2000), the use of the same channels by different people frequently derives from completely different needs.

As the summaries of Communication Technology Models noted above clearly shows, in the 1970s and 1980s, there was a technology centered view focusing on the question of "What do communication technologies do to communication?" During that era of CMC research, researchers tended to give pessimistic answers (e.g., Communication technologies are ill-suited for complex, emotional interactions because they provide less "social presence"; communication technologies filter the social cues, or they are less "rich" than face-to-face communication). However, beginning with the 1990s, the technology-centered question has been turned inside out to ask "What do people do with communication technologies?" New research models have been developed in an effort to answer this user-centered question, and researchers have begun to admit that individuals may perceive the differences in technological versus face-to-face communication not as problems, but as opportunities to manage interpersonal relationships (O'Sullivan, 2000). Because these new models put the emphasis on the users rather than the communication technologies themselves, it is now possible to ask about the role of individual difference factors in communication channel preferences.

1.3 Individual Differences in the Preference for Face-to-Face and Mediated Communication

In this section, first, the literature on the influences of personality factors on the choices and uses of face-to-face and mediated communication is presented. Second, the Need for Cognition, and then, the self-orientations in the Balanced

Integration Differentiation Model (BID Model; İmamoğlu, 1998; 2003) are considered as possible individual difference factors that might influence the preferences for communication channels.

Beginning in the 1990s, individual difference factors began to be recognized as possible sources of variability in how people use communication technologies. However, the results were inconsistent. Those inconsistent findings and possible reasons for the inconsistencies are summarized. Then, how the self-orientations proposed in the BID Model might influence the choices of face-to-face and mediated communication is discussed. One of the unique aspects of the present study is that for the first time, the self-orientations in the BID Model are tested along with possible determinants of the preferences for communication methods.

1.3.1 Basic Personality Factors

Personality refers to the behavioral, emotional and mental attributes that characterizes a person. To clarify the structure of personality, different taxonomies have been developed (for a review, see Pervin & John, 2001). In these taxonomies, three to seven fundamental dimensions have been proposed. There is strong agreement about the importance of two dimensions: *Introversion/Extroversion* and *Emotional Stability/Neuroticism*. Extroversion reflects attributes like enjoying human interactions, talkativeness, assertiveness and enjoying risk taking; Neuroticism reflects attributes like shyness, guiltiness, being tense, and being moody. Eysenck's taxonomy includes also Psychoticism in addition to those two

(Eysenck & Eysenck, 1991). Psychoticism reflects attributes like being solitary, being insensitive to others, aggressiveness and disregarding social conventions. In some personality models, Psychoticism is decomposed into parts, such as *Agreeableness*, *Conscientiousness* and *Openness-to-Experience* in the Five Factor Model (John & Srivastava, 1999). *Agreeableness* refers to being sympathetic, kind, and affectionate; *Conscientiousness* refers to being organized and self-disciplined, and finally *Openness-to-Experience* refers to having wide interests and being imaginative and insightful (John & Srivastava, 1999).

Related research has shown the links between Eysenck's personality factors and several communication variables (McCroskey, Heisel, & Richmond, 2001; McCroskey, Richmond, Heisel & Hayhurst, 2004). These studies showed that extroversion was positively associated with willingness-to-communicate, innovativeness, argumentativeness, assertiveness, responsiveness, affect-orientation, competence and self-acceptance; and negatively associated with shyness, touch apprehension, communication apprehension and singing apprehension. Neuroticism was negatively associated with willingness-to-communicate, innovativeness, assertiveness, self-acceptance, and competence, but positively associated with communication apprehension, writing apprehension, shyness and touch apprehension. Lastly, psychoticism was positively related to verbal aggression and argumentativeness, but negatively associated with responsiveness. These results suggest that personality traits are manifested through differences in interpersonal communication. More specifically, high extroversion, low neuroticism, and low psychoticism are associated with feeling comfortable with face-to-face

communication. McCroskey at al. (2004) also studied the associations of Eysenck's personality dimensions and written communication apprehension, and they found no association. The result suggested that although people with low extroversion, high neuroticism and high psychoticism have some difficulties with face-to-face communication, they may not have the same difficulties during written communication.

Studies reporting findings about the associations between Openness-to-Experience, Conscientiousness and face-to-face communication are very few. With regard to Agreeableness, it was reported that agreeable people have a motivation to have positive relationships with others (Jensen-Campbell, Knack, Waldrip, & Campbell, 2006). Compared to their peers, high agreeable individuals respond to interpersonal conflict more constructively (Graziano, Jensen-Campbell, & Hair, 1996; Jensen-Campbell, Graziano, & Hair, 1996), cooperate more productively during interdependent group tasks (Graziano, Hair, & Finch, 1997) and are described by their parents as exhibiting more competent social skills (Jensen-Campbell, 2006). All these findings suggested that agreeable people are good at maintaining interpersonal relationships through customary face-to-face interactions. With regard to Openness-to-Change, it was reported that open individuals are verbally fluent, humorous, and expressive in interpersonal interactions (Sneed, McCrae, & Funder, 1998).

Surprisingly, only a few empirical studies have addressed personality in the context of mediated communication, and even fewer have explored personality factors as predictors of people's communication channel preferences. Hamburger

and Ben-Artzi's (2000) study examined the interaction of Eysenck's personality dimensions and the Internet use. With regard to social use of the Internet, they found that for women, extroversion was negatively related, and neuroticism was positively related with the use of social services of Internet. In that study, social Internet services involved three elements: Chat, discussion groups and people-address seeking. Later, Amiel and Sargent (2004) found that neuroticism was positively related to and, extroversion was negatively related to Internet use for social-communal purposes. Additionally, they found that people high on psychoticism have an interest in sophisticated and deviant use of Internet, such as Internet pornography. Karemaker (2005) studied the relationship between channel choice and Eysenck's personality factors, and showed that non-neurotic extroverted individuals preferred face-to-face contact whereas neurotic introvert individuals preferred mediated communication.

With regard to the associations of the personality dimensions in the Big Five Model and Internet use, Landers and Lounsbury (2006) found that the frequency of Internet use among undergraduate college students was negatively related to three of the Big Five Inventory traits: Agreeableness, Conscientiousness and Extroversion. Swickert, Hittner, Harris and Herring (2002) found negative associations between neuroticism and the Internet use for "Information Exchange" (email and accessing information), and between neuroticism and the Internet use for "Leisure" (instant messaging and playing). The same study also demonstrated that neuroticism serves as a moderator between "technical Internet use" and social support, and also between the Internet use for "information exchange" and social support. Their

results suggested that highly neurotic individuals who have very low levels of perceived support might seek out these types of Internet activities in an effort to compensate for their lowered sense of support. Tuten and Bosnjak (2001) studied the link between Web usage and personality among college students. They found that Openness-to-Experience was positively related to Web use for entertainment and for product information, while Neuroticism was negatively related to Web use for product information and learning/education. Ehrenberg, Juckes, White and Walsh (2008) studied another specific form of the Internet -instant messaging- among Australian college students, and found that the usage frequency of instant messaging was associated with disagreeableness and low self-esteem. In a study of Facebook use, it was found that higher levels of Openness-to-Experience were associated with a greater tendency to be sociable through Facebook (Ross, Orr, Sisic, Arseneault, Simmering & Orr, 2009). Surprisingly, the same study also showed that Openness-to-Experience was associated with lower levels of CMC knowledge. Some studies were conducted on students' personalities and their preferences for face-to-face or online education (Santo, 2001; Zobdeh-Asadi, 2004). The results were contradictory. According to Santo (2001), the students who preferred online training were found to have higher levels of openness compared to students who preferred traditional forms of training. But according to Zobdeh-Asadi (2004) the students who preferred traditional face-to-face teaching methods had higher levels of Openness-to-Experience.

Researchers also investigated whether big five personality dimensions can explain patterns of mobile phone use. Butt and Philipps (2008) found that the

neurotic, disagreeable, unconscientious and extroverted individuals spent more time messaging using SMS. Also, mobile phone dependence in female college students in Japan was found to be associated with elevated traits of extroversion and neuroticism (Ezoe, et al., 2009). Ehrenberg, Juckes, White and Walsh (2008) found that more disagreeable individuals spent increased time on calls, whereas extroverted and neurotic individuals reported increased time spent text messaging. Also, more neurotic individuals reported stronger mobile phone addictive tendencies.

A list of studies that have been done so far investigating the associations of several personality factors in the choices and use of communication technologies are presented in Table 2. An overview of those studies suggests that they are usually exploratory, and some findings are inconsistent. The inconsistency may stem from the conceptualization of communication technologies, especially the Internet. The general tendency is considering Internet communication as a single technology although it is a collection of many communication technologies. Internet use is a very general concept, and it is narrowed down in different ways by different researchers. Thus, depending on which aspects of the Internet use is explored, the associations found between personality and the Internet use changes. Similarly, personality is a very global concept that is collecting individuals' many different characteristics under a few factors. Although the previous research have listed some ties between personality factors and individuals' choices and uses of communication technologies, they did not provide an explanation of how and why personality

might be related to the way individuals choose and use several communication technologies.

1.3.2 Need-for-Cognition

As conceptualized by Cacioppo and Petty (1982), the need-for-cognition is a tendency for people to vary in the extent to which they engage in and enjoy effortful cognitive activities. It involves elements such as enjoyment of cognitive stimulation, preference for complexity, commitment to cognitive effort, and desire for understanding (Lord & Putrevu, 2006). It is a stable individual difference factor in the sense that some people consistently engage in and enjoy cognitively challenging activities whereas other people have relatively little motivation for such activities across a variety of domains. It has been argued that Need-for-Cognition reflects an intrinsic motivation to think rather than the ability to think, and the argument was empirically supported by findings such as the Need-for-Cognition is only moderately related to measures of cognitive ability (e.g., verbal intelligence) and continues to predict relevant outcomes after controlling for cognitive ability (see Cacioppo et al., 1996).Need-for-Cognition has been examined in a wide variety of areas including attitudes and persuasion, social cognition, decision making and interpersonal relations (see Petty, Briñol, Loersch, & McCaslin, 2009). Previous research has shown that people with high levels of Need-for-Cognition tend to produce more complex attributions when explaining the behaviors of others (Fletcher et al., 1986). The individuals who are low in the need-for-co gnition trait,

however, tend to rely on low effort judgmental strategies that employ simple heuristic cues to make judgments (see Cacioppo et al., 1996 for a review).

Table 2. Research on the Associations between Personality and Choices and Use of Communication Technologies

Reference	**Relevant Study Findings**
	EXTROVERSION
	Face-to-Face
Robin & Abiagil (1988)	Extroverts were more accurate in interpreting the meaning of nonverbal communication than introverts; and they were also more confident that they were accurate decoders than introverts.
McCroskey, Heisel, & Richmond (2001) McCroskey, Richmond, Heisel & Hayhurst (2004)	Extroversion was *positively* associated to argumentativeness, assertiveness, responsiveness, affect-orientation, competence and self-acceptance Extroversion was *negatively* associated to shyness, touch apprehension and communication apprehension
	Mediated
Amiel & Sargent (2004)	Extroverts were found to use the Internet for instrumental purposes, such as research and music downloads rather than social purposes such as seeking support or escape loneliness
Hamburger & Ben-Artzi (2000)	Extroversion was found to be positively linked to the use of leisure activities for men and negatively linked to the use of social sites for women.

Amichai-Hamburger (2005)	Extroversion was found to be negatively linked to the use of social sites regardless of users' gender
Karemaker (2005)	Extroverts preferred face-to-face contact while neurotic introverts preferred mediated communication
Amichai-Hamburger et al. (2002)	Introverted and neurotic people revealed their "true self" on the Internet, while extroverts and non-neurotic people revealed their "true self" through traditional social interaction
Tosun & Lajunen (2010)	High E was related to the Internet communication with "real life" friends (both long-distance and short-distance friendships)
Landers & Lounsbury (2006)	The frequency of Internet use among undergraduate college students was negatively related to Extroversion

NEUROTICISM

Face-to-face

McCroskey, Heisel, & Richmond (2001)	Neuroticism was negatively associated to assertivenes self-acceptance, and competence
McCroskey, Richmond, Heisel & Hayhurst (2004)	Neuroticism was positively associated to communication apprehension, shyness, touch apprehension

Mediated

Hamburger & Ben-Artzi, (2000)	Neurotic women used social services of Internet more than other people
Amiel & Sargent (2004)	Both neurotic men and women used Internet for the purpose of "getting a sense of belonging"

Swickert, Hittner, Harris, & Herring (2002)	Highly neurotic individuals who have very low levels of perceived support used Internet activities-probably because that they need to compensate for their lowered sense of support.
Amiel & Sargent (2004)	Both neurotic men and women used Internet for the purpose of "getting a sense of belonging"
Swickert, Hittner, Harris, & Herring (2002)	Highly neurotic individuals who have very low levels of perceived support used Internet activities-probably because that they need to compensate for their lowered sense of support.
Butt & Philipps, (2008)	Neurotics spent more time for using SMS
Ezoe, et al. (2009)	Neurotics were more likely to be mobile phone dependents.

OPENNESS-to-EXPERIENCE

Face-to-Face

Sneed, Mccrae, & Funder, (1998)	Open individuals are verbally fluent, humorous, and expressive in interpersonal interactions

Mediated

Tuten & Bosnjak (2001)	OtE was positively associated with Web use for entertainment
Copas (2003)	OtE was positively correlated to self-reported frequency of online shopping.
Ross, Orr, Sisic, Arseneault, Simmering & Orr (2009).	Higher levels of OtE were associated with a greater tendency to be sociable through Facebook. Also, lower levels of OtC were associated with lower levels of CMC knowledge.
Santo (2001)	The students who prefer online training had higher levels of OtE compared to students who prefer traditional forms of training.

Zobdeh-Asadi (2004)	The students who preferred face-to-face teaching methods had higher levels of OtE.

AGREEABLENESS

Face-to-Face

Jensen-Campbell, Graziano, & Hair (1996)	Compared to their peers, high agreeable individuals respond to interpersonal conflict more constructively.
Graziano, Hair, & Finch, (1997)	Compared to their peers, high agreeable individuals cooperate more productively during interdependent group tasks.
Jensen-Campbell (2006)	Compared to their peers, high agreeable people are described by their parents as exhibiting more competent social skills.

Mediated

Butt and Philipps (2008)	Disagreeable individuals spent more time messaging using SMS.
Ehrenberg, Juckes, White & Walsh (2008)	Disagreeable individuals spent increased time on phone calls
Landers & Lounsbury (2006)	Agreeableness was negatively associated to frequency of Internet use.

CONSCIENTIOUSNESS

Face-to-Face

No study was found

Mediated

Butt & Philipps (2008)	Conscientiousness was negatively related to using SMS messages
Landers & Lounsbury (2006)	Conscientiousness was negatively related to Internet use frequency.

Previous research suggested that Need-for-Cognition is a rich construct that may have potential contributions to understand several behaviors. It may also help to understand interpersonal communication. Yet, the number of studies aimed at exploring the association between Need-for-Cognition and interpersonal communications is limited. A study that examined the associations of Need-for-Cognition and argumentativeness showed that people with high levels of Need-for-Cognition may have greater attraction for argumentative situations if they are also high at assertiveness (Nusbaum & Bendixen, 2003). In another study, it has been shown that Need-for-Cognition is positively related to argumentativeness but negatively related to verbal aggression (Sanders, Gass, Wiseman & Bruschke, 1992). A study on the impact of failure to apologize in anger situations showed that people who are low on the Need-for-Cognition trait felt more anger when they did not receive an apology (a short statement indicating remorse) than the people high on this trait (Thomas & Millar, 2008). Researchers argue that an apology is a simple cue for de-escalation whereas failure to apologize is a simple cue for escalation; the people low in Need-for-Cognition become more angry in a "no apology" condition because they rely more on such simple cues whereas the people high on Need-for-Cognition may take other situational and personality characteristics into account.

The studies about the influence of Need-for-Cognition trait on the use of mediated communication usually focused on the information gathering function of mediated communication. Tuten and Bosnjak (2001) showed that Need for Cognition is positively associated with Web use for entertainment, for product

information and for education/learning. Amichai and Kaynar (2006) have also found that Need for Cognition is positively linked to willingness to use the interactive websites for information.

The relationship of Need-for-Cognition to the use of communication technologies for the purpose of interpersonal relationship maintenance has not been studied yet. In the current study, Need-for-Cognition is expected to be related to communication channel preferences in social interactions. "Preferring one channel over another" is a cognitive activity as well as a social one: It is a cognitive activity because it requires thinking and decision-making; and it is a social activity because its purpose is relationship maintenance. Because of being a cognitive activity, communication channel preference is expected to be related to individuals' need-for-cognition. The people with low levels of Need-for-Cognition might be expected to refrain from "difficult conversations", and from the "rich" communication channels that make those difficult conversations more vivid. As the previous study by Thomas and Miller (2008) on the influences of apologizing showed, people with low levels of Need-for-Cognition may prefer clear verbal expressions in communicative messages rather than dealing with many social cues provided by auditory and visual channels. Thus, they may prefer "lean" channels over the "rich" ones –in both receiving and giving the messages.

1.3.3 Self-Orientations in Balanced Integration-Differentiation (BID) Model

BID Model rises on two basic ideas about the natural order and the place of humans in this order:

> "the natural order involves a balanced system resulting from the interdependent integration of differentiated components" (p. 371), and humans, "as parts of this natural system, are assumed to have natural propensities for both differentiation and integration" (p. 372).

The model aims to deepen the understanding of those two basic human tendencies for *Inter*personal integration and *intra*personal differentiation (İmamoğlu, 2003). Interpersonal integration is characterized by the level of becoming connected to others. Intrapersonal differentiation is characterized by the level of becoming a unique individual with reference to intrinsic motivation, personal attributes and aspirations. The high and the low ends of interpersonal integration are called relatedness and separatedness, respectively. The high and the low ends of intrapersonal differentiation orientation are called individuation and normative patterning, respectively. The model also proposes that the combinations of these two tendencies in each individual reveal different self-types which vary in the degree of balanced self development. These self-types are *related-individuated* type (balanced), *separated-patterned* type (unbalanced), *related-patterned* type (integrated), and *separated-individuated* type (differentiated). Several research suggested that the self-orientations (relatedness and individuation) are distinct and complementary constructs (e.g., İmamoğlu, 1998, 2003; İmamoğlu & Karakitapoğlu-Aygün, 2004, 2007).

Relatedness and individuation have been found to be associated with qualitatively different psychological variables. For instance, relatedness was found to be positively associated with affect-related variables, such as perceived parental love-acceptance, self and family satisfaction, positive self and other models, secure attachment, positive future expectations, and self-esteem; individuation was found to be positively associated with cognitive-intrinsic motivational variables, such as the need for cognition, curiosity, tolerance for ambiguity (İmamoğlu, 2003, 2006; İmamoğlu & Gluer-Edwards, 2007, İmamoğlu & İmamoğlu, 2007, 2010; İmamoğlu & Karakitapoğlu-Aygün, 2006, 2007). In line with those findings, in the present study, variables were considered in socio-emotional and cognitive motivational domains, as explained later.

With regard to self-orientations and communication, a previous study showed that relatedness and individuation are positively associated to communication competence involving components such as ability to infer meaning, using feelings to guide behaviors and ease of communication, and negatively related to high context communication style involving indirect communication, accommodation, non-open and non-precise communication (Tosun, İmamoğlu & İmamoğlu, 2009).The relationships of these two basic human orientations with communication channel preferences -have not been studied yet; however, in view of the above-noted studies, relational and individuational self-orientations were expected to play a significant role in communication preferences, as explained in later parts.

1.4 Mediating Factors

In this section, the selected literature on the possible role of characteristics of communication situations and of individuals' communication-specific attributes, namely their level of anxiety about face-to-face and mediated communication, and the attitudes about face-to-face communication on channel preferences are provided.

1.4.1 Communication Situations

Communication is embedded within situations. While recognizing the characteristics of the persons (P) in an interaction is important in fully understanding the messages, recognizing the situation (S) in which the message is conveyed is also very important (Hargie, 2006). This argument about the importance of both (P) and (S) in understanding communication behaviors is actually nothing more than a reflection of Kurt Lewin's famous statement where behaviors (B) are considered to be the function of (P) and (S). Systematic conceptualization of (P) and (S) are important for understanding any behavior, including communication behaviors, such as channel selection. However, while well-developed taxonomies of personality traits (e.g., The Big Five Model) exist in psychology literature and are widely used in empirical research, no such successful taxonomies of situations have been developed (For a review of the taxonomies of situations, see Yang, Read & Miller, 2006).

A *situation* is a construct that involves components of *who* is involved, *where* the action takes place and *what* activities are involved (Pervin, 1978; cited in Miller, Cody & McLaughlin, 1994). *Who* component refers to the role relationships

in a situation (i.e.: husband-wife, parents-child, student-advisor…etc.); *where* component refers to physical settings (i.e.: home, school, park…etc.); *what* component refers to activities such as joint working, self-disclosing, fighting, serving…etc. Researchers argue that interpersonal behaviors can be predicted based on features of those three components. A number of researchers put some efforts into defining the characteristics of who, where and what components (For a review, see Miller, et al., 1994). Those researchers came up with some situational features that largely describe communicators' perceptions, and summarize the anticipated or actual emotions that are elicited (Cody, *et al.* 1994). The situations that individuals encounter in their day-to-day experiences may differ in terms of their affective features (e.g., pleasure, apprehension), and certain affective components may be related to whether individuals will approach or avoid those situations (Biggers & Masterson, 1983).

From a classical view point of situations, "time" and "space" are two important concepts for describing situations as individuals are required to meet in a shared location and time for formation of an interpersonal communication situation to take place. However, after 1980s, more flexible definitions of situation in terms of spatial and temporal requirements were developed, and according to those new definitions, a social situation may be constructed long before an actual meeting occurs as the individuals who are involved in a particular situation set goals, develop expectations, make plans, and experience emotions *before* they meet (e.g., Imamoğlu,1995). Therefore, in addition to space and time-related features, *psychologically active features* of situations gain importance in evaluation of

situations, and of person-situation-behavior relationships. The fact that people use many different psychological descriptors for situations in everyday life, such as "threatening", "romantic", "challenging" or "frustrating", demonstrates that individuals tend to define situations in everyday life according to their psychological features; therefore, those features deserve to be examined.

Based on this background information about communication situations, individual's channel selection process for a dyadic interaction can be thought as following the path below:

A communicator who intends to transmit a communicative message to the other communicator pre-establishes the situation in her (or his) mind, and decides on which communication channel is the most preferable in that situation. First, she/he evaluates the spatial and temporal characteristics of the situation. For example, face-to-face communication would be an option only if both spatial and temporal requirements are met. However, spatial requirement does not exist for a synchronous communication (i.e.: phone talk, e-chat, videoconference…etc.) to take place. Neither spatial nor temporal requirements exist for asynchronous communication (i.e.: e-mail, SMS message…etc.). The range of alternative communication methods is the largest when spatial and temporal requirements are fully met. After the evaluation of the situation for spatial and temporal requirements, the person evaluates psychologically active characteristics of the situation. Although individuals may use many specific psychological descriptors for defining situations in everyday life, they may also make very simple psychological evaluations, such as categorizing the situation in terms of the valence of the

situation: Negative situations –the situations in which negative messages are given and taken- and positive situations –the situations in which positive messages are given and taken.

The basic information in the literature with regard to influence of the message valence on communication is that people are reluctant to transmit negative messages. This is called MUM effect (Rosen & Tesser, 1970). MUM effect is found among anonymous strangers (Rosen & Tesser, 1972) and also among close friends (Blumberg, 1972). This effect suggests that people do not want to construct negative impressions by being associated with bad news. MUM effect can take different forms, such as distorting negative information in a positive direction, or delaying the delivery of giving negative message. It has been argued that the use of mediated communication can be another form of MUM effect (Sussman & Sproull, 1999). During mediated communication, relatively fewer cues regarding the rmessage-taker and the social context, thus, the mesager-giverr may feel less psychological discomfort during communication process. An empirical support come from a study by Sussman and Sproull (1999) in which people distorted negative information less when they were communicating through computers than they did face-to-face in an organizational context. Another empirical support comes from a study by O'Sullivan (2000). In which romantic partners prefer a mediated channel to unmediated channel *if* they have to convey a negative information/evaluation or anything that is likely to get a negative reaction from their partner (O'Sullivan, 2000).

Little research has conducted on the counterpart of reluctance to give negative messages, which is eagerness to give positive messages. In an exceptional study by Uysal and Öner-Özkan (2007), reluctance to give negative messages and eagerness to give positive messages are argued to be two processes that differ in psychological aspects; and provided support for that people use positive message transmission to manage their impressions. It was a scenario study examining transmission of bad and good news only through face-to-face communication. To the knowledge of author, although reluctance of giving negative message through mediated communiation has been studied (i.e., Sussman & Sproull, 1999), there is no study examining the eagerness for giving positive messages phenomena in mediated communication context.

Not all people may prefer mediated channel in giving negative messages, but only the ones who consider those communication situations in which they have to transmit negative message as difficult situations. To be able to argue that the perceived "difficulty" of communication situation is an important determinant of channel choice, first, there should be an agreement on what makes a situation difficult. Unfortunately, it is rare to find studies dealing with "communication in difficult situations" in the communication literature, although the number of studies dealing with "communication with difficult people" is a lot (Bramson, 1991; Solomon, 1990). Management literature involves some studies about difficult communication situations at work environments (For a review, see Whicker, 2003). These studies show that even people who have adequate knowledge, skill, and motivation to communicate may fail to perform skillfully in a range of situations.

However, studies on difficult communication situations in some contexts other than the work context are not found. The interactions involving conflict, providing feedback to others, requesting, refusing and emotional encounters are all communication situations that are likely to be perceived as difficult, but some individual differences may produce differences in the degree of perceived difficulty of each of those situations. Individuals' personalities, their views of self and others, and their approaches to cognitive complexities may play a role in their tendencies to evaluate communication situations differently.

1.4.2 Anxiety about Face-to-Face and Mediated Communication

The term anxiety is described as "an unpleasant emotional state or condition which is characterized by subjective feelings of tension, apprehension, and worry" (Spielberger, 1972, p. 482). Some people exaggerate the threat of evaluation associated with a situation, which produces the feelings of anxiety (Sarason, 1972). The anxiety then motivates an individual to avoid conditions that produce anxious feelings (Cheek & Buss, 1982; Epstein, 1972).

With regard to communicating, anxiety is studied under the heading of communication apprehension, and is defined as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1984, p.13). Anxiety to communicate has been associated with social anxiety (Schlenker & Leary, 1982). Though correlated, they have been shown to be distinct constructs (Patterson & Ritts, 1996). Thus, communication anxiety-or apprehension- can be thought of as a special type of

anxiety. Individuals with a high level of this special type of anxiety tend to avoid communication situations, often refraining from the tasks in which they perceive the communication requirements to be high (McCroskey &Andersen, 1976).

Computer-mediated communication anxiety (CMC anxiety) is a concept developed by Brown, Fuller and Vician (2002), and it refers to an individual's level of fear or apprehension associated with actual or anticipated use of information technology to communicate with others. Brown, and his colleagues (2002) found that the oral communication apprehension (anxiety associated with situations in which *oral* communication is required), computer anxiety (uneasiness about computer use), and CMC familiarity contribute to CMC anxiety, and high level of CMC anxiety negatively predicts CMC satisfaction and CMC use. However, in their study, they measured CMC anxiety with a measure that involves items related to use of only a single CMC channel, which is e-mail. Thus, what they call as "CMC anxiety" is a very limited concept that should be called "anxiety to use e-mail". Inspired by Brown and his colleagues' (2002) concept of "CMC anxiety", a more general concept, "anxiety about mediated communication" was developed in the present study. This concept includes anxiety about older technology-mediated channels, such as letter and phone talk, as well as anxiety about a variety of CMC channels (e.g., e-mail, e-chat).

1.4.3 Attitudes about Face-to-Face and Mediated Communication

Ajzen and colleagues' Theory of Planned Behavior (TPB) (Ajzen, 1985, 1988, 1991; Ajzen & Fishbein, 1980; Ajzen & Madden, 1986; Fishbein & Ajzen,

1975) defines attitude toward a behavior as the overall orientation toward the behavior. This has been applied in the information technology literature. Attitude toward information technology usage has been defined as the valence of an individual's overall feelings toward usage of a specific technology (Taylor & Todd, 1995). It is a concept negatively correlated with computer anxiety and negative attitudes toward computers (Igbaria & Parasuraman, 1989). Also, there is evidence supporting the notion that attitude toward information technologies influences its usage (Venkatesh, Ramesh, & Massey, 2003).

. While the term "information technology" covers the use of computers and telecommunications for information handling and communication, the interest of the current study is limited to the use of computers and telecommunication tools only for the purpose of interpersonal communication. Therefore, attitudes about mediated communication channels that are used for interpersonal communication were studied rather than the attitude toward general information technology usage.

The current study investigated not only the influences of the attitudes about mediated communication, but also the influences of the attitude towards face-to-face communication on channel choice. According to Papacharissi and Rubin (2000), those who felt valued in interpersonal communication did not turn to the Internet as a substitute for face-to-face communication. Therefore, attitudes about face-to-face communication might be a factor in explaining individuals' decision to use face-to-face or mediated communication. In some situations, face-to-face communication can be too demanding. For instance, some situations may result in a negative evaluation. Thus, the communicator may feel unattractive or embarrassed, but face-

to-face communication does not give much opportunity to him/her for hiding how unattractive or embarrassed he/she feels (O'Sullivan, 2000). Also, face-to-face communication requires spontaneous response, and sometimes communicators find it difficult to communicate spontaneously without time to plan the message carefully (Kelly, Keaten & Finch, 2004). Such considerations may lead individuals to have a negative attitude towards face-to-face communication, and hence, prefer it less than CMC.

CHAPTER 2

FIRST STUDY

2.1 INTRODUCTION

Developing a systematic and objective understanding of individuals' choices of communication technologies constitutes a major challenge for the researchers seeking to understand interpersonal communication in the "communication age". The present study, therefore, aims to develop a deeper understanding of people's preferences for communication technologies by considering the characteristics of the technologies, their users, and the communication situations. Specifically, the present study examines university students' channel preferences in friend-to-friend relationships in multi-channel environments. The focus is university students because they are a segment of population who are early adaptors of communication technologies (PEW, 2009).

In the following sections of this chapter, first, I present the aim of the study, specific research questions and hypotheses, and the rationale behind them. Next, Methods section comes where I tried to explain my data collection process in detail. Then, I provide the results and lastly, I discuss these results in the lights of the literature.

2.1.1 Aims of the Study and Research Questions

Communication usually occurs in an embedded context of preferences or choices (Stephens, 2005), and the present study focuses on these "preferences" or "choices" for communication technologies rather than the "uses" of those technologies. As Trevino, Webster and Stein stated (2000), communication channel research tended to study one or more of those three concepts below:

(i) attitudes about channels	: General subjective evaluation of the channel
(ii) uses of channels	: General pattern of use over time
(iii) channel choice	: Decision to use a channel in a particular communication incident.

As the conceptual difference between "preferences" and "use" is often overlooked, it is explained here once again: "Use" describes individuals' behaviors (e.g., how frequently they use a certain communication technology, for what purposes, and in what ways) whereas "preferences" describe individuals' conscious selection among the alternatives when they have a freedom to choose. "Use" is rarely measured using actual behaviors (Timmerman, 2000). Most typically, the studies ask people to self-report use; thus the data more accurately reflects preferences rather than uses (e.g.,Donabedian et al., 1998; Fulk, 1993; Rice, 1992; Swanson, 1987; Trevino et al., 1987; Zeffane & Cheek, 1995)

The current study directly and openly asks individuals' preferences, without causing any confusion about what it measures: It measures communication channel preferences, not their uses.

To investigate the antecedents of communication channel choice for face-to-face communication and six different communication technologies –letter, phone

talk, SMS messages, cell-phone talk, textual e-chat, e-mail, audio-visual e-chat), individuals were given a set of scenarios describing friend-to-friend interactions, were asked to put themselves into the shoes of the message-giver in those interactions, and accordingly, evaluate to what extent they would prefer each communication method. The main goals of this study were to explore these questions:

> Question1: Is face-to-face communication preferred to mediated communication?
>
> Question 2: Does the positivity-negativity of communication situation make a difference in individuals' communication channel preferences?
>
> Question 3: What is the relationship between face-to-face and mediated communication preferences?
>
> Question 4: Are individual difference factors (i.e., Big Five Personality factors, Need for Cognition, and Self-orientations) related to communication channel preferences?
>
> Question 5: Do perceptions and feelings about the communication channel mediate the relationship between individual difference factors and communication channel preferences?

Specifically, I have investigated the following possible mediators:

1. The perceived difficulty of communication situations
2. The anxiety about face-to-face communication
3. The attitudes about face-to-face communication
4. The anxiety about mediated communication
5. The attitudes about mediated communication

Psychological research suggests that individual differences can emerge as predictors of behavior only when the situational strength is relatively mild (Tett & Guterman, 2000). In the context of communication channel preferences, situational press to use mediated communication may be considered to be too high if geographical distance between the communicators are too much for making face-to-

face communication an option. Also, the situational press to use face-to-face communication can be considered too high if the communicators do not have equipments for communication technologies or if they do not have knowledge of using those technologies. Therefore, the current study investigates individual's communication channel preferences in a situational context where the communicators live in close geographical distances; they have access to communication technologies, and they have prior experience in using communication technologies. Individual differences can be expected to emerge only under those conditions.

In the following subsection, first, I discuss the theoretical framework of the study and second, I discuss specific predictions relevant to each research question

To build a theoretical framework, the present study relied on several theoretical perspectives. As Stephens (2005) stated, empirical studies tend to:

(i) conduct a test using one theoretical perspective, or

(ii) compare two theoretical perspectives, or

(iii) combine several theories and use them to guide the research.

As previous studies provided only limited knowledge about individuals' communication channel choice, having a broad theoretical base increases the likelihood of developing meaningful study expectations, and adequate rationale for those expectations. For example, the expectation for Question 1 was based on the Cues-Filtered-Out perspective whereas the expectations for Question 4 and 5 were based on Cues-Filtered-In perspective. Those two perspectives provide opposing predictions about the role of individual differences on the preferences for face-to-

face and mediated communication. The former one claims that channel characteristics determine individuals' level of preference for each communication channel. The latter one, although not always openly mentions the specific role of individual difference factors on communication channel choice, opens a door for hypothesizing that individual differences would be a source of variety in channel preferences. In the present study, it is claimed that it is unnecessary to accept one of those perspectives as the "correct" one, and the other as "wrong".

2.1.1.1 Research Question 1

Do individuals prefer face-to-face communication or mediated communication more in friend-to-friend interactions?

2.1.1.1.1 Rationale and Expectations for Research Question 1

From many different theoretical frameworks, face-to-face communication is the dominant method of communication. For instance, from a psychobiological point of view, people have a predisposition towards face-to-face communication because it is a more "natural" communication method that humans have been using since the prehistoric times (Kock, 2004); from the Cues Filtered Out perspective, it is the "richest," and "the most useful" means of communication, and beyond all these explanations, it is simply "the most obvious and purest example of what constitutes interpersonal communication" (O'Sullivan, 2000, p. 417) .Therefore, regardless of communicators' personal characteristics, face-to-face communication was expected to be the preferred method of communication when compared to the

mediated-communication. According to the results of a previous study comparing college students' interpersonal interaction online, face-to-face, and on the telephone, participants reported using the internet as often as the telephone, but less than face-to-face interaction (Baym, Zhang & Lin, 2004). Flaherty, Pearce, and Rubin (1998) examined the motives behind using face-to-face and mediated communication, and found that face-to-face communication was rated higher than mediated for all motives, including social ones like inclusion and affection. Based on the arguments above and the supporting empirical information, in the current study, face-to-face communication was expected to remain as the dominant mode of interaction for university students.

As explained in the following sections in more detail, in the current study, each mediated channel was compared to face-to-face based on the assumption that face-to-face is the "default" channel. The aim of the first research question was to test whether face to-face is really the "default" communication method. For this aim, individuals' preferences for face-to-face communication and for different forms of mediated communication are compared. If it is found that the preference level for face-to-face communication is higher than preference levels for any form of mediated communication, it will be considered as the proof that face-to-face communication is the default communication method.

2.1.1.2 Research Question 2

Does the positivity-negativity of the communication situation make a difference in individuals' communication channel preferences?

2.1.1.2.1 Rationale and Expectations for Research Question 2

The message content determines the positivity-negativity of the communication situation. Positive messages create a good impression of the message giver; strengthen the relationship between the message giver and the receiver. Negative messages, however, convey unpleasant, disappointing or unfavorable information for the receiver, and it may cause the receiver to react negatively. Therefore, giving negative messages is more difficult and it requires the message sender to have competence in communication skills (Derlega, *et al.* 1993). In the current study, it was expected that people would prefer communicating positive messages rather than negative ones in both face-to-face and mediated interactions. Although face-to-face communication was expected to be preferred over mediated communication in any situation, preference for face-to-face over mediated was expected to be higher when the situation (or message content) is negative rather than positive.

2.1.1.3 Research Question 3

What is the relationship between face-to-face and mediated communication preferences?

2.1.1.3.1 Rationale and Expectations for Research Question 3

If a person enjoys interpersonal conversations, she would do so in both face-to-face and mediated contexts, and thus, have a high level of preference for each of them. If she does not enjoy conversations much, she may not enjoy it whether it is face-to-face or mediated. Looking from this perspective, in which the focus is the characteristics of persons, face-to-face and mediated communication preferences should be expected to be positively correlated. However, there is another possible way of looking at the relationship between face-to-face and mediated communication preferences.

In an evaluation of individuals' preferences for face-to-face and mediated communication, Uses and Gratifications Model takes into account both the users' communication needs and the capacities of communication technologies to gratify these needs. According to this model, one type of communication channel may be preferred to another one if it is better at fulfilling certain needs (Birnie & Horvath, 2002). For instance, individuals would prefer mediated communication more if face-to-face communication does not function well in gratifying their communication needs. Otherwise –if face-to-face communication is satisfactory for them-, they would not look for alternatives to it. Looking at from this perspective,

face-to-face and mediated communication preferences may be expected to have a negative association.

In the current study, the preferences for face-to-face and mediated communication in negative and positive situations were examined separately. The association between the preferences for face-to-face and mediated communication was expected to be positive in positive situations, but it was expected to be negative in negative situations. In other words, individuals were expected to be willing to communicate through any channel when they have positive messages to give, thus, report high preference for both face-to-face and mediated channels. However, when they have to give negative messages, face-to-face communication may not be satisfactory. In self-threatening situations, such that they may receive a negative evaluation from the other, people may prefer mediated communication (O'Sullivan, 2000) because it has some advantages such as ability to hide one's embarrassing aspects due to the lack of visual cues or providing more time for a careful planning of one's message due to its being asynchronous.

2.1.1.4 Research Question 4

Are general individual difference factors (Big Five Personality factors, Need-for Cognition, and Self-orientations) related to communication channel preferences?

2.1.1.4.1 Rationale and Expectations for Research Question 4

When face-to-face communication is taken as a "default" channel of preference, and then, the amount of the differences between individuals' preference levels for face-to-face and mediated communication channels are calculated, it was expected that those differences would partially depend on individuals' personalities and self-orientations. In other words, people would have a significant amount of difference in their preferred levels of face-to-face and mediated communication *to the extent that* they carry certain personality characteristics and self-orientations. In sum, Cues-Filtered-Out perspective was expected to be confirmed in a general comparison of preferences for face-to-face and mediated communication, but Cues-Filtered-In perspective was expected to be confirmed in the examination of the extent to which individuals' preference for mediated communication is similar to or different from his or her preference for the customary face-to-face communication.

In the current study, it is argued that some of general individual difference factors may be reflecting individuals' social motivations, such as having positive interactions with others and developing good relationships. Lacking those social motivations may cause people to be unsuccessful in face-to-face communication situations, especially if the situations are challenging. When people are not competent in face-to-face communication, and unsatisfied with the quality of their face-to-face interactions, they may look for alternative communication methods. Extroversion, Agreeableness, Emotional Stability (low end of neuroticism), and Relatedness are some possible variables that may be reflecting individuals' social motivations. In the current study, although the preference for mediated

communication was not expected to be higher than the preference for face-to-face communication for any person or for any situation, the *relative* preference for face-to-face over mediated communication was expected to be less for the individuals with low levels of Extroversion, Agreeableness, Emotional Stability and Relatedness.

In the current study, it was argued also that some of the general individual difference factors may be reflecting individuals' cognitive motivations, such as motivation to cognize (to be knowledgeable and competent), motivation to put cognitive effort to solve problems, and motivation for developing a unique self. Individuals who lack those cognitive motivations may be likely to be unsuccessful in face-to-face communication, and therefore, those people may tend to look for alternative communication methods. Conscientiousness, Openness-to-Experience, Need-for-Cognition and Individuation are possible variables that may be reflecting individuals' cognitive motivations. As noted above, it was expected that the preference for mediated communication would not be higher than the preference for face-to-face communication for any person or for any situation. Yet, it was expected that the *relative* preferences for face-to-face over mediated communication would be less for individuals with low levels of Openness-to-Experience, Conscientiousness, Need-for-Cognition and Individuation. The study aimed to test those expected associations in both positive and negative communication situations.

2.1.1.5 Research Question 5

Do communication-specific individual difference factors mediate the relationship between individual difference factors and communication channel preferences?

Specifically, the following possible mediators were aimed to be investigated:

1. The perceived difficulty of communication situations
2. The anxiety about face-to-face communication
3. The attitudes about face-to-face communication
4. The anxiety about mediated communication
5. The attitudes about mediated communication

2.1.1.5.1 Rationale and Expectations for Research Question 5

In the current study, it was expected that the increases in

1. perceived difficulty of communication situations,
2. anxietyabout face-to-face interactions,
3. negative attitude towards face-to-face communication,

and the decreases in

4. anxiety about using mediated communication and
5. negative attitudes about mediated communication,

would be linked to decreases in relative preference for face-to-face over mediated communication.

If any of those variables were found to have positive contribution to understand communication channel preference, then, its mediation role in the relationships between general individual difference factors and channel preferences was sought. Testing a series of separate hypotheses where each of general individual difference factors is taken as a unique predictor may cause complications

in statistical analyses, and in the interpretation of results. Thus, general individual difference factors which were seen to be associated with outcomes were factor analyzed, and higher order constructs were created by combining the variables which are empirically correlated and theoretically similar. Then, analyses were conducted to examine whether these higher order constructs were mediated by the potential mediators offered in the current study. The study aimed to test the expected mediation links in both negative and positive communication situations.

2.2 Methods

2.2.1 Participants

One hundred seventy eight Turkish university students (128 female, 50 male) participated in the study. The participants were students in psychology courses at Middle East Technical University, Ankara. The mean age of participants was 20.55 (*SD* = 1.75, range = 18-28).

2.2.2 Measures and Scales

Individual differences were assessed by the General Personality Traits Scale (Gençöz & Öncül, in progress), Need for Cognition Scale (Cacioppo & Petty, 1982), and Balanced Integration and Differentiation Scale (İmamoğlu, 1998). For an evaluation of mediating factors, those measures were developed and used: The Scale for Perceived Difficulty of Communication Situations, the Scale for Anxiety to use Face-to-Face and Mediated Communication, the Scale of Negative Attitudes

for Face-to-Face and Mediated Communication. To evaluate the channel preferences, the Scale of the Preference for Face-to-Face and Mediated Communication was developed by the author. The items for all measures used in the study are presented in Appendix A. The scale development procedures for new measures are explained in Appendix B. To provide an overall consistency among the response sets in the scale set, the participants were asked to rate the extent to which they agreed to each item on a 5-point Likert scale for all scales.

2.2.2.1 Demographics

Participants were asked their gender, age and some questions about their use of communication channels, availability of internet access at home/dormitory, whether they have their own PC and their gender. The majority of students reported that they own communication technology tools and used them regularly. Figure 1 presents information about participants' demographic characteristics and their communication technology use.

2.2.2.2 General Personality Traits Inventory

A 45-item self-report measure developed by Gençöz and Öncül (in progress) was used to assess the personality traits in Turkish young adult population (Appendix A.2). The scale yields six dimensions: Extroversion (8 items), Agreeableness (8 items), Conscientiousness (8 items), Neuroticism (9 items), Openness-to-Experience (6 items) and Negative Valence (6 items). Extroversion is

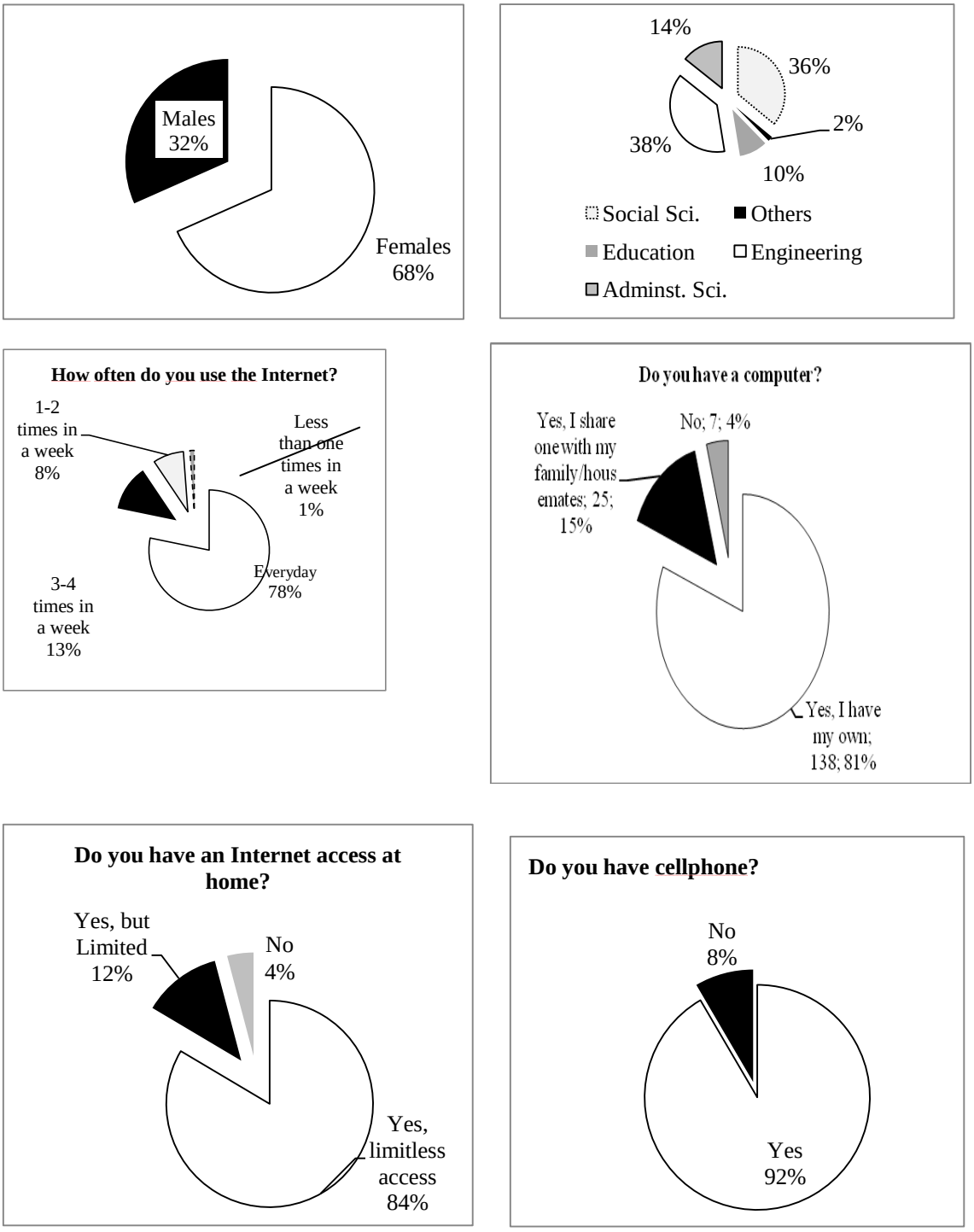

Figure 1. The Information about Participants' Demographic Characteristics and Their Communication Technology Use

the degree to which one is active, assertive, talkative, and so forth); Neuroticism (vs. Emotional Stability) is the degree to which one is anxious, depressed, irritable, and so forth; Agreeableness is the degree to which one is generous, gentle, and kind; Conscientiousness is the degree to which one is dutiful, organized and reliable; Openness-to-Experience or Culture/Intellect is the degree to which one is creative, imaginative and introspective; Negative Valence is the degree to which individuals attribute negative characteristics to themselves. Ratings were made on a scale from 1 (*disagree strongly*) to 5 (*agree strongly*) for each item. Scale scores were obtained by reverse-scoring 8 items and computing the mean of relevant subscale items. In previous studies, Cronbach's alphas for the dimensions vary from .71 to .89. In the current study, Cronbach's alpha was .84 for Openness-to-Experience, .87 for Extroversion, .80 for Neuroticism and Agreeableness, .82 for Conscientiousness, and .56 for Negative Valence.

2.2.2.3 Need for Cognition Scale (NCS)

A translated and adapted version of Cacioppo and Petty's (1982) Need for Cognition Scale (NCS) was used to assess the tendency to engage in and enjoy thinking (İmamoğlu, 2001). The revised scale consists of 27 items (Appendix A.1), such as “I prefer my life to be filled with puzzles that I must solve” or “The notion of thinking abstractly is appealing to me.” Participants rated items on a 5-point scale (1 = totally disagree, 5 = totally agree). Higher scores indicate a greater need for cognition. A scale score was obtained by reverse-scoring 17 items and computing the mean of all items. In previous studies, the Cronbach's alpha of the

Turkish form ranged from .88 to .91 (İmamoğlu, 2001; 2003). In the current study, Cronbach's alpha was .89.

2.2.2.4 Balanced Integration-Differentiation Scale

İmamoğlu's (1998, 2003) Balanced Integration Scale assesses relatedness and individuation (see Appendix A). The measure consists of two subscales: The Interrelational Orientation subscale and The Developmental Orientation subscale. The Interrelational Orientation subscale consists of 16 items measuring the extent to which individuals value close emotional ties to family and to others such as, "I emotionally feel very close to my family"). The Self-Developmental Orientation subscale consists of 13 items measuring to what extent individuals rely on inner qualities and interests as a developmental frame of reference, rather than accommodating to a normative frame of reference, such as the reverse-scored item of "I feel it is more important for everyone to behave in accordance with societal expectations rather than striving to develop his/her uniqueness." BID items were rated on a 5-point scale (1 = totally disagree, 5 = totally agree). Subscale scores on relatedness and individuation were obtained by reverse-scoring relevant items and computing a mean of the items for each subscale. In previous studies, Cronbach's alpha range from .80 to .91 for the Interrelational Orientation subscale, and from .74 to .82 for the Self-Developmental Orientation subscale (Gezici & Güvenç, 2003; İmamoğlu, 1998, 2003; İmamoğlu & Karakitapoğlu-Aygün, 2007; Kurt, 2000). In the current study, Cronbach's alpha was .88 for the interrelational orientation subscale and .73 for the self-developmental orientation subscale.

2.2.2.5 Preference Ratings for Face-to-Face and Mediated Communication

Preference Ratings for Face-to-Face Communication

Participants were given 16 scenarios. Preference ratings for face-to-face conversation were indicated by participants on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*) for each scenario. A factor analysis indicated that it is appropriate to group scenarios into two as *Positive Situations* (6 items) and *Negative Situations* (7 items). Three scenarios were deleted because an examination of psychometric qualities demonstrated that those items had poor qualities. The scenarios retained are given below. In Appendix B, the factor analysis conducted on Preference Ratings for Face-to-Face Communication is explained in detail.

Positive Scenarios

1) Conragulating your friend about a success s/he gained which makes you feel happy and be proud about him/her
2) having a conversation with your friend in which s/he will thank to you for a favor you did for him/her
3) thanking to your friend for a favor s/he did for you
4) having a conversation with your friend in which you share your feeling of happiness and proud after learning that you have gained a prize or had a success
5) asking your friend his/her advise before making your decision about an issue which your friend has some experience or expertise
6) congratulating your friend about a success s/he has gained

Negative Scenarios

1) confessing a fault you did to your friend
2) giving negative feedback on a job/homework that your friend did
3) disclosing a failure or embarrassment that you have
4) telling your friend that she/he owes an apology to you because of a his/her misbehavior
5) expressing how you are hurt because of something that your friend did to you
6) expressing your anger towards your friend
7) asking your friend about his/her evaluation of your job/homework which is likely to be a negative one.

For face-to-face communication, two preference scores were obtained by computing the mean value of ratings: One for negative situations, and another one for positive situations (FtF ☹ and FtF ☺). Cronbach α was .81 for negative situations and .83 for positive situations.

Preference Ratings for Mediated Communication

Participants are given 16 interpersonal communication scenarios. The scenarios are identical to the ones used for measuring Preference for Face-to-Face Communication. After reading each scenario, participants did preference ratings on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*) for each communication technologies below separately:

1) letter, 2) phone talk, 3) cell-phone talk, 4) SMS message,

5) e-mail, 6) e-chat (textual only), 7) audio-visual e-chat

Separate factor analyses were conducted in ratings for each communication channel. With the exceptions of *letter* and *audio-visual e-chat,* each analysis produced a two-factor structure: Positive Situations and Negative Situations. Letter and audio-visual e-chat were excluded from further analyses. The factor analyses conducted on preference ratings for each mediated communication channel are explained in Appendix B.

For each of the communication technologies, a preference score for negative situations and another preference score for positive situations were computed by taking the mean values of ratings. Cronbach's α were ranging from .87 to .93 for negative situations, and from .79 to .88 for positive situations. Next, the preference scores for auditory and written communication were computed out of those scores:

1) *auditory communication in negative situations (Audi ☹):*

   Computed by taking the mean of the preference for phone talk and cell-phone talk in negative situations

2) *written communication in negative situations (Written ☹):*

   Computed by taking the mean of the preference for SMS message, e-mail and textual e-chat in negative situations.

3) *auditory communication in positive situations (Audi ☺):*

   Computed by taking the mean of the preference for phone talk and cell-phone talk in positive situations

4) *written communication in positive situations (Written ☺):*

   Computed by taking the mean of the preference for SMS message, e-mail and textual e-chat in positive situations.

Cronbach's α values were .84 and .71 for auditory and written communication in negative situations, .75 and .72 for auditory and written communication in positive situations.

Relative Preferences for Face-to-Face over Mediated Communication

Preference Ratings for Face-to-Face Communication, for Auditory Communication, and for Written Communication were used to calculate *Relative Preferences*. The difference between preference for FtF and written communication (FtF-Written) and the difference between preference for FtF and auditory communication (FtF-Audi) was computed for each individual. Separate FtF-Written and FtF-Audi scores were calculated for negative and positive communication situations. This procedure yielded four difference scores that reflected the relative preference of one communication channel over another:

(i) FtF-Written in ☹ Situations = (preference for *face-to-face* communication in *negative* situations) - (preference for *written* communication in *negative* communication situations)

(ii) FtF-Audi in ☹ Situations = (preference for *face-to-face* communication in *negative* situations) - (preference for *auditory* communication in *negative* communication situations)

(iii) FtF-Written in ☺ Situations = (preference for *face-to-face* communication in *positive* situations) - (preference for *written* communication in *positive* communication situations)

(iv) FtF-Audi in ☺ Situations = (preference for *face-to-face* communication in *positive* situations) - (preference for *auditory* communication in *positive* communication situations)

Face-to-face and mediated communication scales were rated on a five point scale so the relative preference measures can range from (-4) to (+4). Positive scores reflect a preference for face to face communication over the other communication type. Negative scores reflect a preference for the other communication type over face to face communication. Scores near or at zero indicate no preference for one type of communication over another. In this sample, the relative preferences dropped below 0 for 15% of the sample in negative situations (26 cases in FtF-Audi☹, 27 cases in FtF-Written☹), and dropped below 0 in 4% of the sample in positive situations (6 cases in FTF-Audi☺ and 7 cases in FtF-Written☺) For the 15% of the cases, the difference was equal to 0 . Thus, face to face communication was generally preferred over other types of communication and this was particularly so in positive situations. Reliabilities of Relative Preference scores were calculated by using a computer program developed by Watkins (2008) specifically for measuring reliability of differences scores. Cronbach's α were ranging from .86 to .71 for negative situations, and from .78 to .79 for positive situations.

2.2.2.6 Perceived Difficulty of Communication Situations

Participants were given a set of friend-to-friend communication scenarios, which were identical to the one in Communication Channel Preference Ratings. The scale items were given in Appendix A. Participants were to evaluate to what extent they would perceive the situation as a difficult situation if they were the actor in the given situation. They evaluated the difficulty level of each situation on a 5-point

Likert-type scale from “very easy” to “very difficult”. As described in Appendix B, a factor analysis was performed on the items, and it produced two subscales:

(i) The perceived difficulty of positive communication situations (PDCS☺),

(ii) The Perceived Difficulty of Negative Communication Situations (PDCS☹).

PDCS☺ had 7 scenarioss and PDCS ☹ had 6 scenarios. Composite scores for each subscale were gathered by calculating the mean value of all responses. Cronbach’s alpha values for those two scores were .91 and .87 for PDCS☺ and PDCS☹, respectively.

2.2.2.7 Anxiety about Face-to-Face and Mediated Communication

Participants were asked to rate the degree of anxiety they experience while using each one of the communication methods: Face-to-face, letter, phone talk, cell-phone talk, SMS messages, e-mail, e-chat (textual) and e-chat (audio-visual). Higher scores represented higher degree of anxiety. The rating for the *anxiety about face-to-face communication* was considered to be a single –item measure. Based on the factor analyses conducted on the anxiety about technological channels, two more variable were computed: Anxiety about *auditory* communication technologies (consisting of two items: Phone talk and cell phone talk) and anxiety about *written* communication technologies (consisting of three items: SMS messages, e-mail and textual e-chat). The reliability for the former one was .84, for the latter one was .89.

The scale items are given in Appendix A, and the scale development procedure are explained in more detail in Appendix B.

2.2.2.8 Attitudes about Face-to-Face and Mediated Communication

Participants were asked to evaluate their general attitude toward each of the following communication methods: Face-to-face, letter, phone talk, cell-phone talk, SMS messages, e-mail, e-chat (textual) and e-chat (audio-visual). Higher scores represented higher degree of negative attitudes. The rating for the *negative attitudes about face-to-face communication* was considered to be a single –item measure. Based on the factor analyses conducted on the negative attitudes about technological channels, two more variables were computed: Negative attitudes about *auditory* communication technologies (phone talk and cell phone talk) and negative attitudes about *written* communication technologies (SMS messages, e-mail and textual e-chat). The reliability for the former was .74, for the latter was .70. The scale items are given in Appendix A, and details about scale development are explained in more detail in Appendix B.

2.2.3 Procedures

Data were collected from the students in the participant pool at METU Psychology Department. The questionnaires were given to the participants who signed the content form. It took 15 to 30 minutes to complete a questionnaire. After they completed answering the questionnaire, they were debriefed.

2.3 Results

Descriptive information about main study variables and gender differences are summarized in Table 3. Detailed information about the analyses of the factor structure of the newly developed or adapted scales is provided in Appendix B. With regard to gender differences, a series of t-test analyses showed that there were no significant gender differences for any study variables –except for marginally significant results for Agreeableness and Relatedness. Both relatedness and agreeableness scores were higher for females relative to males. Perceived difficulty of communication situations was higher for men when the situation is positive. Gender was dropped from further analyses, in view of the fact that no hypotheses were generated involving gender.

2.3.1 Results for Research Questions 1 and 2: Preferences for Communication Channels and the Role of Situation Valence

The first research question was whether face-to-face or mediated communication was preferred. To compare the preference levels for face-to-face, auditory and written communication in negative and positive messages, a 3 (Communication channel: FtF, Auditory or Written) X 2 (Valence: ☹ or ☺) repeated measures analysis of variance was conducted. ANOVA analyses revealed that the channel main effect, valence main effect and also the interaction effect were

Table 3. Descriptive Statistics of Main Study Variables and the Results of t-test Analyses for Gender Differences

Measures		Total		Females		Males		
		M	*SD*	*M*	*SD*	*M*	*SD*	*T*
General Individual Difference Factors								
Extroversion		3.50	.80	3.51	.82	3.45	.77	.47
Neuroticism		2.94	.69	2.98	.70	2.84	.67	1.27
Openness-to-Experience		3.61	.65	3.56	.66	3.75	.60	-1.80
Agreeableness		4.15	.47	4.19	.45	4.02	.48	2.25*
Conscientiousness		3.40	.77	3.36	.75	3.49	.82	-1.02
Negative Valence		1.69	.46	1.70	.47	1.71	.45	-.45
Need-for-Cognition		3.75	.48	3.73	.45	3.81	.55	-.95
Relatedness		3.77	.67	3.83	.65	3.61	.71	1.97*
Individuation		3.85	.46	3.89	.42	3.76	.55	1.73
Communication-specific Individual Difference Characteristics								
PDCS	☹	3.02	.67	3.08	.67	2.86	.67	1.91
	☺	1.72	.52	1.67	.47	1.86	.62	-2.20*
Negative attitudes about	FtF C.	1.28	.50	1.26	.49	1.32	.51	1.04
	Written C.	2.77	.83	2.75	.84	2.82	.80	-.75
	Auditory C.	2.28	.75	2.25	.69	2.37	.90	-.54
Anxiety about	FtF C.	1.97	1.01	2.02	1.04	1.84	.93	1.04
	Written C.	2.17	.99	2.13	.94	2.27	1.11	-.83
	Auditory C.	2.23	.82	2.23	.80	2.22	.89	.08
Communication Channel Preferences								
☹ Situations	FtF	4.15	.74	4.12	.74	4.23	.74	-.88
	Written	2.73	.78	2.81	.77	2.53	.79	2.98
	Audi C.	3.20	.84	3.30	.70	2.94	.79	2.18
☺ Situations	FtF C.	4.62	.43	4.62	.41	4.62	.48	2.87
	Written C.	3.19	.77	3.24	.78	3.06	.73	1.42
	Audi C.	3.93	.62	4.01	.60	3.72	.64	.01

Note. PDCS refers to Perceived Difficulty of Communication Situations; FtF refers to face-to-face; ☺ refers to positive; ☹ refers to negative. * $p < .05$, ** $p < .01$, *** $p < .001$.

significant, $F(2, 176) = 143.58$, $p < .001$, $\eta = .62$ for channel, $F(1, 177) = 336.89$, $p < .001$, $\eta = .66$ for valence, $F(2, 176) = 16.74$, $p < .001$, $\eta = .16$ for the interaction. Specifically, with regard to channel main effect, face-to-face ($M = 4.40$, $SD = .50$) was preferred more than auditory ($M = 3.57$, $SD = .60$) and written communication ($M = 2.96$, $SD = .02$); and auditory communication was preferred more than written communication. With regard to valence main effect, positive situations ($M = 3.91$, $SD = .44$) were preferred to negative situations ($M = 3.56$, $SD = .43$).

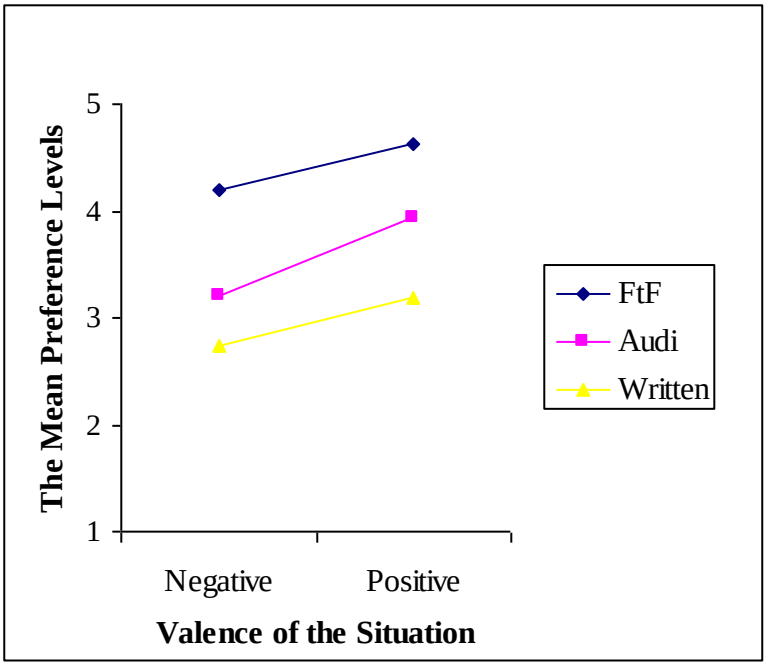

Figure 2. Mean Preferences for FtF, Audi and Written Communication in Negative and Positive Situations

According to post-hoc pairwise Bonferonni comparisons, communication preference difference between face-to-face and auditory communication was significant in both positive ($\mu = 4.60$ and, $\mu = 3.93$, respectively) and negative situations ($\mu = 4.15$ and $\mu = 3.20$, respectively). Also, preference difference between face-to-face and written communication was significant in both positive ($\mu = 4.60$ and $\mu = 3.18$, respectively) and negative ($\mu = 4.15$ and $\mu = 2.73$), respectively). And finally, preference difference between auditory and written communication was significant in both positive ($\mu = 3.93$ and $\mu = 3.18$, respectively) and negative situations ($\mu = 3.20$ and $\mu = 2.73$, respectively).

2.3.2 Results for Research Question 3: The Associations between Face-to-Face and Mediated Communications

The third research question was whether face-to-face and mediated communication preferences were associated. Pearson correlation analyses were conducted to examine the associations among the preferences for face-to-face, auditory and written communication in positive and negative situations. The results are given in Table 4.

In negative situations, auditory and written communication were positively related ($r = .33$, $p < .001$), Face-to-face communication was negatively related to written communication ($r = -.44$, $p < .001$) and unrelated to auditory communication. In positive situations, auditory and written communication were positively related ($r = .43$, $p < .001$), and face-to-face communication was positively

correlated to auditory communication (r = .35, p < .001) and unrelated to written communication.

Table 4. Intercorrelations among the Preferences for Face-to-Face, Auditory and Written Communication in Positive and Negative Situations

	FtF	Audi	Written
FtF	-	.09	-.44***
Audi	.35***	-	.33***
Written	-.10	.43***	-

Note. The values below the diagonal shows the correlations in positive situations, the values above the diagonal show the correlations in negative situations.

*** p < .001.

2.3.3 Results for Research Question 4: General Individual Difference Factors and Communication Channel Preferences

The fourth question was whether the general individual difference factors were related to face-to-face and mediated channel preferences. The analyses described in section 3.1 showed that face-to-face communication is preferred over written and auditory communication. Below, I examined whether this relative

preference for face-to-face communication over written and auditory communication was associated with communicator's personal attributes.

2.3.3.1 The Correlations between General Individual Difference Factors and the Relative Preferences for Face-to-Face over Mediated Communication

Correlations among individual difference factors and relative preferences are shown in Table 5. Four of the eight individual difference factors were significantly related to the relative preferences for face-to-face over mediated communication (written and auditory) in negative situations: Extroversion, Openness-to-Experience, Need-for-Cognition and Individuation. In positive situations, again, Extroversion, Openness-to-Experience and Individuation were significantly related to the relative preferences for face-to-face over mediated communication. Need-for- Cognition, however, was significantly related to the relative preferences for face-to-face over written communication, but not between face-to-face over auditory communication.

2.3.4 Results for Research Question 5: Mediation Analyses

According to Baron and Kenny (1986), a mediating model must first satisfy those requirements:

> (a) the mediating variable (e.g., Perceived Difficulty of Communication Situations) must significantly relate to the independent variable (e.g., Extroversion);
>
> (b) the dependent variable (e.g., FtF-Written☹) must significantly relate to the independent variable;

(c) the dependent variable must significantly relate to the mediating variable.

If all these requirements are satisfied, then, one can start to test the mediation. In the current study, astructural equation modeling (SEM) was conducted for the model that met the above requirements..

Consistent with the mediation requirements described above, initial correlations were calculated between all hypothesized mediators (communication-specific individual difference factors), predictors (general individual difference factors) and dependent variables (Relative Preferences). The correlations between general individual difference factors and relative preference scores had already been calculated to answer the Research Question 4, and the results had presented in Table 5. According to results, four general individual difference variables were significantly correlated to the Relative Preferences: Extroversion, Openness-to-Experience, Need-for-Cognition , and Individuation. Therefore, only those four variables were included in the subsequent mediation models. Next, the correlations among the hypothesized mediators, general individual difference factors and the relative preferences were calculated and the results are presented in Table 6. These correlations were used to determine which potential mediators would be included in the subsequent mediation models.

Table 5. The Correlations among General Individual Difference Variables and Outcome Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1. Extroversion	-											
2. Neuroticism	-.09	-										
3. Agreeableness	.24***	-.06	-									
4. Openness-to-Experience	.49***	-.18*	.12	-								
5. Conscientiousness	.11	-.17*	.17*	.15*	-							
6. Need-for-Cognition	.23**	-.08	.14	.44***	.28**	-						
7. Relatedness	.45***	-.23**	.31***	.23**	.18*	.15*	-					
8. Individuation	.22**	.02	.12	.37***	-.05	.44***	.06	-				
9. FtF-Written☹	.33***	.08	.02	.30***	.07	.23**	.09	.28***	-			
10. FtF-Audi☹	.34***	.13	-.05	.34***	.04	.27***	-.01	.28***	.73***	-		
11. FtF-Written☺	.28***	-.05	.15	.19*	.13	.22**	.07	.17*	.60***	.39***	-	
12. FtF-Audi☺	.20**	.06	-.03	.21**	.09	.06	-.04	.16*	.42***	.56***	.58***	-
13. FtF Preference ☹	.37***	.08	.08	.32***	.07	.22**	.10	.27***	.68***	.84***	.36***	.39***
14. Audi Preference ☹	-.08	-.10	.15*	-.13	.01	-.14	.11	-.10	-.68***	-.15	-41***	.-14
15. Written Preference ☹	-.19*	-.05	.04	-.19*	-.05	-.17*	-.06	-.20**	-.57***	-.86***	-.35***	-.62***
16. FtF Preference ☺	.40***	.03	.30	.23	.15	.23**	.15*	.16*	.20**	.33***	.35***	.52***
17. Audi Preference ☺	.07	-.04	.23**	-.06	.01	.10	.15	-.05	-.43***	-.19	.22**	-.76***
18. Written Preference ☺	-.13	.02	-.04	-.09	-.04	-.04	-.06	-.11	-.33***	-.58***	-.50***	-.82***

Table 5. The Correlations among General Individual Difference Variables and Outcome Variables (continued)

	13	14	15	16	17
14. Audi Preference ☹	.09	-			
15. Written Preference ☹	-.44***	.33***	-		
16. FtF Preference ☺	·47***	.20**	-.10	-	
17. Audi Preference ☺	-.03	.55***	29***	.35***	-
18. Written Preference ☺	-.24**	.20**	.73***	-.08	.44***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

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One of the potential mediators, the Perceived Difficulty of Communication Situations, was correlated with all the selected general individual difference factors, and all the outcome variables (FtF-Written☹, FtF-Audi☹, FtF-Written☺ and FtF-Audi☺). The other potential mediators failed to exhibit a consistent pattern of meaningful relationships with predictor and outcome variables. As they did not meet the initial requirement for mediation testing, they were not included into the following analyses.

The following route is followed after testing the initial requirements:

1) a factor analysis conducted on general individual difference factors;

2) higher-order individual difference constructs were created according to the results of factor analysis,

3) a mediation model involving these higher-order constructs as independent (exogenous) variable was tested by using structural equation modeling.

Table 6. Correlations among Hypothesized Mediators, Predictors and Outcomes

	Perceived Difficulty of		Anxiety about			Negative Attitudes about		
	☹ Situations	☺ Situations	FtF C.	Auditory C.	Written C.	FtF C.	Auditory C.	Written C.
General Individual Difference Factors:								
Extroversion	-.30***	-.20**	-.39***	-.25***	.06	-.21**	.11	.02
Neuroticism	-.04	.09	.14	.15	-.03	-.04	.09	-.01
Agreeableness	-.01	-.19*	-.14	.01	.02	-.22**	-.04	-.05
Openness-to-Experience	-.39***	-.03	-.31***	-.19*	.03	.03	.12	.02
Conscientiousness	-.08	.06	-.13	-.16*	.04	-.18*	-.06	-.00
Need-for-Cognition	-.19*	-.10	-.12	-.20***	.09	-.08	.11	-.01
Relatedness	-.09	-.34***	-.27***	-.08	.05	-.28***	-.04	-.01
Individuation	.23**	-.15**	-.11	-.03	.02	-.01	-.06	.09
Relative Preferences:								
FtF-Written☹	-.34***	-.14	-.27***	-.20**	.21**	-.26***	.02	.23**
FtF-Audi☹	-.27***	-.08	-.22**	-.01	.13	-.17*	.25***	.14
FtF-Written☺	-.13	-.14	-.12	-.04	.19*	-.17*	.13	.36***
FtF-Audi☺	-.15	-.08	-.12	.04	.08	.04	.33***	.17*

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

General individual difference variables of Extroversion, Openness-to-Experience, Need-for-Cognition and Individuation were subjected to a free varimax rotated factor analysis (principal axis). The analysis yielded a single factor explaining 38% of the total variance. After an examination of the scree plot, and consideration of total variance explained by each factor, a two-factor solution was decided to be tested. Factor analysis was re-conducted with a forced two-factor solution. As shown in Table 7, results yielded two equally strong factors explaining 25.47% and 23.67% of the total variance, respectively. The first one, labeled Individuated Functioning involved the variables associated with having an intrinsic exploratory orientation. The variables loaded on this factor were Need-for-Cognition and Individuation. Openness-to-Experience had loadings over .40 on both first and second factors. As its loading on the second factor was substantially higher than on the first factor (.42 on Factor 1 and .72 on Factor 2), it was considered to be a variable of the second factor. The second factor was labeled as Social Openness.The two variables that loaded on the second factor were Openness-to-Experience and Extroversion. Conceptually, both variables loaded on the second factor reflected an inclination to have various interpersonal interactions whether they are rewarding or challenging.

A composite score of Individuated Functioning was calculated by taking the mean of Need-for-Cognition and Individuation scores. Similarly, a composite score of Social Openness was calculated by taking the mean of Openness-to-Experience and Extroversion scores. The correlation between

Social Openness an Individuated Functioning was .72. Thus, results indicated that these two factors were separate but strongly correlated.

A structural mediation model was tested in which Social Openness and Individuated Functioning were predictors, the Perceived Difficulty of Communication Situations was the mediator, and Relative Preference ☹ was the outcome. Since two Relative Preferences ☹ (FtF-Audi☹ and FtF-Written ☹) were strongly correlated, they were combined under a latent construct (FtF-Mediated ☹).

Table 7. Results of Factor Analysis on the General Individual Difference Variables Involved in the Mediation Model

Variables	Varimax Rotation Loading	
	Factor 1	Factor 2
Need-for-Cognition	.72	.20
Individuation	.56	.22
Openness-to-Experience	(.42)	.67
Extroversion	.14	.64
Total Variance Explained	%25.47	%23.67

Note: Extraction method was Principal Axis Factoring.

Structural Equation Modeling (SEM) was utilized to test the model. In testing the model, a number of strategies were employed following Kenny, Kashy, and Bolger's (1998) suggestions. The first step was to test the measurement model, providing evidence for how well the latent

variables were measured by predefined indicators. Thus, testing the measurement model involved a confirmatory factor analysis for the latent variables. Second, the proposed structural equation model was tested. Thirdly, two alternative models were developed and tested. The goodness of fit statistics across models was compared.

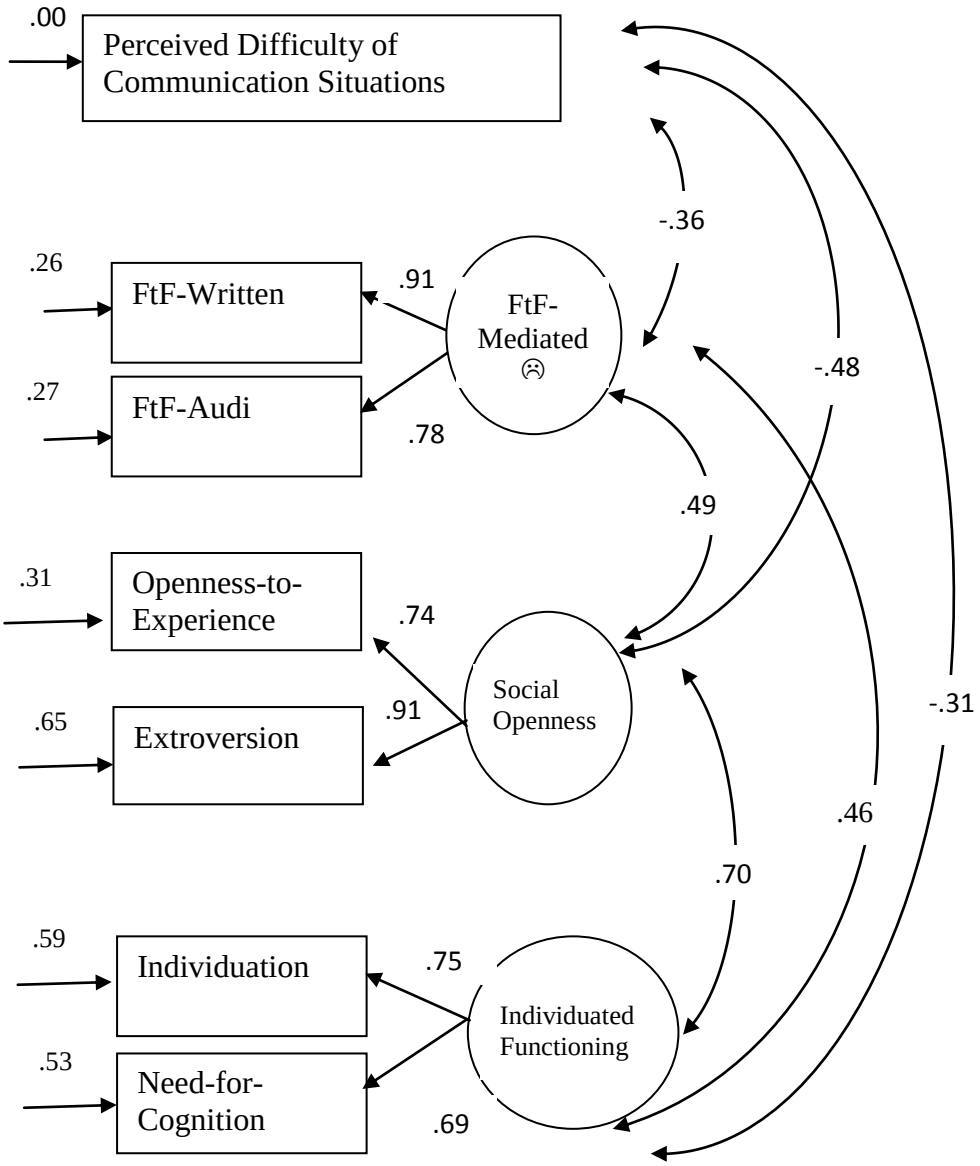
The evaluation of model adequacy was based on the chi-square to degrees of freedom ratio, Root Mean Square Error of Approximation (RMSEA), Goodness-of-fit index (GFI), Adjusted Goodness-of-fit index (AGFI), Comparative Fit Index (CFI) and Normative Fit Index (NFI). Bollen (1989) noted that values of the df: $\chi 2$ ratios 2, 3, or even 5 indicate reasonable fit. Hu and Bentler (1999) reported that values of <= .05 for RMSEA with 90% confidence intervals within 0 -.10 indicate close approximate fit. They also indicated that values greater than .90 for the CFI, GFI, and AGFI represent good fit of the model.

For comparison of the proposed model and alternative models, Akaike information criterion (AIC) index was used as suggested by Kline (2005). AIC index compares models on the basis of the same data matrix. The lower value of Akaike information criterion shows the superiority of the model to the compared models.

The covariance matrix was used as input and maximum likelihood estimation was employed in all of the analyses. Path models were examined using the AMOS 16.0.

2.3.4.1 The Measurement Model

As illustrated in Figure 3, measurement model specified three latent constructs, namely, Social Openness, Individuated Functioning, and FtF-Mediated ☹. All latent constructs had two indicators. Social Openness involved Openness-to-Experience and Extroversion; Individuated Functioning involved Need-for-Cognition and Individuation; and finally, FtF-Mediated involved FtF-Written and FtF-Audi. The Perceived Difficulty of Negative Communication Situations was taken as an observed variable. In the measurement model, each indicator was constrained to load only on the factor it was designated to measure, the residual terms for all indicators were fixed to be uncorrelated, no equality constraints on the factor loadings were imposed, and the factor covariances were free to be estimated. This model indicated an acceptable fit, χ^2 (9, N = 178) = 11.94, $p < .001$ χ^2 /df = 1.33, GFI = .98, AGFI = .94, CFI = .99, NFI = .97, RMSEA = .04. The model and the path coefficients were given in Figure 4. Next, the proposed structural model was evaluated and then, it was compared to the alternative models.



χ^2 (9, N = 178) = 11.94, $p > .05$ χ^2 /df = 1.33, GFI = .98, AGFI = .94, CFI = .99, NFI = .97, RMSEA = .04

Figure 3. The Measurement Model for the Proposed Mediation Model

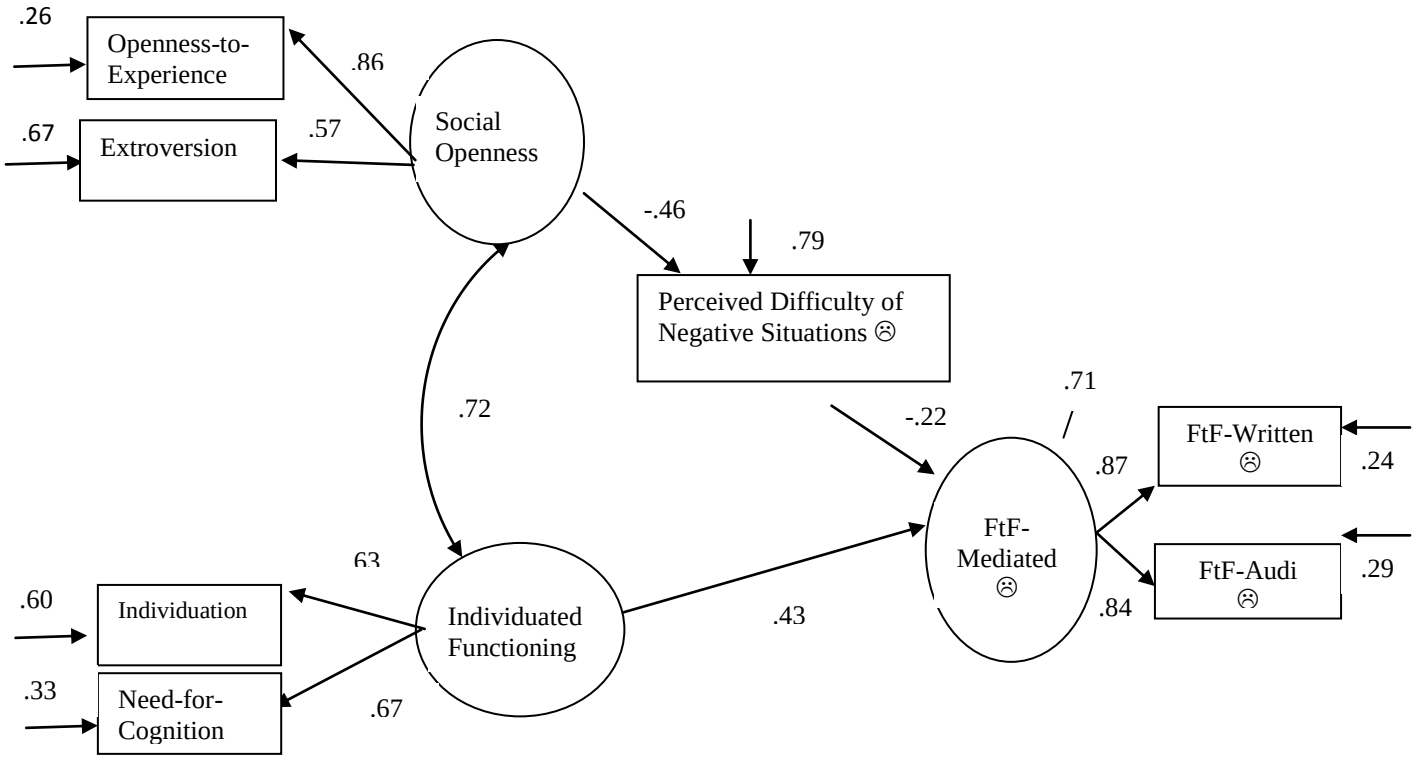
2.3.4.2 The Proposed Structural Model

As suggested by Kline (2006), independence model was estimated before testing the proposed model. The independence model is a model in which all relationships are assigned to be zero. The results indicated that independence model yielded a very poor fit; χ^2 (21, N=178) = 354.43 $p <$ .001, which means that the proposed model can be tested. The exogenous variables of the study were Social Openness and Individuated Functioning, the mediator variable was the Perceived Difficulty of Negative Communication Situations, and the outcome was FtF-Mediated ☹. First, a model was tested in which direct and indirect links from the predictors to outcome were included. The model had a good fit, χ^2 (9, 178) = 11.94, p = .001, χ^2/df = 1.32, GFI = .98, AGFI = .94, CFI = .99, NFI = .97, RMSEA = .04, AIC = 49.94. However, only a single path was significant: The path between Social Openness and the outcome. Variations of the model were tested by dropping non-significant paths from the model one by one. The path between the mediator and the outcome was retained because of its theoretical importance. A model with good significant fit and all significant paths were reached when two non-significant paths (a direct path from Social Openness to the outcome, and a path from Individuated Functioning to the mediator) were deleted. The revised model and the path coefficients were displayed in Figure 4. As indicated by fit indices, the model showed a good fit to data, χ^2 (11, 178) = 13.61, p =.001, χ^2/df = 1.24, GFI = .98, AGFI = .94, CFI = .99, NFI = .96, RMSEA = .04, AIC = 47.61. Social Openness negatively predicted the Perceived Difficulty of Negative Communication Situations (-.46), and in turn, this difficulty negatively

predicted FtF-Mediated ☹ (-.22). Therefore, the results indicated that Social Openness is linked to the outcome through the mediation of the Perceived Difficulty of Negative Communication Situations. Twenty one percent of the variance in the Perceived Difficulty of Negative Communication Situations was explained by its predictor in the model (Social Openness), and 29% of the variance in FtF-Mediated was explained by its predictors (Social Openness, Individuated Functioning and the Perceived Difficulty of Negative Communication Situations).

2.3.4.3 Alternative Models

Two alternative models were tested. In the first alternative model, the Perceived Difficulty in Negative Communication Situations was considered as an independent (exogenous) variable in addition to Social Openness and Individuated Functioning, and these three variables predicted Relative Preferences. In the second alternative model, the Perceived Difficulty in Negative Communication Situations was considered as a dependent (endogenous) variable together with Relative Preferences. Social Openness and Individuated Functioning predicted both Perceived Difficulty in Negative Communication Situations and Relative Preferences.



(χ^2 (11, 178) = 13.61, p = .000, χ^2 /df = 1.24, GFI = .98, AGFI = .94, CFI = .99, NFI = .96, RMSEA = .04, AIC= 47.61)

Figure 4. The Structural Model for the Proposed Mediation Model

As will be remembered, the proposed model, explained in the section above, yielded following fit statistic; χ^2 (11, 178) = 13.61, p =.000, χ^2 /df = 1.24, GFI = .98, AGFI = .94, CFI = .99, NFI = .96, RMSEA = .04, AIC= 47.61. The first alternative model was provided fit indices as good as the proposed model; χ^2 (11, N = 178) = 44.85, $p <$. 001; χ^2/df = 4.08; RMSEA = .14; GFI = .94; AGFI = .84; NFI = .87; CFI = .90, AIC = 78.85. The fit statistics for the second alternative model was as followed: χ^2 (10, N = 178) = 14.62, $p >$. 05; χ^2/df = 1.46; RMSEA = .06; GFI = .98; AGFI = .94; NFI = .96; CFI = .99, AIC = 50.62. The second alternative model produced the following fit indices: , χ^2 (10, N = 178) = 14.62, $p >$. 05; χ^2/df = 1.46; RMSEA = .06; GFI = .98; AGFI = .94; NFI = .96; CFI = .99, AIC = 50.62.

As can be seen, the chi-square statistic, chi-square-degrees of freedom ratio and RMSEA for the second alternate model were poorer for the second alternative model than for the proposed model.

When the proposed model was compared with alternate models in terms of AIC index, it was seen that the value of AIC index for the proposed model (AIC = 47.61) was lower than those for both the first alternate model (AIC = 78.85), and the second alternate model (AIC = 50.62) implying that the proposed model provides a better fit to data than the alternative models.

2.4 Discussion

In this study, I investigated individuals' preferences for face-to-face and mediated communication during positive and negative communication interactions in their friendships. Face-to-face was the dominant communication method in friendship maintenance, and written communication was the least preferred. This finding supported the idea that the richness of the communication *does* matter. In the richness spectrum, face-to-face is the richest channel, and written technologies are the leanest. The current study clearly showed that the richest channel is the most preferable, and the leanest one is the least preferable, as researchers following the *Cues-Filtered-Out* Perspective suggested. Although using cell phones or the Internet as a tool of communication has become common for many people, face-to-face communication is still the most preferred method for friendship maintenance. Because face-to-face communication is unquestionably the most preferred method, the concern was not to find out which individual and situational factors make people prefer mediated communication over face-to-face, but rather to find which individual and situational factors increase or decrease the magnitude of the difference between preference for face-to-face and mediated communication. Smaller relative preference for face-to-face over mediated communication implies that mediated communication may get close to face-to-face communication in terms of gratifying the need for interpersonal interaction.

With regard to valence of communication situations, results are unsurprising: Individuals prefer positive over negative communications -whether it is face-to-face or mediated. In both negative and positive situations, the preference for face-to-face

communication was higher than the preference for auditoy comunciation, and the preference for auditory communication was higher than the preference for written communication. This finding may reflect the intermediate position of auditory communication channels in the channel richness spectrum: Auditory communication is "leaner" than face-to-face communication and "richer" than written communication. The finding could be interpreted as indicating that it might be beneficial for researchers to be careful about the different characteristics of text-based and audio-based communication. One should not study only one form of mediated communication, and generalize the results for all forms of mediated communication

Although auditory and written forms of mediated communication were positively associated with each other, they seemed to be associated with face-to-face communication in different ways: Auditory communication was positively associated with face-to-face communication in positive situations and unrelated in negative situations; but written communication was negatively related to face-to-face communication in negative situations, and unrelated in positive situations. Thus, the idea that researchers should pay attention to the differentiation between written and auditory communication channels in studying channel preferences in friendships is once more supported. Preference for written communication increases when preference for face-to-face communication decreases in negative situations suggests that written communication can be an alternative to face-to-face communication in negative situations. Face-to-face communication may not be as preferable in negative situations because it is sometimes difficult to find out

appropriate expressions for transmitting negative thoughts or feelings towards others during a face-to-face talk, or because expressing negative messages may elicit negative reaction which is unpleasant to confront directly. Written communication may help people to avoid the difficulties of direct confrontation. This may explain why preference for written communication is negatively related to preference for face-to-face communication only in negative situations. On the other hand, the findings that auditory and face-to-face communication are positively correlated in positive situations and unrelated in negative situations show that auditory communication may not be beneficial for overcoming difficulties of face-to-face communication in negative situations. The positive correlation between auditory and face-to-face communication may signal a third variable that influences both of them, which can be explored in future studies. One suggestion can be willingness to communicate. If individuals have willingness to communicate, they would communicate either face-to-face or via auditory channels. If they have any avoidance for communication, then, face-to-face and auditory communication would be unappealing for those people. Therefore, the results suggested that auditory communication technologies may not be preferential alternatives to face-to-face communication whereas written communication technologies may be.

Although many researchers recognize the potentially important effect that individual differences have on face-to-face and mediated communication, research in this area has been piecemeal, and few guidelines exist for understanding how various individual difference variables are linked to communication variables. An awareness of which personal characteristics predispose an individual to make a

choice between face-to-face versus mediated communication in several interpersonal situations may help individuals to handle those situations more effectively, and maybe facilitate constructive ways of communication to meet the communicative needs of people involved in those situations. Since it was beyond the limits of this study to bring together all the individual difference constructs in this fragmented literature, only a small part of them have been included into the current study. Individual difference factors investigated in the current study are considered as being a part of either Individuated Functioning or Social Openness constructs.

Social Openness construct involved Extroversion and Openness-to-Experience. Decreases in Extroversion and Openness-to-Experience are associated with decreases in relative preferences for face-to-face communication. The related literature has full of studies reporting the associations of Extroversion to face-to-face and mediated communication, and the findings of current study is consistent with them. For instance, extroverts prefer face-to-face contact while neurotic introverts prefer mediated communication (Karemaker, 2005); or introvert people prefer to reveal their true self on the Internet, whereas extroverts prefer to reveal their true self through traditional social interaction (Amichai-Hamburger et al., 2002). Openness-to-Experience, however, has not been investigated as extensively as Extraversion in the context of interpersonal communication. The finding with regard to Openness-to-Experience in the current study is a new contribution to the literature because in all previous studies about the association between Openness-to-Experience and mediated communication, the interest was the use of mediated

communication for the purposes other than interpersonal communication (e.g., information seeking, online learning…etc.). In the current study, Extroversion and Openness-to-Experience are considered as complementary factors in terms of their contributions to variance in Relative Preferences. These two personality factors were combined under a higher construct -Social Openness- on the basis of theoretical and empirical reasons. Empirically, a factor analysis conducted on individual difference variables in the current study demonstrated that Extroversion and Openness-to-Experience were members of the same factor. Besides, Extroversion and Openness-to-Experience have a moderate correlation and both have positive correlations with relative preferences. Openness is a multi-facet concept, which may include openness to people and to interpersonal interactions as well as to non-personal stimuli. Type of openness measured by many measures of Openness (-to Experience, -to Change, Intellect...etc.) tends to involve both cognitive and social openness (McCrae & Sutin, 2009) Although the Openness-to-Experience measure used in the current study has been developed to measure general openness, without making any distinction between cognitive versus social openness, it may be the case that majority of participants have evaluated the openness items in a social/interpersonal context. When it is evaluated in a social-interpersonal context, it is reasonable to consider Openness-to-Experience as conceptually similar to Extroversion, and to place them under a single higher-order construct. Previous research indicated that individuals low in Openness-to-Experience feel uneasy when they are confronted with different opinions and anything challenging the norms and routine (Flynn, 2005; Whitbourne, 1986).

People who are low in Openness-to-Experience may tend to think dogmatically and be unable to adapt to changing social situations (Goldberg, 1981). This uneasiness in interpersonal communication may be the common characteristic of low Openness-to-Experience and low Extroversion (or high introversion). Social Openness construct combining Extroversion and Openness-to-Experience may be considered as reflecting positive affect, and motivation for an approach behavior rather than an escape behavior. The results suggested an indirect relationship between Social Openness and Relative Preference for face-to-face communication via the Perceived Difficulty of Negative Communication Situations. It seems that a Social Openness characteristic helps people to take negative interpersonal situations easy; thus, those people with high levels of Social Openness may be less likely to avoid face-to-face encounters.

The second construct, Individuated Functioning, involved Individuation and Need-for-Cognition. The association between Need-for-Cognition and Individuation has been well-established (İmamoğlu, 2003). Consistent with the previous research, Need-for-Cognition and Individuation were correlated in the current study, and a factor analysis on individual difference variables demonstrated that they are loaded into the same factor. Thus, creating a combined score of Need-for-Cognition and Individuation for the purpose of parsimony was reasonable. This construct reflects individuals' motivation for personal growth, such as motivation to be knowledgeable and competent, motivation to put cognitive effort to solve problems, and motivation for developing a unique self. The results suggested that there is a direct positive association between Individuated Functioning and Relative

Preferences. No indirect effect involving the Perceived Difficulty of Negative Communication Situations was found. People with low scores of Individuated Functioning may tend to prefer the plain, straightforward and obvious over the complex, ambiguous and subtle. Such people may perceive mediated communication less complex than face-to-face because mediated communication transmits only a limited number of audio-visual cues. To test this argument, further research is needed in which perceived complexity of using communication technologies is measured.

Although individuated Functioning and Social Openness constructs had a high correlation, and empirically, it would be acceptable to create a single -rather than two- higher-order constructs (combining Extroversion, Openness-to-Experience, Need-for-Cognition and Individuation), the model tested here provided support to the decision to differentiate Individuated Functioning and Social Openness while studying communication; because these constructs have influences on Relative Preferences through different processes. It appeared that the construct of Perceived Difficulty of Communication Situations explained the influence of Social Openness on the communication outcome, but the same construct does not seem to explain the influence of Individuated Functioning on the same outcome.

Not only the individual differences that are included into the higher-order constructs of Individuated Functioning and Social Openness, but also the ones that were eliminated deserve to be mentioned. Agreeableness, Emotional

Stability, Conscientiousness, and Relatedness were expected to contribute to channel preferences but they were found to have no significant associations to Relative Preferences. An examination of previous studies shows that there are only a few studies reporting that individuals' communication behaviors were associated to Agreeableness and Conscientiousness. Thus, in the current study, having no associations may not be considered as a big surprise. On the other hand, some previous studies have consistently shown that Emotional Stability is a personality factor contributing to communication behaviors usually in the same direction with Extroversion, and complementing its influence such that, in addition to differences between Extroverts and Introverts, in general, Stable Extroverts, Stable Introverts, Unstable Extroverts and Unstable Introverts have some differences in their communicative characteristics or behaviors (McCroskey, Daly & Martin, 1998). The current study does not support this. Besides that, not being able to find associations of Relatedness to outcome variables and the mediator is surprising. Relatedness and individuation have been rarely studied in the communication domain, but a general review of studies in which these two basic self-orientations of BID Model are used as the antecedents of several attitudes and behaviors in different domains demonstrate a clear pattern such that relatedness and individuation complement each other in terms of their contributions to the outcomes; (Beydoğan & İmamoğlu, 2008; Gündoğdu & İmamoğlu, 2008; İmamoğlu & İmamoğlu, 2008; Karakitapoğlu-Aygün & İmamoğlu,2008). For instance, in a study it was shown that relatedness and individuation are positively associated to communication

competence and negatively related to high-context communication; relatedness having stronger associations to the outcomes than individuation does (Tosun, İmamoğlu & İmamoğlu, 2008). The current study does not fit into this pattern of relationships because while individuation is associated with Relative Preferences and the perceived difficulty of communication situations, relatedness is associated with neither. However, it is worth to note that both Extroversion and Openness-to-Experience –the two variables constituting Social Openness- are positively associated to Relatedness. Conceptual similarity between "Social Openness" construct and Relatedness is also obvious. Relatedness is the name of a general motivation to have good relations with others, while Social Openness has a more specific meaning: It describes individuals' tendency to get involved in various interactions with others and have some social experiences. Individuals with high Social Openness may or may not manage to have good relations with others, yet, a willingness/preparedness to take a part in social experiences (Social Openness) can be argued to be positively related to general motivation to have good relationships with others (Relatedness). Perhaps, not Relatedness, but some more specific characteristics associated with Relatedness may be likely to have a role in channel preferences; and Social Openness construct appears to tap those specific characteristics.

Although several different factors -namely The Perceived Difficulty of Communication Situations, the Negative Attitudes and Anxiety about Face-to-Face and Mediated Communication- were tested for their capacity to mediate between

individual difference variables and relative preferences in communication, only one of them –the Perceived Difficulty of Communication Situations- yielded significant results, and only when the situation was negative. Anxiety and Negative Attitudes about Face-to-Face and Mediated Communication did not appear as mediators. When the contents of the measures are examined closely, it can be seen that the scales for Anxiety and Negative Attitudes about Face-to-Face Communication and Mediated Communication measure general anxiety and general attitudes whereas the Perceived Difficulty of Communication Situations and Preferences for Face-to-Face and Mediated Communication are evaluated for specific interpersonal situations. The correspondence in the specificity of measures may play a role in relatively higher correlations of the outcome measures with the Perceived Difficulty of Communication Situations than with the other potential mediators.

The results suggest that a feeling of difficulty in interpersonal situations, rather than a feeling of easiness in using communication technologies, contributes to the understanding of the relation between some individual difference factors and relative preference for face-to-face over mediated communication. A general message that these findings provide is that understanding individuals' mediated communication behavior requires understanding their perception of the communication situation. People might be using technology-mediated communication to deal with the difficulties in the situation when it is hard to handle those difficulties during face-to-face interaction. Thus, an examination of individual difference factors and communication channel preferences can benefit from further consideration of the perceived difficulty of communication situations.

A consideration should be made with respect to the way in which the outcome variables were measured. Difference scores (FtF-Written and FtF-Audi) were used as outcome variables. Although difference scores have been widely used in studies of fit, similarity and agreement, some researchers attack against the use of difference scores due to the spread of several potentially damaging myths regarding the drawbacks of difference scores (Edward 2001). The major criticism to the use of difference scores is that they have low internal reliability. In the current study, the difference scores were found to have acceptable reliability values (for a review of the criticisms and counter arguments, see Edward, 2001). As Tisak and Smith (1994) explained "Difference scores provide unique information on intra-individual change." (p.675), therefore, they are worth to be analyzed. Edwards (2001) claims that "The calculation of a difference score implies that two constructs exist, as represented by the component measures. The difference between these constructs does not itself represent a construct but instead refers to the proximity between two constructs." Regarding the present study, each difference score, which I preferred to name as "Relative Preference", refers to the proximity between the degree of preference for face-to-face communication and for the other communication type. This proximity is exactly what I aimed to examine. I sought the factors that make individuals' preference levels for written (or auditory) communication closer to their preference levels for face-to-face communication. Therefore, I judged difference scores as appropriate to use.

The findings of the current study not only produced some answers for the research questions, but also helped to the formulation of new questions; thus, they opened a path for conducting a new empirical study. One of the aims of the new study was to replicate findings of the first study in a larger group of university student sample. However, the new study was planned not to be an exact replication of the first one. Because the current study demonstrated that individual difference factors are associated with communication preferences only in negative situations, in the new study, communication preferences in only negative situations were examined –the items for positive situations were eliminated. In the current study, data were collected on individuals' communication preferences for several channels, but factor analysis showed that it is empirically acceptable to categorize those channels into two: Auditory and Written. Therefore, in the new study, rather than evaluating many different channels separately, individuals were asked to rate their preferences for one of those three: Face-to-Face Communication, Auditory Communication Technologies and Written Communication Technologies. In this way, the time and effort that participants were asked to spend for ratings were diminished. Because the Perceived Difficulty of Communication Situations was the most promising explanation for understanding the relationship between individual difference factors and communication preferences, the new study excluded the other mediating factors, and focused on understanding the nature of difficulty in communicating negative messages. Two potential answers were produced to the question of "why do individuals perceive a communication situation involving negative messages as difficult?" 1) individuals might be oversensitive to potential

negative feedback which may come as a response to the negative message that they give; 2) individuals may suffer from the lack of enough time to get prepared for the difficult conversation (to think about precisely what one wants to say instead of making immediate responses). In the new study, the focus was not the general perceived difficulty of communication situations, but individuals' oversensitivity to negative feedback, and their need for preparation before responding. The new study also examined the association of three more individual factors in addition to the ones investigated in the current study: Shyness, Social Anxiety and Cognitive Flexibility.

CHAPTER 3

SECOND STUDY

3.1 Introduction

Gathering comprehensive knowledge about which individual difference factors have a role on communication channel preferences is a challenging task. There are many individual difference factors that could be examined in relation to communication channel preferences. The overall body of literature is fragmented into pieces such that some research is devoted into the examination of particular traits; some others focus on examination of face-to-face communication only; and some other study mediated communication. Besides, many of the individual difference factors may have overlaps. For this reason, in the first study (chapter 2), I attempted to consider multiple individual difference factors in one study, and to organize those variables under parsimonious sets. Four individual difference variables were found to be associated with communication-specific variables, and those four variables were grouped under two factors Social Openness (involving Extroversion and Openness-to-Change) and Individuated Functioning (involving Individuation and Need-for-Cognition). In the second study, as noted, I included some new individual difference variables: Shyness, Social Anxiety and Cognitive Flexibility. I expected Shyness (reversed) and Social Anxiety (reversed) to be parts

of the Social Openness construct, and Cognitive Flexibility to be a part of Individuated Functioning.

One of the aims of the second study was to examine to what extent the findings of the first study is replicated in a larger sample of university students. As in the first study, the answers are sought for those questions:

Research Question 1: For dyadic friendship conversations, which one is preferred more: Face-to-face communication, auditory communication technologies or written communication technologies?
Research Question 2: How is face-to-face, auditory and written communication associated with each other?
Research Question 3: How is individual difference factors (Individuated Functioning and Social Openness) associated with communication channel preferences?

Unlike the first study, in the second study, the answers to the questions above are sought only for negative situations.

Like the first study, I tried to understand the mechanism linking individual difference factors to channel preferences. However, I examined different mediators. Among the mediators investigated in the first study, the Perceived Difficulty of Communication Situation was the most promising one. In the second study, I aimed to better understand the specific content of this general concept of "the perceived difficulty of communication situation." What makes a communication situation "difficult"? According to Stone, Patton, Heen and Fisher (2000), a difficult situation puts people into an avoid-or-confront dilemma. More specifically, people in difficult situations have to ask this question to themselves: "Should I express my feelings and thoughts, or keep them unexpressed so that I can avoid negative

feedback, or express them and confront with possible rejection, attacks, or the possibility of hurting the other person?" Thus, it could be said that the difficulties are not inherent in the situation itself, but it is inherent in individuals' perception about how well she or he can handle the situation. Many times, people think that they cannot handle a negative conversation because they are concerned too much about the possibility of getting negative reactions, which are likely to be expressed nonverbally (i.e., frowning, change in bodily position, facial expression and tone of voice). In the second study, I examined whether the oversensitivity to negative bodily feedback may be the potential mediator between the considered individual differences and channel preferences.

If individuals choose to confront rather than avoid the situation, then, they will need to think carefully before communicating the difficult message. The chance of clear communication increases when the sender thinks carefully beforehand. The time needed for thinking before the communication and the amount of cognitive preparation might be different for each person. I examined the need for preparation before responding as another potential mediator in the link between individual differences and channel preferences. The communicators who are oversensitive to negative bodily feedback can benefit from the reduced cues characteristics of communication technologies, and the communicators in need of preparation before responding may benefit from asynchrony characteristic. Thus, the preference for mediated communication may increase as the oversensitivity to negative bodily feedback and the need for preparation before responding increase.

In sum, the purpose of the present study was (a) to investigate the associations between face-to-face, written and auditory communication on the data collected with shortened scales, (b) to re-investigate the relationship between individual difference factors and communication channel preferences with the inclusion of some new variables, (c) to investigate the mediating effect of difficulty in handling difficult situations, which involves oversensitivity to negative bodily feedback and the need for preparation before responding.

The introductory text is organized around four specific topics. First, the construct of Cognitive Flexibility is described, and the literature on the relationship between Cognitive Flexibility and interpersonal communication is reviewed. Second, the concepts of Shyness and Social anxiety are described and the literature on the relationship between shyness, social anxiety and interpersonal communication is reviewed. Thirdly, the concepts of Oversensitivity to Negative Bodily Feedback and the Need for Preparation before Responding are described and related literature is reviewed. Hypotheses are presented throughout the chapter where relevant.

3.1.1 Cognitive Flexibility and Communication

Cognitive flexibility can be defined as the awareness of various possible options for dealing with a situation, willingness for adaptation and flexibility in new situations, and an individual sense of self-efficacy (Martin & Anderson, 1998; Martin, Anderson, & Thweatt, 1998; Martin & Rubin, 1995). Previously, it has

been shown that cognitive flexibility is associated with interpersonal communication behaviors. For instance, Martin et al. (1998) reported that cognitive flexibility is negatively associated with aggressive responses to others, and positively associated to argumentativeness and tolerance for disagreement. Rubin and Martin (1994) found a positive relationship between cognitive flexibility and interaction involvement, self-monitoring, and interpersonal communication competence. Additionally, they found cognitive flexibility to be negatively associated with rigidity; Martin and Anderson (1998) found assertiveness and responsiveness to be positively related to cognitive flexibility. All these empirical studies have clearly showed that flexibility is an essential part of communication competence during face-to-face interactions. However, to the author's knowledge, no study has examined cognitive flexibility in mediated interpersonal relationships.

The complexity of everyday life requires individuals to be cognitively flexible. Before they decide to adapt their behaviors, people undergo a social cognition process wherein they become aware of choices and alternatives (Berger & Rolof, 1980), and they develop a willingness to change their standard behaviors with the alternatives. When cognitively flexible individuals experience some difficulties in initiating a face-to-face interaction, they may more easily recognize that there are some alternative ways of communication, and they may have higher motivation to get the advantages of those alternative communication ways as compared to the individuals who are cognitively less flexible. This is one way of thinking the association between cognitive flexibility and individuals' choice for communication channels. However, a negative association between cognitive

flexibility and communication preference can also be expected. Given that cognitively flexible people have more confidence in their interpersonal competence in face-to-face interactions (Martin & Anderson, 1998), they may be less likely to be in need of searching alternative ways of communication. Cognitively less flexible individuals, as compared to more flexible individuals, may prefer communication technologies more because they may be more likely to have a self-doubt in dealing with face-to-face communication situations.

3.1.2 Social Anxiety, Shyness and Face-to-Face Communication

Anxiety is a response to threatening situations. It is characterized by cognitive apprehension, neuropsychological arousal, and a subjective experience of tension or nervousness (Leary, 1991). People may feel anxious for various reasons, but factor analyses of anxiety and fear inventories consistently obtain solutions that include at least one category of social or interpersonal anxieties (For a review, see Leary, 1991). Social anxiety refers to discomfort in the presence of others and may also include avoidance of others and fear of negative evaluation (e.g. La Greca & Lopez, 1998).

People experience the disturbance called "social anxiety" when they have a desire to create a positive impression in social settings but they suffer from a general lack of self-presentational confidence (Schlenker & Leary, 1982). Social anxiety is also considered to be a trait-like characteristic that remains relatively stable across time and situations, often producing negative interpersonal

consequences (Leary & Kowalski, 1995). As stated by Leary and Kowalski (1995), ‘‘when they must interact with others, individuals high in social anxiety tend to appear inhibited, reticent, and socially withdrawn” (pp. 158) and “as a result of their tendency to be inhibited and withdrawn, people who are prone to social anxiety often have difficulty forming and maintaining satisfying relationships” (pp. 173).

Shyness and social anxiety are often used interchangeably. Researchers continue to struggle with definitional problems regarding the constructs of shyness and social anxiety, but no consensus has been reached on what distinct aspects differentiate them. Shyness is defined as a form of excessive self-focus, a preoccupation with one’s thoughts, feelings, and physical reactions and may vary from mild social awkwardness to total social inhibition (Saunders & Chester, 2008). It is a broad concept involving characteristics such as quietness, inhibited behavior, self-consciousness and apprehension about being negatively evaluated in social situations (Zimbardo, 1977). Phillip Zimbardo (1977), a pioneer in the shyness field, has conducted the largest non-clinical study to date investigating shyness rates. He assessed the shyness levels of 5000 individuals. More than 80% reported that they were shy at some point in their lives, either currently, in the past or always. Over 40% described themselves to be currently shy. More recent research indicates that the percentage of currently shy has increased to nearly 50% (Carducci & Zimbardo, 1995).

Main negative effect of shyness/social anxiety is a decreased level of social interaction. Shyness makes it difficult to meet new people, make friends, or enjoy potentially good experiences (Zimbardo, 1977). Due to their fear of social interactions, shy individuals initiate fewer conversations and are less expressive verbally and nonverbally; remember negative feedback more than non-shy people, see themselves as less physically attractive; blame themselves for their perceived inadequacies, report intense feelings of shame and report negative thoughts about themselves in social interactions; see themselves as awkward, unfriendly and incompetent (Henderson & Zimbardo, 1998). Also, Jones and Carpenter (1986) found that shy people had less social support, smaller friendship networks, and fewer, more passive interactions in their offline lives than the non-shy people. Some of the empirical studies on the associations of shyness/social anxiety and communication difficulties in face-to-face interactions are summarized in Table 8.

One strategy used by shy individuals to overcome their shyness was identified as "electronic extroversion" (Carducci et al., 1997). Electronic extroversion is the use of Internet chat rooms or newsgroups by shy individuals for the purpose of fostering social relationships. There is no consensus among researchers on whether Internet usage can serve as a facilitating (Roberts, Smith, & Pollock, 1997) or inhibiting (Carducci & Zimbardo, 1995) agent for helping shy individuals to develop social relationships. There are relatively more studies investigating whether shy people use mediated communication in friendship establishment, there are not many research investigating whether shy people use mediated communication in their existing relationships for dealing with difficult

conversations. Table 8 lists some of the studies in which the associations among shyness/social anxiety and mediated communication were investigated. Overall, study findings implied that shy people have more difficulties in face-to-face communication as compared to non-shy people, and they value mediated communication more than non-shy people do.

A Self-Presentational Theory Perspective is very helpful to understand how mediated communication may help shy people overcoming social difficulties (Stritzke, Nguyen, Durkin, 2004). According to this perspective, shy individuals experience social difficulties because they have a discrepancy between the way they desire to present themselves and the way they perceive themselves (Edelmann, 1987; Schlenker & Leary, 1982). In face-to-fac1e interaction, such discrepancies between perceived and desired impressions can be inferred from negative verbal and nonverbal cues, such as pauses in speech, decreased eye contact, inattentive body language, facial expression, tone of voice, and length and content of responses. Shy people do not only recognize those negative cues very quickly, but also interpret them as a sign of their own interpersonal incompetence or of their rejection by others (Edelmann, 1987; Miller, 1995).

Table 8. Research on the Associations between Shyness/Social Anxiety, Face-to-Face and Mediated Communication

Study	Findings
	Face-to-Face Communication
See Leary & Kowalski (1995)	Socially anxious people are more likely than less anxious individuals a) to allow long silences to develop in conversations, b) avert their gaze during interactions, and c) require longer response time
Erwin, Turk, Heimberg, Fresco, & Hantula (2004)	In a sample of socially anxious people indicated that a) 77% indicated that they are socialized in person for less than five hours per week, b) 36% reported that they had no significant friendships, c) 46% had no romantic relationships.
Wheeless, Nesser, & McCroskey, (1986)	As compared to less apprehensive people, communication apprehensive individuals are a) less disclosive, b) reveal relatively superficial information, and c) express more negative content in interpersonal encounters
Duran & Kelly (1989)	As compared to non-shy people, shy people are lower on a) social composure (how relaxed the person is) b) articulation (appropriate use of syntax and semantics) c) social experience (affect for and participation in social settings
	Mediated Communication
Ward & Tracey (2004)	Shyness is related to greater difficulties in face-to-face relationships than online relationships on the aspects below: a) social support b) satisfaction c) number of friends d) interpersonal competence
Ebeling-Witte & Frank & Lester (2007)	Shyness is positively associated with the preference for online conversing versus face-to-face conversing and problematic internet usage

Study	Findings
Madell & Muncer (2006)	No correlation between social interaction anxiety and the amount to of time spent by using several internet channels
Scealy, Phillips, & Stevenson (2002)	Shy males are much more likely to use the Internet for recreation/leisure searches
Caplan (2005)	Social anxiety increases the preference for online interaction (POSI), and POSI mediates the relationship between social anxiety and negative outcomes of internet usage
Yuen & Lavin (2004)	Among Internet-dependent college students, shyness level was lower in online interaction than in face-to-face interaction.
Peter & Valkenburg (2006)	Younger, socially anxious and lonely adolescents more strongly value the controllability of internet communication and perceive it as broader, deeper and more reciprocal than older, non-socially anxious and non-lonely adolescent respondents.
Reid & Reid (2007)	Whilst lonely participants preferred making voice calls and rated texting as a less intimate method of contact, anxious participants preferred texting, and rated it a superior medium for expressive and intimate contact.
Brunet & Scmidt (2007)	Shyness is negatively correlated with the number of self disclosures in an e-chat session with a stranger if there is live-webcam. In no live-webcam condition, shyness is not associated with the number o self-disclosures.

3.1.3 Difficulty in Handling Negative Situations

Giving negative messages can be a difficult venture if individuals

a) cannot deal with the message takers' potential bodily reactions to negative message, and their own bodily reactions to potential negative feedback,

b) are in need of time to prepare responding.

In the Section 1.3.1 and 1.3.2, these two elements of difficulty in handling negative situations are addressed.

3.1.3.1 The Need for Preparation before Responding

In order to be competent communicators, individuals need to have an ability to prepare before social interactions (Duran & Spitzberg, 1995). This preparation is an attempt to control the way that people appear to others. Everyone has a desire to control their presentation to others (Schlenker, 1980). Having a good self-presentation during a difficult conversation may require spending time and effort thinking and reflecting beforehand. A communication situation can be called difficult when the communicator is willing to initiate a "difficult" topic, or transmit a negative message which he or she believes the other person will not like. In those situations, communicators may feel relatively higher pressure for finding a way to give the message in an appropriate way in which they will keep having a control over their impression on the other person. To be able to communicate the negative message without damaging self-impression, communicators may need to think and reflect beforehand about issues such as knowing what to say, how to warm-up before beginning to discuss tangible issues; whether the communication should be direct and to the point, or somewhat indirect and roundabout. The time and effort required for preparation to feel ready to handle a difficult conversation may be higher for some individuals, than the others. Some people may have a difficulty to think clearly in the presence of others, or under time pressure; therefore, they may need more time for preparation. One of the aims of the study was to find out

individual difference factors associated with the need for preparation to a difficult conversation.

Finding "the right words" to solve the difficult conversations can be considered to be a cognitive task in which the communicator needs to explore alternative ways of saying things and evaluate implications of those alternatives. Some individuals may have a tendency to avoid such cognitive tasks whereas some others may have a genuine interest in those tasks. The latter group of individuals may perform thinking and reflection necessary for dealing with those tasks quickly and effortlessly; they can embed thinking and reflection into the daily (problematic or non-problematic) conversations habitually; thus, they may not perceive cognitive preparation for difficult conversations as cumbersome and time-consuming. In this study, it was assumed that individual difference factors reflecting individuals' cognitive motivation (Need-for-Cognition, Individuation and Cognitive Flexibility) would be associated with their need for time and effort for preparing themselves to a difficult conversation. Socio-emotional factors (Extroversion, Neuroticism, Social Anxiety, Shyness and Relatedness) were also expected to be associated with the need for thinking and reflection before the communication in a similar way. With regard to extroversion-introversion, Helgoe (2008) claimed that introverts differ from extroverts in terms of their need for *psychological time*: Time devoted to noticing, evaluating, and finding meaning. When they have enough time and space, interaction occurs more spontaneously. With regard to shyness, an empirical study showed that shy college students were rated by independent observers as speaking less frequently, allowing longer silences to develop, and having longer latency to

their first utterances (Pilkonis, 1977, as cited in Turner, Beidel and Townsley, 1990) which suggested that shy people need more time for preparation to conversations.

In difficult situations, using mediated communication may decrease potential challenges to self-presentation. Self-presentation is more selective, malleable and subject to self censorship in mediated environments than in face-to-face environments due to its two characteristics: Asynchronity, and the emphasis on verbal cues rather than nonverbal cues (Walther & Burgoon, 1992; McKenna & Bargh, 2000; O'Sullivian, 2000; Walther, 1996). Walther (1996) has shown that computer-mediated communication –especially asynchronous communication such as e-mail- can be more friendly, social and intimate than face-to-face communication because it gives participants time to compose their messages more thoughtfully and perhaps be less distracted by other things going on. Therefore, people who are in need of thinking and reflecting on difficult conversations may find the mediated communication as satisfying alternative to face-to-face interactions because mediated communication limits those concerns by allowing for preparation and control.

On the basis of the literature introduced above, in the current study, it was expected that certain individual difference factors would be positively related to having a high need for preparation and in turn, this high need for preparation and control would predict preference for Relative Preferences. Specifically, "The Need for Preparation before Responding was expected to be positively related to Shyness, Social Anxiety and Neuroticism; and negatively related to Need-for-

Cognition, Individuation, Relatedness, Cognitive Flexibility, Extroversion, Openness-to-Experience, Agreeableness, and Conscientiousness. An attempt was made to put the individual difference factors under investigation under higher-order constructs similar to the ones in study 1 (Social Openness and Individuated Functioning). High Extroversion, high Openness-to-Experience , high Agreeableness, high Relatedness, low Shyness, low Social Anxiety were considered to be potential members of Social Openness constructs while Need-for-Cognition, Cognitive Complexity, Conscientiousness and Individuation were considered to be potential members of Individuated Functioning. A model was tested in which these higher-order constructs were the predictors; "Difficulty in Handling Negative Communication Situations" involving "the Need for Preparation before Responding" and "Oversensitivity to Negative Bodily Reactions" as sub-factors was the mediator; and Relative Preference for face-to-face communication (involving FtF-Written ☹ and FtF-Audi☹) was the outcome.

3.1.3.2 Oversensitivity to Negative Bodily Reactions

Individuals who sense a negative outcome in a given situation (punishment, danger, failure) will alter or withdraw from that situation (MacDonald, 1998). The sense of negative outcome may stem from nonverbal, as well as verbal cues. Thus, communicators not only listen to what the other says, but they constantly search for nonverbal feedback cues during interaction. Some people may be very sensitive to catch negative feedback cues, and they may easily withdraw from the situations

when they recognize that there is a negative tone in the other person's voice or a negative expression in the other person's bodily expression. Those people may benefit from the relative absence of nonverbal cues in mediated communication. The lack of physical presence of others and the availability of hiding one's own physical presence from others may diminish the concern for negative feedback. There is previous research demonstrating that CMC maybe better for establishing *new* intimate relationships than face-to-face communication due to its characteristic of limited transmission of nonverbal cues (e.g. Walther, 1996), but the role of this characteristic in having difficult conversations with *existing* friends has been an understudied topic. The current study aimed to examine the individual differences in sensitivity to negative bodily reactions, and its influence on communication channel preference. Individual difference factors were expected to be associated with their degree of avoidance for negative feedback, and in turn, their avoidance was expected to be associated with their relative preference for face-to-face over mediated communication. Specifically, "the Oversensitivity to Negative Bodily Reactions" was expected to be positively related to Shyness, Social Anxiety and Neuroticism; and negatively related to Need-for-Cognition, Individuation, Relatedness, Cognitive Flexibility, Extroversion, Openness-to-Experience, Agreeableness, and Conscientiousness.

As mentioned before, in the current study, it was aimed

(a) to examine whether the individual difference factors under investigation could be put under higher-order constructs similar to the ones in study 1 (Social Openness and Individuated Functioning), and then,

(b) test a model in which Social Openness and Individuated Functioning predict relative preference for face-to-face over mediated communication through the mediation of "Difficulty in Handling Negative Situations" involving two components, namely, "The Need for Preparation before Responding" and "Oversensitivity to Negative Bodily Reactions".

3.2 Methods

3.2.1 Participants

Participants were 343 university students (202 females, 101 males) from three different universities: Hacettepe (128 respondents), METU (129 respondents) and Uludağ (86 respondents). The mean age of participants was 20.74 (*SD* = 1.74, range = 17-27). Fifty three percent of the students (53%) reported that they used the Internet every day, 68% of students had their own PC, and of those who had a PC at home, 69% reported that they had limitless access to the Internet. Almost all of the participants had a cellular phone (99%). Detailed information about participants' demographic characteristics and their communication technology uses is given in Figure 5.

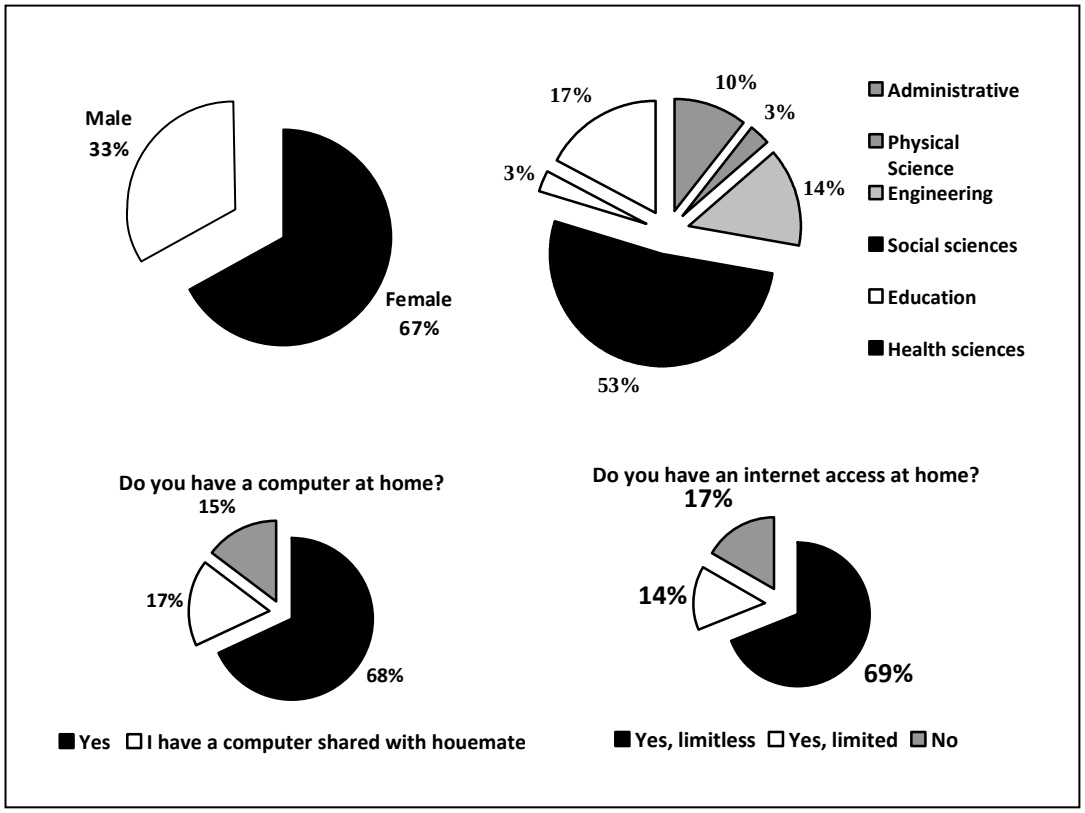


Figure 5. The Information about Participants' Demographic Characteristics and Their Communication Technology Use (Study 2)

Participants were also asked how often they use several communication technologies. Most students reported that they use phone (talking and sending SMS messages) and Internet every day. Detailed information about their frequencies of using several communication technologies is given in Table 9.

Table 9. The Frequencies and Percentages of Using Communication Technologies

	Phone talk	SMS Message	E-chat	E-mail	Internet use (General)
Everyday	145 (%42)	211 (%62)	107 (%31)	26 (%8)	189 (%55)
Once in two days	81 (%24)	61 (%18)	59 (%17)	23 (%7)	51 (%15)
Once or twice in a week	87 (%25)	50 (%15)	87 (%25)	111 (%32)	71 (%21)
Biweekly	15 (%4)	10 (%3)	34 (%10)	45 (%13)	18 (%5)
Once in a month or less	15 (%4)	9 (%2)	55 (%16)	138 (%40)	14 (%4)
TOTAL	343 (%100)	343 (%100)	343 (%100)	343 (%100)	343 (%100)

3.2.2 Measures and Scales

In the first and second studies, some common measures were used: General Personality Traits Inventory, Need-for-Cognition Scale and Balanced Integration-Differentiation Scale. Those scales are not described in detail again. Their reliability coefficients for the second study are provided below. The second study also included some new measures and some revised measures. These new measures are described in more detail.

3.2.2.1 General Personality Traits Inventory

As explained before, a 45-item self-report measure developed by Gençöz and Öncül (in progress) was used to assess the personality traits. The scale yields six dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness-to-Experience and Negative Valence. In the current study, Cronbach's alpha was .78 for Openness-to-Experience and Neuroticism, .86 for Extroversion, .80 for Neuroticism, .87 for Agreeableness, .84 for Conscientiousness, and .58 for Negative Valence.

3.2.2.2 Need for Cognition Scale (NCS)

As in the first study, a translated and adapted version of Cacioppo and Petty's (1982) Need for Cognition Scale (NCS) was used to assess the tendency to engage in and enjoy thinking (İmamoğlu, 2001). In the current study, Cronbach's alpha was .89.

3.2.2.3 Cognitive Flexibility Scale

This scale has 12 items which measure a continuum of cognitive rigidity-flexibility, measuring individual's awareness of alternatives, willingness to adapt to situations, and self-efficacy in being flexible (Martin & Rubin, 1995). It is rated on a 6-point Likert type scale ranging from (1) *Strongly disagree* to (6) *Strongly agree*.

The items are keyed toward cognitive flexibility (i.e., higher scores indicate higher levels of flexibility). Sample items include, "I can find workable solutions to seemingly unsolvable problems," and "I am willing to listen and consider alternatives for handling a problem." Previous reliabilities obtained for this scale were .82 (Martin et al., 1998) and .81 (Martin & Anderson, 1998). The scale was adapted to Turkish for the first time to be used in the present study. The Cronbach's alpha reliability for this scale in the present study was .77 (M = 4.25, *SD* = .57).

3.2.2.4 Balanced Integration-Differentiation Scale

As noted before, İmamoğlu's (1998, 2003) Balanced Integration-Differentiation Scale was used assess relatedness and individuation. The measure consists of two subscales: The Interrelational Orientation subscale and The Developmental Orientation subscale. In the current study, Cronbach alpha was .87 for the interrelational orientation subscale and .74 for the self-developmental orientation subscale.

3.2.2.5 Liebowitz Social Anxiety Scale

It is a measure developed to assess the range of social interaction and performance situations that individuals may fear and/or avoid. (Liebowitz, 1987) Participants are given 11 social interaction situations (e.g., Using a telephone in public; talking face-to-face with someone you don't know very well) and 13

performance situations (e.g., taking a test; writing while being observed). Each situation is rated separately for fear (0 to 3 = none, mild, moderate, severe) and avoidance (0 to 3 = never, occasionally, often, usually). Thus, the measure provides an overall social anxiety score and scores on 4 subscales: 1) performance fear, 2) performance avoidance, 3) social fear, and 4) social avoidance. Previously, psychometric properties of the self-report Liebowitz Social Anxiety Scale were investigated by Baker, Heinrichs, Kim and Hofmann (2002). It was reported that the scale had a good 12-week test-retest reliability (r = .83 for the total score), a good internal consistency (r = .95 for the total score), and was a valid instrument to be used in the assessment of social anxiety. Turkish version of the Liebowitz Social Anxiety Scale has been developed by Soykan, Özgüvenc and Gençöz (2003). All reliability and validity assessments of the Turkish version indicated good reliability and validity. An overall social anxiety score is employed in the current study. The internal reliability for the overall score is .95.

3.2.2.6 Shyness Scale

Shyness was measured by a scale adapted from the Revised Cheek and Buss Shyness Scale, shortly RCBSS, (Cheek, 1983; Cheek & Buss, 1981) to Turkish by Güngör (2001). It assesses discomfort/tension and inhibition in the presence of others. Example items are "I am socially somewhat awkward" and "I have trouble looking at someone right in the eye". Original (English) version had 13 items. 7 extra items were added in its Turkish adaptation. The RCBSS has high internal

consistency (α = .82; Jones, Briggs, & Smith, 1986), good 8-week test–retest reliability (*r* = .89; Glass & Arnkoff, 1989), and adequate convergent validity (Jones et al., 1986). Turkish version also has high internal consistency (α = .91), 3-week test-retest reliability (.83) and adequate convergent validity (Güngör, 2001). Each of the items was answered on Likert-type scales with five response alternatives from 1 (*strongly disagree) to* 5 (*strongly agree).* Scoring of this scale involved reversing the score on negatively phrased items and calculating a mean of all items. The internal reliability is .92.

3.2.2.7 The Measure of the Need for Preparation before Responding

Participants are given seven negative interpersonal communication scenarios. The scenarios are identical to the ones used in the first study for measuring the perceived difficulty of communication situations and in both the first and second studies for measuring preference levels for face-to-face and mediated communication:

1) expressing how hurt you are because of something that your friend did to you
2) expressing your anger towards your friend
3) telling your friend that she/he owes an apology to you
4) disclosing a failure or embarrassment that you have experienced in an earlier point of your life to your friend
5) confessing a fault you did to a friend
6) apologizing because you hurt or made him/her angry
7) giving negative feedback on a job/homework that your friend did.

For each scenario, the participants are asked to rate those 3 items:

1) "If I were in this situation, I would turn my words over and over again in my mind before talking."
2) "If I were in this situation, I could say what I wanted to say even if I didn't make a practice first." (reversed item),
3) "If I were in this situation, I would need time to think about how he/she might react to me and prepare myself for this reaction."

Ratings range from (1) *Strongly disagree* to (5) *Strongly agree*. Higher scores indicate higher level of need for self-reflection. The Cronbach's alphas range between .65 and .80 for each of those seven scenarios. For all the scenarios across all items (7 scenarios X 3 items), Cronbach's alpha was .88. The Need for Self-Reflection score was computed by first reverse coding the second item for each scenario, and then taking the average of all items in all scenarios.

3.2.2.8 The Measure for Oversensitivity to Negative Bodily Feedback

Participants are given seven negative interpersonal communication scenarios. For each scenario, they are asked to rate those 3 items:

1) "I would feel very bad if I caught some negative changes that occur in my friend's facial and bodily expressions while I am talking to him/her."
2) "If I recognize that what I say makes my friend disturbed, I either stop talking or change the topic."
3) "If I were in this situation, I would have difficulty to look at my friend's eyes while talking."

Ratings range from (1) *Strongly disagree* to (5) *Strongly agree*. Higher scores indicate higher level of avoidance for getting negative feedback. The Cronbach's alphas range between .62 and .70 for each of those seven scenarios. For all the scenarios across all items (7 scenarios X 3 items), Cronbach's alpha was .91. The

Avoidance for Getting Negative Feedback score was computed by taking the average of all items in all scenarios.

3.2.2.9 Preference Ratings for Face-to-Face and Mediated Communication (Short Form)

Preference Ratings for Face-to-Face Communication

As explained before, preferences for face-to-face conversation were indicated by participants on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*) for seven negative situations, Face-to-face communication preference scores for negative situations (FtF☹) were obtained by computing the mean value of ratings. Cronbach's alpha was .81 for negative situations.

Preference Ratings for Mediated Communication

Parallel to the preference ratings for face-to-face communication, preferences for auditory and written communication technologies were indicated by participants on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*) for seven negative situations. Auditory communication technologies and written technologies are described and exemplified for participants:

i. **Auditory communication:** a form of communication whereby you receive and transmit only auditory messages (no visual and no textual messages) through technologies such as phone or cellular phone.
ii. **Written communication:** a form of communication whereby you receive and transmit only textual messages (no auditory and no

visual messages) through technologies such as e-mail, e-chat, SMS message…etc.

Cronbach's alpha was .81 for auditory and .83 for written communication.

3.2.2.10 Relative Preferences for Face-to-Face and Mediated Communication

Two Relative Preference Scores were calculated. The first one is the Relative Preference for Face-to-Face over Auditory Communication (FtF-Audi☹) and the second one is the Relative Preference for Face-to-Face over Written Communication (FtF-Written☹). The calculation of FtF-Written☹ and FtF-Audi☹ scores is described below:

i. FtF-Audi☹:
(Preference for *Face-to-Face* Communication) – (Preference for *Auditory* Communication)

ii. FtF-Written☹:
(Preference for *Face-to-Face* Communication) – (Preference for *Written* Communication)

As will be remembered, face-to-face and mediated communication scales were rated on a 5-point scale so the relative preference measures can range from (-4) to (+4). As mentioned before, positive scores reflect a preference for face to face communication over the other communication types. Negative scores reflect a preference for the other communication type over face to face communication. Scores near or at zero indicate no preference for one type of communication over another. In this sample, the relative preferences dropped below 0 for 18% of the sample in FtF-Audi☹; and for 22% of the sample in FtF-Written ☹. Thus, face to

face communication was generally preferred over other types of communication. Reliabilities of Relative Preference scores were calculated by using a computer program developed by Watkins (2008) specifically for measuring reliability of differences scores. Cronbach's α were .70 for both FtF-Audi☹ and FtF-Written☹.

3.3 Results

Descriptive information about the characteristics of the study variables and gender differences on those variables has been summarized in Table 9. With regard to gender differences, a series of t-test analyses showed that there were no significant gender differences for any study variables-except for Extroversion and Neuroticism. women had higher scores on Extroversion and Neuroticism than men did(See Table 9). Gender was dropped from further analyses, in view of the fact that no hypotheses were generated involving gender. Detailed information about the analyses involving the factor structure of the newly developed or adapted scales can be found in Appendix D.

Table 10. Descriptive Statistics for the Variables Used in the Study 2

	Total		Females		Males		
Variables	*M*	*SD*	*M*	*SD*	*M*	*SD*	*t*
			General Individual Difference Factors				
Extroversion	3.55	*.78*	3.64	*.77*	3.42	*.75*	2.48*
Neuroticism	2.92	*.69*	2.94	*.71*	2.89	*.66*	4.59***
Openness-to-Experience	3.62	*.66*	3.55	.65	3.69	.65	.65
Agreeableness	4.19	*.53*	4.29	*.478*	4.03	*.54*	1.18
Conscientiousness	2.92	*.68*	3.57	*.73*	3.47	*.80*	-1.82
Negative Valence	1.74	*.50*	1.64	*.45*	1.88	*.53*	-4.48
Need-for-Cognition	3.65	*.46*	3.64	*.45*	3.68	*.49*	-.82
Relatedness	3..83	*.60*	3.93	*.58*	3.67	*.58*	1.88
Individuation	3.71	*.50*	3.71	*.51*	3.73	*.48*	-1.04
Shyness	2.68	*.69*	2.64	*.70*	2.72	*.68*	3.94
Liebowitz Social Anxiety (total score)	1.92	*.46*	1.97	*.46*	1.87	*.47*	-.39
Cognitive Flexibility	4.25	*.57*	4.22	*.54*	4.27	*.60*	-.74
			Communication-Specific Individual Difference				
the Need for Preparation before Responding	3.04	*.63*	3.11	*.63*	2.93	*.63*	2.44
Oversensitivity to Negative Bodily Feedback	2.78	*.66*	2.80	*.68*	2.77	*.65*	.45
			Channel Preferences				
Face-to-Face	4.00	*.72*	3.97	*.77*	4.07	*.62*	-1.30
Written Channels	3.05	*.90*	3.06	*.89*	3.04	*.90*	.27
Auditory Channels	3.02	*.77*	2.99	*.78*	3.07	*.77*	-.91

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

3.3.1. Results for Research Question 1: Preferences for Communication Channels

The first research question was whether face-to-face vs. mediated communication was preferred more. To compare the preference levels for face-to-face, auditory and written communication, a one-way repeated measures ANOVA was conducted. Analyses revealed that there was a channel main effect, F (2, 341) = 143.27, $p < .001$, $\eta = .46$. Post-hoc pairwise Bonferroni comparisons revealed that face-to-face was (M = 4.00, *SD* = .71) preferred more than both auditory (M = 3.02, *SD* = .76) and written communication (M = 3.05, *SD* = .88) The results are presented in Figure 6.

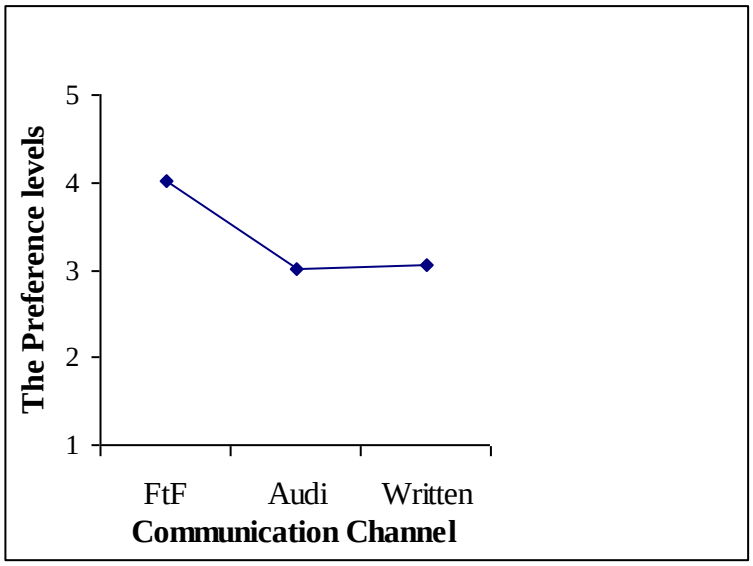


Figure 6. The Preference Ratings for Face-to-Face, Auditory and Written Communication (Study 2)

3.3.2. Results for Research Question 2: Associations among Face-to-Face and Mediated Communications

The second research question was whether face-to-face and mediated communication preferences were associated. Pearson correlation analyses were conducted to examine the associations among the preferences for face-to-face, auditory and written communication in negative situations. Face-to-face communication was found to be negatively correlated with written communication, and uncorrelated with auditory communication (See Table 11).

Table 11. The Intercorrelations among the Preferences for Face-to-Face, Auditory and Written Communication in Negative Situations in the Study 2

	FtF	Audi	Written
FtF	-		
Audi	.08	-	
Written	-.37***	.39***	-

Note. *** $p < .001$.

3.3.3. Results for Research Question 3: General Individual Difference Factors and Communication Channel Preferences

The analyses described in the section 3.1 showed that face-to-face communication was preferred over written and auditory communication. Below, I examined whether this relative preference for face-to-face communication over written and auditory communication decreased/increased depending on general individual difference variables .

3.3.3.1. The Correlations between General Individual Difference Factors and Relative Preferences for Face-to-Face over Mediated Communication

Correlations among general individual difference factors and relative preferences are shown in Table 12. High levels of Agreeableness, Openness-to-Experience, Need-for-Cognition, Cognitive Flexibility and low levels of Shyness and Social Anxiety were found to be associated with an increase in FtF-Written☹ and FtF-Audi☹. Also, high level of Extroversion was related to an increase in FtF-Written☹.

Table 12. The Correlations between General Individual Difference Factors and the Relative Preferences

	1	2	3	4	5	6	7	8	9	10	11	12
1. Extroversion	-											
2. Neuroticism	-.23***	-										
3. Agreeableness	.30***	-.14*	-									
4. Openness-to-Experience	.52***	-.09	.25***	-								
5. Conscientiousness	.11*	-.05	.30***	.16*	-							
6. Need-for-Cognition	.20***	-.08	.21***	.32***	.20***	-						
7. Cognitive Flexibility	.46***	-.17**	.19**	.57***	.24***	.43***	-					
8. Shyness	-.68***	.22***	-.20***	-.57***	-.12*	-.35***	-.52***	-				
9. Social Anxiety	-.45***	.11*	-.08	-.53***	-.06	-.35***	-.51***	.67***	-			
10. Relatedness	.45***	-.20***	.28***	.22***	.22***	.05	.35***	-.42***	-.21***	-		
11. Individuation	.16**	-.02	.03	.28**	- .11	.52***	.36***	-.33***	-.34***	-.06	-	
12. FtF-Written☹	.15**	-.06	.14*	.23***	.01	.16**	.22***	-.24***	-.25***	.09	.26***	-
13. FtF-Audi☹	.08	-.05	.10	.16**	.03	.13*	.16**	-.17**	-.20***	.03	.26***	.73***
14. FtF Preference ☹	.22***	-.04	.20***	.34***	.01	.27***	.26***	-.32***	-.30***	.11	.28***	.79***
15. Audi Preference ☹	-.05	.06	-.03	-.07	-.01	-.04	-.07	.09	.12	-.05	-.15**	-.88***
16.Written Preference ☹	.05	.05	.04	.08	-.04	.04	.03	-.03	.03	.03	-.13*	-.30***

Table 12. The Correlations between General Individual Difference Factors and the Relative Preferences (Continued)

	13	14	15	16
14. FtF Preference ☹	.70***	-		
15. Audi Preference ☹	-.54***	-.08	-	
16.Written Preference ☹	-.76***	-.40***	.39***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

3.3.4 Results for Research Question 4: Mediation Analysis

As will be remembered, the initial requirement for the mediation testing was the following: The mediating variables must significantly relate to the independent variable; the dependent variable must significantly relate to the independent variable, and the dependent variable must significantly relate to the mediating variable (Baron & Kenny,1986). Therefore, first, correlations were calculated between all hypothesized mediators (Oversensitivity to Negative Bodily Reactions and The Need for Preparation before Responding), predictors (general individual difference factors) and dependent variables (Relative Preferences). The correlations between predictors and outcome scores had already been calculated to answer the Research Question 3, and the results were presented in Table 11. Next, the correlation analyses were conducted to examine whether predictors (general individual difference factors) and outcomes (relative preferences) were significantly related to the hypothesized mediators. The results are presented in Table 12. These correlations were used to determine which predictors, potential mediators and outcome variables would be included in the subsequent mediation model. The potential mediators (Oversensitivity to Negative Bodily Reactions and The Need for Preparation before Responding) were significantly related to the outcome variables. Shyness, Social Anxiety, Openness-to-Experience, Need-for-Cognition, Cognitive Flexibility and Individuation were correlated with outcomes (FtF-Written☹ and FtF-Audi☹) and with the potential mediators (Oversensitivity to Negative Bodily Reactions and The Need for Preparation before Responding). Extroversion was significantly associated with only one of the outcomes (FtF-Written☹), and two mediators. The individual difference variables having non-significant

Table 13. Correlations among Hypothesized Mediators, Predictors and Outcomes (Study 2)

	Potential Mediators	
	Oversensitivity to Negative Bodily Feedback	The Need for Preparation before Responding
Extroversion	-.30**	-.31***
Neuroticism	.06	.10
Agreeableness	-.01	.02
Openness-to-Experience	-.36***	-.37***
Conscientiousness	.02	.05
Need-for-Cognition	-.29***	.19***
Cognitive Flexibility	-.38***	-.29***
Shyness	.51***	.47***
Social Anxiety	.49***	.45***
Relatedness	-.19**	-.11*
Individuation	-.32***	-.26***
Relative Preferences:		
FtF-Written☹	-.32***	-.27***
FtF-Audi☹	-.27***	-.21***

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

correlations with mediator or outcome variables were not included into the further analyses.

Individual difference variables of Extroversion, Social Anxiety, Shyness, Openness-to-Experience, Need-for-Cognition, Cognitive

Flexibility and Individuation were subjected to a free varimax rotated factor analysis (principal axis). The analysis yielded two factors explaining 56 %

Table 14. Results of Factor Analysis on the General Individual Difference Variables Involved in the Mediation Model

Variables	Varimax Rotation Loading	
	Factor 1	Factor 2
Shyness	-.83	-.25
Extroversion	.76	.05
Openness-to-Experience	.66	.28
Social Anxiety	-.64	-.34
Cognitive Flexibility	.57	.43
Need-for-Cognition	.20	.72
Individuation	.17	.66
Total Variance Explained	%36	%20

of the total variance. The first factor involved Shyness, Extroversion, Openness-to-Experience, Social Anxiety and Cognitive Flexibility. It explained 36% of the total variance. The second factor involved Individuation Need-for-Cognition, and Cognitive Flexibility. It explained 20% of the total variance. The factor loadings were presented in Table 14. Cognitive Flexibility, which had loadings over. 40, but had similarly the lowest loading in both Factors, was decided to excluded from the factor structure. Based on the obtained, two composite scores were created. As in

the first study, the first one was labeled as the Social Openness Factor and involved Shyness (reversed), Extroversion, Openness-to-Experience and Social Anxiety (reversed). The second one was labeled Individuated Functioning, and it involved the Need-for-Cognition and Individuation.

Structural Equation Modeling (SEM) was utilized to test that the Difficulty in Handling Negative Situations mediates the relationship between Social Openness and FtF-Mediated, and also between Individuated Functioning and FtF-Mediated. In testing models, a number of strategies were employed following Kenny, Kashy, and Bolger's (1998) suggestions. First, the measurement model was tested. With this model, it was aimed to provide evidence for that the latent variables were measured well by predefined indicators. Second, the proposed structural equation model was tested. Thirdly, two alternative models were tested. The goodness of fit statistics across models was compared. Those indices were the chi-square to degrees of freedom ratio, RMSEA, GFI, AGFI, CFI and NFI. For comparison of proposed model to alternatives, Akaike information criterion (AIC) index was used as suggested by Kline (1998). In all analysis, the covariance matrix was used as input and maximum likelihood estimation was employed. Analyses were conducted by using AMOS 7.0.

3.3.4.1 The Measurement Model

As illustrated in Figure 8, measurement model specified four latent constructs, namely, Social Openness, Individuated Functioning, the Difficulty of Handling Negative Situations, and FtF-Mediated. Social

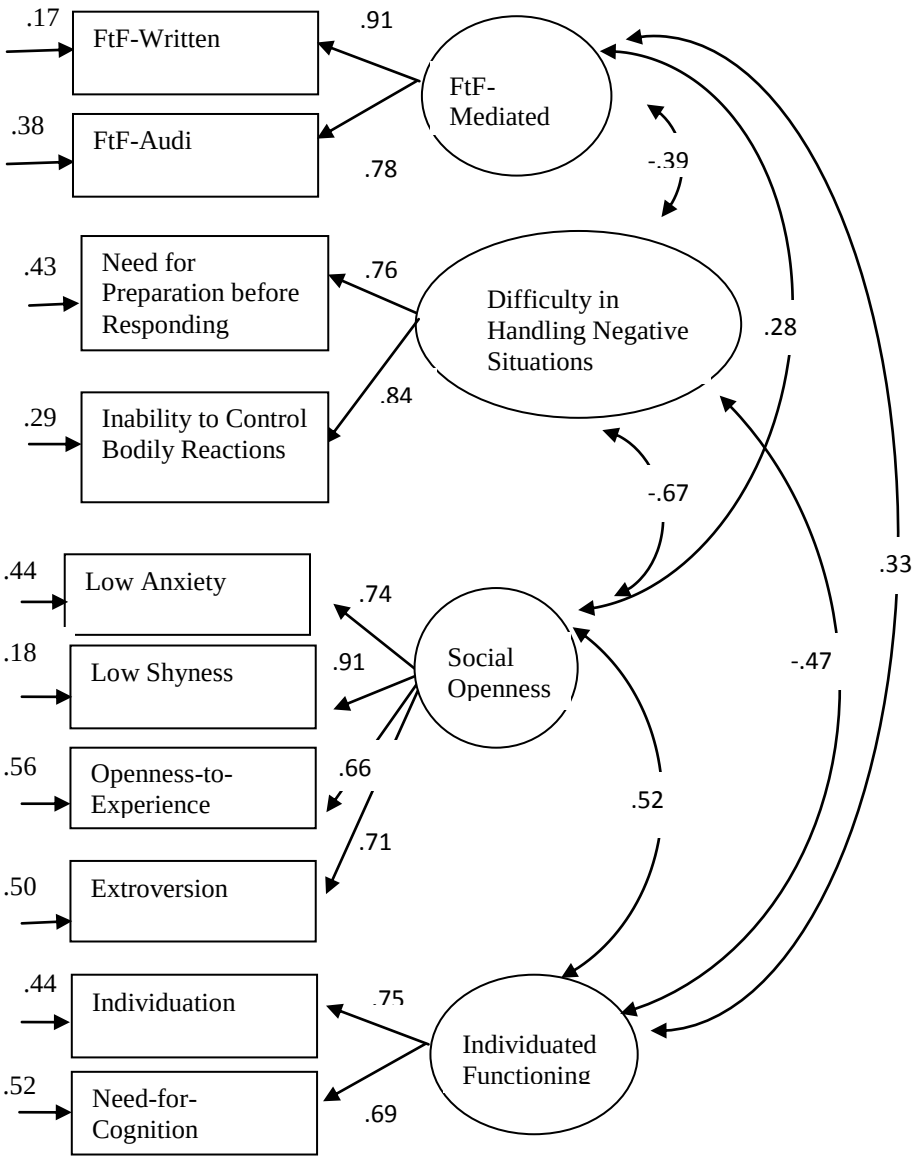
Openness had four indicators (Low Social Anxiety, low Shyness, high Openness-to-Experience and high Extroversion). All other latent constructs had two indicators. Individuated Functioning involved Need-for-Cognition and Individuation; the Difficulty of Handling Negative Situations involved the Need for Preparation before Responding, and Oversensitivity to Bodily Negative Feedback, and finally, FtF-Mediated involved FtF-Written and FtF-Audi. In the measurement model, each indicator was constrained to load only on the factor it was designated to measure, the residual terms for all indicators were fixed to be uncorrelated, no equality constraints on the factor loadings imposed, and the factor covariances were free to be estimated. This model indicated an acceptable fit, χ^2 (29, N=343) = 286.92, $p < .001$, $\chi^2/df = 2.54$, RMSEA= .07, GFI = .92, AGFI = .97, CFI = .97, NFI =.95. The model and the path coefficients are given in Figure 7. Next, the proposed structural model was evaluated and compared to the measurement model.

3.3.4.2 The Proposed Structural Model

As suggested by Kline (2006), independence model was estimated before testing the proposed model. The results indicated that independence model yielded a very poor fit; χ^2 (45, N = 343) = 1415.28, $p < .001$, which means that the proposed model can be tested. The exogenous variables of the study were Social Openness and Individuated Functioning, the mediator variable was the Difficulty of Handling Negative Situations, and the outcome was FtF-Mediated.

First, a model was tested in which direct and indirect links from the predictors to outcome were included. The model had a good fit, χ^2 (29, 178) = 73.70, $p < .001$, $\chi^2/df = 2.54$, GFI = .96, AGFI = .92, CFI = .97, NFI = .95, RMSEA = .07, AIC = 125.70. There was one insignificant path: The direct path between Social Openness to the outcome. The non-significant path was dropped, and the analysis was re-runned. As indicated by fit indices, the model showed an acceptable fit to data, χ^2 (30, N=343) = 73.86, $p < .001$; $\chi^2/df = 2.46$; RMSEA = .07; GFI = .96; AGFI = .92; NFI = .95; CFI = .97. The revised model and its path coefficients are displayed in Figure 8.

As seen in Figure 8, both Social Openness and Individuated Functioning negatively predicted the Difficulty in Dealing with Negative Situations (-.19, -.17, respectively), and in turn, this difficulty negatively predicted FtF-Mediated (-.32). Also, Individuated Functioning directly predicted FtF-Mediated (.20). The results indicated a partial mediation between Individuated Functioning and FtF-Mediated and a full mediation between Social Openness and FtF-Mediated.



χ^2 (29, N = 343) = .46, p < .001 χ^2 /df = 2.54, GFI = .92, AGFI = .97, CFI = .97, NFI = .95, RMSEA = .07

Figure 7. Measurement Model for the Proposed Mediation Model

Forty seven percentage of the variance in the Difficulty in Handling Negative Situations was explained by its predictors in the model (Social Openness and Individuated Functioning), and 17% of the variance in FtF-

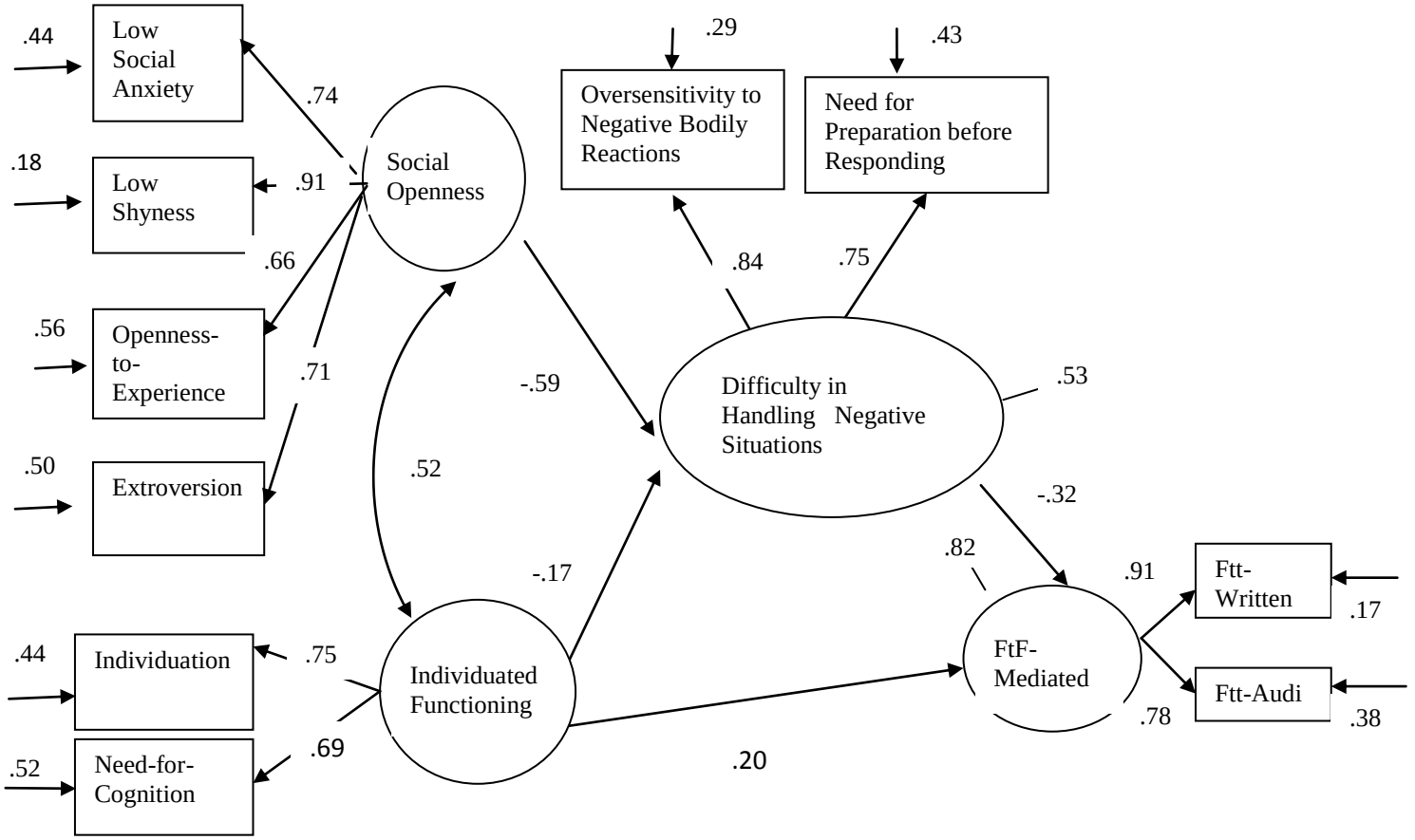
Mediated was explained by its predictors (Social Openness, Individuated Functioning and the Difficulty in Handling Negative Situations).

3.3.4.3 Alternative Models

Two alternative models were developed. In the first one, Difficulty in Handling Difficult Situation was considered as an independent (exogenous) variable while in the second one, it was considered as a dependent (endogenous) variable.

As noted before, the test of the proposed mediation model provided acceptable fit to the data; χ^2 (29, N = 343) = 73, 70 p <. 001; χ^2/df = 2.54; RMSEA = .07; GFI = .96; AGFI = .92; NFI = .95; CFI = .97. The first alternative model yielded fit indices very similar to the ones in the proposed model, χ^2 (30, N=343) = 73.86, p < .001; χ^2/df = 2.46; RMSEA = .07; GFI = .96; AGFI = .92; NFI = .95; CFI = .97. Some of the fit indices yielded by the second alternative model (the chi-square statistic and chi-square-degrees of freedom ratio) were relatively poor while other fit indices were similar to the ones in the proposed model, χ^2 (30, N = 343) = 84.68, p <.001; χ^2/df = 2.82; RMSEA = .07, GFI = .96, AGFI = .91, CFI = .94, NFI = .96.

When the proposed model was compared with alternative models in terms of AIC index, it was seen that the value of AIC index for the proposed model (AIC = 123.86) was lower than both alternative models (AIC = 125.70 and AIC = 134.68, respectively).



(χ^2 (30, 343) = 73.86, p =.000, RMSEA = .07)

Figure 8. The Structural Model for the Proposed Mediation Model

3.4 Discussion

Study 2 yielded results that are consistent with the results of Study 1 in many respects. First of all, according to the findings of Study 2, face-to-face communication preferred more than both auditory and written forms of mediated communication. The two studies were also similar in that face-to-face communication was negatively associated to written communication in negative situations. The implications of these results were discussed in Chapter 1. In this section, I will try to discuss in what senses the findings of Study 1 and 2 are similar and dissimilar, also, what information was gathered through Study 2 over and beyond the findings of Study 1.

In Study 1, participants were given a list of interpersonal situations, and were simply asked how difficult they perceived each of them. The perceived difficulty of communication situation was measured by taking the mean of these self-ratings, and according to results, this measure was negatively associated with participants' relative preferences for face-to-face over mediated communication. In Study 2, however, it was not aimed to investigate participants' evaluation of situations in an easy-difficult continuum. Rather, it was aimed to gather some information about participants' self-evaluation of their own performance in the given situations. Participants were given the same interpersonal situations as in Study 1, but then, were asked to evaluate 1) how sensitive they would be to negative bodily reactions during these situations, and 2) how much time

they would need for preparation before responding. In one sense, the specific communicative characteristics inherent to individuals, which may make them perceive several situations as difficult, were explored in Study 2. In that way, the concept of "perceived difficulty of communication situation" in the former study was tried to be understand better. According to the findings, the more sensitive people to negative reactions, and the more time they need for preparation before responding, their relative preference for face-to-face communication over mediated communication decreases. This result is consistent with the finding of Study 1.

Eleven individual difference variables were investigated in the Study 2. Four of them (Agreeableness, Relatedness, Conscientiousness and Neuroticism) were found not to be associated with outcome variables and/or mediators. This was again, consistent with the findings of Study 1. The other individual difference variables (Individuation, Need-for-Cognition, Cognitive Flexibility, Extroversion Openness-to-Experience, Shyness and Social Anxiety) were used to form two higher-order constructs: Individuated Functioning and Social Openness. Similar to Study 1, Extroversion and Openness-to-Experience were placed under the construct of Social Openness. In addition to Extroversion and Openness-to-Experience, two more variables were placed into Social Openness construct: Shyness (reversed) and Social Anxiety (reversed).

On the other hand, Need-for-Cognition and Individuation were placed under the construct of Individuated Functioning, just as in Study1. Social Openness and Individuated Functioning were found to be correlated

constructs in both studies. According to the results of Study 2, the Difficulty in Handling Negative Situations was related to Social Openness, Individuated Functioning, and Relative Preference for face-to-face over mediated communciaiton. Difficulty in Handling Negative Situations decrased as Social Openness and Individuated Functioning increased, and in turn, Relative Preference increased. Social Openness was found to be indirectly linked to Relative Preference for face-to-face over mediated communication via Difficulty in Handling Negative Situations, while Individuated Functioning was both directly and indirectly linked to it.The finding that there was an indirect association between Social Openness and Relative Preference via Difficulty in Handling Negative Situations was consistent with the findings in Study1 in which there was an indirect association between Social Openness and Relative Preference via Perceived Difficulty of Communication Situations. On the other hand, Individuated Functioning had only a direct link to Relative Preferences in the Study1 (the study in which the mediator was the Perceived Difficulty of the Communication Situation) whereas both a direct and indirect link was found in Study 2 (the study in which the mediator was the Difficulty in Handling Negative Situation). It seems that people with high Individuated Functioning had a high relative preference for face-to-face over mediated communication not because that they perceive the negative communication situations less difficult, but because they find it easier to cope with the difficulty of negative situations as compared to people with low Individuated Functioning. General implications of the findings are considered in the following General Discussion chapter.

CHAPTER 4

GENERAL DISCUSSION

The present thesis attempts to expand the empirical basis for understanding communication technology preferences in friendships. In particular, I wanted to know how young adults make choices for having a face-to-face versus mediated conversation with their friends when various communication technologies are simultaneously available to them. Young people are increasingly using communication technologies to achieve a whole range of daily activities-including social interaction with friends in several situations. I thought that understanding to what extent and in what ways communication technologies are integrated into individuals' friendship maintenance process may contribute to general understanding of communication patterns in friendships among university students. This idea motivated me to conduct two empirical studies based on surveys of university students. The findings are indeed quite encouraging in terms of their contribution to current research knowledge on communication channel preferences. It is important to note that the findings are not intended to suggest which channel should be used, but rather to help predict which channel will be preferred.

One of the major findings is that face-to-face communication (the richest channel in the richness spectrum) is the most preferred channel for anyone and for any situation, and the written communication (the leanest one in the richness spectrum) is the least preferred. This finding lends

support to theories emphasizing the element of "channel characteristics" (Cues-Filtered-Out Theories). Another very clear-cut finding is that positive messages are more preferable than negative messages. Finally, the results demonstrated that individual difference factors investigated in the current two studies can be combined under two higher level constructs named Individuated Functioning and Social Openness, and that these constructs are directly and/or indirectly associated with relative preference for face-to-face over mediated communication in giving negative messages. This finding supports the theories emphasizing the element of "individuals' characteristics" (Cues-Filtered-In Theories).

Overall, the findings signal the importance of considering Cues-Filtered-In and -Out theories as complementary rather than competing as suggested by Webster and Trevino (1995). In most studies, the superiority of one of these approaches to the other has been claimed. Integrative approaches receive relatively little attention. The findings presented here signal that the distinction between Cues-Filtered-In and –Out Theories is perhaps unnecessary: Multiple factors from both approaches may be incorporated to the research on the antecedents of communication channel preferences, and results may be interpreted in the light of both approaches.

Below, the major findings will be addressed separately. After discussing main findings, limitations of the study and suggestions for future research will be presented. Finally, major contributions of the study will be discussed.

4.1 The Findings Regarding the Comparison of Preference Levels for Face-to-Face, Written and Auditory Communication

The major message from both studies is very clear: Even when many different forms of communication technologies are available, people prefer face-to-face communication. This result must be a relief for pessimistic scholars concerned with "…people's enslavement to digital technology, their growing dependency, the breakdown of social structures and values and unstoppable growth of technology…" (as cited in Thurlow, Lengel & Tomic, 2004) The findings of current studies suggested that none of those technologies appear as replacing face-to-face communication. As human beings, we are born to communicate and are driven to maximize our communication satisfaction and interaction (Kock, 2004). We have been provided this satisfaction through face-to-face communication for thousands of years. We have been using technological communication tools, however, for only hundreds of years. It may be that we still feel face-to-face communication as more natural, and this may be why we are more comfortable with it than with technological tools. Or it may be that nonverbal elements and geographical co-presence are important for interactions to be satisfactory. The current study did not provide information about whether people actually communicate face-to-face more often than they communicate via mediated communication in various communication situations, but it showed that people believe that they would prefer being face-to-face in a variety of communication situations, suggesting that traditional face-to-face contact is perhaps considered as having the potential

to satisfy communicating needs of human beings better than any other communication method.

4.2 The Finding Regarding the Valence of the Given Message

The influence of the message valence (Positive vs. Negative) on channel preferences was examined in the first study. Positive messages were more preferable than negative messages. Furthermore, the perceived difficulty of negative message, but not of positive messages was associated to relative preferences. Sheer and Cheer (1994) explained a possible mechanism for the influence of message valence on communication channel preference in manager-subordinate relationships in a work context. Some factors in their explanation may be used in a friendship context as well: When a message is positive, the message-giver is unlikely to feel a threat to his or her image or to the relationship with his or her friend. On the other hand, when a message is negative, the reactions from the message-taker may make the communication undesirable. The message giver's concern for self-presentation and relationship maintenance may become more prominent. The message giver may be motivated to choose a leaner medium that communicates a detachment from the negative message. That way, the chosen communication channel may mitigate the relational damage and assist in maintaining good relationship.

4.3 The Findings Regarding the Communication-Specific Individual Difference Factors

Although earlier studies have shown that general individual difference factors have some influences on face-to-face versus mediated communication preferences, there has been relatively little effort to investigate a more comprehensive framework that attempts to explain the process of how individuals' general characteristics are linked to their preferences. In this thesis, I present the perceived difficulty of communication situations (Study 1) and two specific difficulties in handling communication situations (Study 2) as concepts insightful for understanding the link between individuals' characteristics and their communication channel preferences. I tested models in which these concepts were mediators. The only study that I could find in the literature which studies the effects of specific communication situations together with users' personality characteristics on communication channel preferences is the study done by Karemaker (2005). He gave participants eight social situation scenarios and asked them whether they will choose face-to-face or computer-mediated communication if they were in those situations. Half of the scenarios were high arousal scenarios (difficult situations) and the other half were low arousal scenarios (easy situations). He found that stable extroverts were more likely to prefer face-to-face over computer-mediated communication whereas neurotic introverts were more likely to prefer computer-mediated over face-to-face communication. He found no moderating effect of high versus low arousal social situations. It is possible that the extreme nature of his high arousal scenarios (i.e.: "Your best friend tells you that he/she is in

love with you. The feeling is not mutual." or "You find out a friend stole something from you.") leads participants to choose more traditional or most commonly used means of communication, regardless of their personality types. In real life, people often make decisions about which communication channel to use in relatively mild situations. Usually, these situations cannot be strictly categorized as high-arousal, or low-arousal. The level of arousal those situations cause depends on individuals' perception. For this reason, in the first study, I prepared hypothetical situations which are relatively mild, and asked participants to rate the perceived difficulty of situations. Seeing that the concept of the perceived difficulty of communication situation functions well as a mediator between some individual differences and relative preference for face-to-face over mediated communication, in the second study, I attempted to explore this concept further. Unlike face-to-face communication, some forms of mediated communication allow individuals *when* to respond to others. This offers the benefit of allowing communicators to think out more structured, more complex responses. Furthermore, unlike face-to-face communication, some forms of mediated communication allow communicators to hide their physical appearance from others. This benefits the communicators who are not good at dealing with giving and taking nonverbal messages. Study 2 explored these two factors – Need for Preparation before Responding and Oversensitivity to Negative Bodily Feedback- as contributors of "difficulty in handling negative situations". I should note that the nature of the concepts of "difficulty" in Study 1 and 2 are not exactly the same: In the first study, participants were asked to evaluate the difficulty of *situations,* in the second

study, they were asked to evaluate *their own behaviors* in those situations. Although I believe that perceiving a situation as difficult is strongly tied with individuals' perceptions of their competency in dealing with the situation, it is important to notice that these concepts are not the same.

4.4 The Findings Regarding the Associations between General Individual Difference Factors and Relative Preferences for Communication Channels

In the current studies, I attempted to investigate a large number of individual difference variables. I tried not only to figure out which of those variables were associated to communication channel preferences, but also to categorize those individual difference variables into theoretically meaningful sets which can be empirically tested. According to the findings of the first study, the individual difference factors under examination were categorized into two: Social Openness and Individuated Functioning. In the second study, I examined a larger set of individual difference variables. Again, two factors, named as Social Openness and Individuated Functioning, were created out of the variables under examination. Social Openness and Individuated Functioning tapped into two basic human motivations: One is social-emotional and the other is cognitive. Social Openness may be argued to be assessing individuals' receptivity to many varieties of social experiences and feelings, also involving an appreciation of interpersonal experience for its own sake. Individuated Functioning, on the other hand, may be argued to be assessing individuals' motivation to

gain knowledge, skills and resources to successfully deal with several life events.

Although individual difference variables can be conceptualized in many different ways, the two-factor structure proposed here is useful in forming global information about individuals, and can be supported on the basis of current literature and conceptual analyses. The theoretical framework that would best support this two-factor approach is İmamoğlu's Balanced Integration-Differentiation Model (BID). İmamoğlu argues that Individuation and Relatedness are two basic human needs, which are distinct but complementary. The construct named as "Individuated Functioning" in the current study describes exactly the same human tendency referred to as "Individuation" in the BID Model. "Social Openness", on the other hand, is fairly similar to "Relatedness" in the BID Model; the major difference is that Relatedness is the name of a general motivation to be positively interrelated with others, while Social Openness appears as a courage or forwardness to be involved in various social interactions and social experiences, which may or may not give birth to good relations with others. As noted in the Introduction, Individuation and Relatedness are distinct but complementary self orientations. Individuated Functioning and Social Openness also are empirically and theoretically different constructs although they were found to be strongly associated, and both Study 1 and 2 shows that they have similar influences on Relative Preferences: Higher a person is on Social Openness and Individuated Functioning, higher the difference in their relative preference for face-to-face over mediated communication.

According to the findings, although there is a general tendency of preferring face-to-face over mediated communication, this relative preference decreases if people have low levels of orientation toward Social Openness and Individuated Functioning. If individuals are low on these two aspects, they may perceive mediated communication as a good way of giving their negative message as compared to the individuals who are high on those aspects. To some extent, the findings can be interpreted as supporting the argument that whether or not an aspect of the technology is a constraint or an opportunity may depend on the users' characteristics. People with high levels of Social Openness and Individuated Functioning may perceive some aspects of communication technologies (e.g., limited transmission of nonverbal messages, asynchrony...etc.) as constraints, thus, their relative preference for face-to-face communication over mediated communication may remain high. However, people with low levels of Social Openness and Individuated Functioning, may not perceive a big difference between giving a message face-to-face or through mediated communication, probably due to the fact that they experience problems or difficulties in face-to-face communication, and they consider characteristics of mediated communication (e.g., limited transmission of nonverbal messages, asynchrony...etc.) as opportunities to overcome these difficulties.

4.5 Limitations and Suggestions for Future Research

Although the current study has contributed to the current literature, it is not without its limitations that should be considered when interpreting the presented findings and in planning future research.

First, people may relate differently to their friends, romantic partners, family members, relatives, neighbors, acquaintance… etc. The results of these two studies are limited to friendship. Because of the complex nature of interpersonal relationships, it is hard to generalize results of these studies to different forms of interpersonal relations. Future studies are needed to examine whether present findings can be generalized to other close relationships. Second, I did not ask participants about their closeness to friends and/or importance of maintaining friendship, which may influence the outcomes.

Third, conceptualization and categorization of individual difference variables were difficult and complex. Although individual difference characteristics were categorized into two latent constructs in both studies, more research should be conducted by using different measures of individual difference variables, and two-factor structure should be re-tested.

Fourth, it is assumed that people use face-to-face communication relatively less and mediated communication more when they are unsatisfied with the quality of face-to-face communication. However, participants were not directly asked how satisfied they were in face-to-face communication. In interpretation of results, a low score on perceived difficulty of communication situation (Study 1), or on participants' oversensitivity to negative feedback and the time needed for preparation before responding (Study 2) were accepted as signs of relative satisfaction or dissatisfaction with face-to-face communication.

Fifth, in current studies, all data consist of participants' perceptions and self-reports. Although self-reports have always been central in

psychology, they are neither the only means nor the invariably best. Alternatives may be peer ratings. People might believe that they were nervous, energetic, original, accommodating, or careful but others around them might have quite different ideas about their characteristics. Future studies could also collect measures of actual communication behaviors, and other persons' evaluations of one's characteristics.

Sixth, as mediated technologies become more complex, and capable of integrating video and voice, it would become more important to understand how attributes of such kinds of complex technologies influence communication choice. Further studies are needed to examine those new technologies such as virtual social networks (e.g., Facebook, MySpace…etc.).

Another limitation of the study was unequal male-female ratio. In both data sets, majority of the respondents were female. This limitation may need to be considered when generalizing our results to men. Although gender was not found to have significant effects on the variables considered, this issue may need to be pursued further in future research.

4.6 Contributions to Current Literature and Conclusions

Individuals have a desire to open-up their feelings and thoughts to others, which is preferably fulfilled through face-to-face communication. New communication technologies have a capacity to respond to the fundamental desire of people to communicate and to relate to each other. Some people appreciate these technologies more than others. The current studies demonstrated that individuals' characteristics are systematically

related to their relative preferences for face-to-face over mediated channels. It appears that people who tend to be less open to social experiences and have less motivation to improve their personal skills benefit from communication technologies which provide a "safe context" to them during negative communication situations. It seems that, to some extent, communication technologies may be providing a comfortable alternative which those people are looking for in order to overcome their difficulties. These ideas are supported by mediation models. In overall, the current studies contributed to the understanding of how and why people prefer one communication method over another by using a conceptual framework in which various characteristics of individuals, channels and situations were included. I would like to mention the following points as the major strengths of the current studies.

In recent years, researchers whose main research interest is interpersonal communication have begun to appreciate the importance of understanding the role of mediated communication in the phenomena they study. Yet, majority of research focused on establishing technological relationships with strangers, or maintenance of long distance relationships (Joinson, McKenna, & Postmes, 2007). In the current research, I tried to bring a relatively neglected area of mediated communication to the attention, which is mediated communication for maintaining close-distance friendships.

Second, I reviewed a sizable and remarkably diverse body of literature concerned with the social psychology of face-to-face and mediated communication. My focus has been on bringing the previous studies

regarding the roles of several individual difference factors in face-to-face and mediated communication behaviors together. This detailed review led me to think that it is important to concentrate on what the general themes were underlying those factors. Two empirical works reported here coherently demonstrated the existence of these general themes: Social Openness and Individuated Functioning. The studies contributed to existing literature by showing that an understanding of individual difference factors on channel preferences can be enhanced by consideration of the use of those higher order constructs.

Another contribution of the current studies to literature is that they supported idea that the valence of the message (positive versus negative) should be taken into account while studying communication relative preferences for face-to-face over mediated communication. This result may provide a basis for conducting further studies. Future studies in this field may focus on examining what message (e.g., expressing embarrassment, injury, anger, failure, guilt...etc) is negative for whom. Future studies may also focus on finding out what aspect of the message other than its valence influence individuals' channel preference.

One of the strength of these studies is that they did not only demonstrate that some general individual factors were associated to the channel preferences but also attempted to explain through which specific mechanism they were associated. The offered mechanisms were the perceived difficulty of communication situations (Study 1); individuals' oversensitivity to negative feedback and their need for preparation before responding (Study 2). I think that a deeper understanding of general

individual difference factors on channel preferences can come from recognizing and working with such kinds of relatively specific variables.

The fourth strength is that I examined individuals' preferences for several different communication technologies within a single study. General trend in the literature is to examine a single technology at a time. The current study allowed me to examine the associations of preference for one channel to other.

As final words, I would like to say that I believe that the insights gained by this research will be beneficial for understanding how channel preference is accomplished during friend-to-friend interactions, and this understanding of channel preferences, in turn, will be incorporated into theoretical models of the interpersonal communication process. I am, therefore optimistic about the prospects for achieving a more comprehensive and systematic social psychological understanding of interpersonal communication –both face-to-face and mediated.

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APPENDICES

A. THE SCALES USED IN THE FIRST STUDY

B. PSYCHOMETRIC CHARACTERISTICS OF THE NEW SCALES USED IN THE STUDY 1

C. THE NEW AND THE REVISED SCALES IN THE STUDY 2

D. PSYCHOMETRIC CHARACTERISTICS OF THE NEW SCALES USED IN THE STUDY 2

APPENDIX A

THE SCALES USED IN THE STUDY 1

A.1 The Need for Cognition

Aşağıda bazı ifadeler bulunmaktadır. Her birini size uygunluğu açısından değerlendiriniz.

	Kesinlikle Bana Aykırı	Bana Aykırı	Kararsızım	Beni Anlatıyor	Tamamen Beni Anlatıyor
1. Karmaşık problemleri basit problemlere yeğlerim.	1	2	3	4	5
2. Çok düşünmeyi gerektiren bir işin sorunluluğunu almak hoşuma gider.	1	2	3	4	5
3. Düşünmek benim için bir eğlence biçimi değildir.	1	2	3	4	5
4. Düşünce yeteneğini zorlayacak bir şey yapmaktansa, az düşünmeyi gerektirecek şeyleri tercih ederim.	1	2	3	4	5
5. Bir mesele hakkında derin düşünmemi gerektirecek durumları önceden sezip, onlardan uzak durmaya çalışırım.	1	2	3	4	5
6. Bir sorunu kafamda uzun süre yoğun bir biçimde tartışmak hoşuma gider.	1	2	3	4	5
7. Sadece durumun gerektirdiği kadar derin düşünürüm.	1	2	3	4	5
8. Uzun süreli işlere kafa yormaktansa, küçük, günlük meseleler hakkında düşünmeyi yeğlerim.	1	2	3	4	5
9. Nasıl yapıldığını öğrendikten sonra fazla düşünmeyi gerektirmeyecek işleri tercih ederim.	1	2	3	4	5
10. İşimde düşünme yeteneğime güvenerek yükselme fikri bana çekici gelir.	1	2	3	4	5
11. Sorunlara yeni çözümler bulmayı gerektiren işler bana gerçekten zevk verir.	1	2	3	4	5
12. Yeni düşünce biçimleri öğrenmek bana pek heyecan vermez.	1	2	3	4	5
13. Yaşamımın çözmem gereken bulmacalarla dolu olmasını yeğlerim.	1	2	3	4	5
14. Soyut düşünme eylemi bana çekici gelir.	1	2	3	4	5
15. Aynı öneme sahip, fazla düşünce gerektirmeyen bir iş yapmaktansa, kafa çalıştırmayı gerektiren zor ve önemli işi yapmayı tercih ederim.	1	2	3	4	5

16. Çok zihinsel çaba gerektiren bir işi tamamlayınca tatminden ziyade rahatlama duygusu hissederim.	1	2	3	4	5
17. Bence bir nesnenin kendisinden beklenen işi görmesi önemlidir, işi nasıl ve neden gördüğü benim ilgimi çekmez.	1	2	3	4	5
Kişisel olarak beni etkilemeleri söz konusu olmasa bile birçok değişik konuda düşünürüm.	1	2	3	4	5

A.2 Personality Characteristics

BİREYSEL ÖZELLİKLER ÖLÇEĞİ

Aşağıda size uyan ya da uymayan pek çok kişilik özelliği bulunmaktadır. Bu özelliklerden her birinin sizin için ne kadar uygun olduğunu ilgili rakamı daire içine alarak belirtiniz.

Örneğin; **Kendimi ..... biri olarak görüyorum.**

Hiç uygun değil	Uygun değil	Kararsızım	Uygun	Çok uygun
1	2	3	4	5

		Hiç uygun değil	Uygun değil	Kararsızım	Uygun	Çok uygun			Hiç uygun değil	Uygun değil	Kararsızım	Uygun	Çok uygun
1	Aceleci	1	2	3	4	5	24	Pasif	1	2	3	4	5
2	Yapmacık	1	2	3	4	5	25	Disiplinli	1	2	3	4	5
3	Duyarlı	1	2	3	4	5	26	Açgözlü	1	2	3	4	5
4	Konuşkan	1	2	3	4	5	27	Sinirli	1	2	3	4	5
5	Kendine güvenen	1	2	3	4	5	28	Canayakın	1	2	3	4	5
6	Soğuk	1	2	3	4	5	29	Kızgın	1	2	3	4	5
7	Utangaç	1	2	3	4	5	30	Sabit fikirli	1	2	3	4	5
8	Paylaşımcı	1	2	3	4	5	31	Görgüsüz	1	2	3	4	5
9	Geniş-rahat	1	2	3	4	5	32	Durgun	1	2	3	4	5
10	Cesur	1	2	3	4	5	33	Kaygılı	1	2	3	4	5
11	Agresif	1	2	3	4	5	34	Terbiyesiz	1	2	3	4	5
12	Çalışkan	1	2	3	4	5	35	Sabırsız	1	2	3	4	5
13	İçten pazarlıklı	1	2	3	4	5	36	yaratıcı	1	2	3	4	5
14	Girişken	1	2	3	4	5	37	Kaprisli	1	2	3	4	5
15	İyi niyetli	1	2	3	4	5	38	İçine kapanık	1	2	3	4	5
16	İçten	1	2	3	4	5	39	Çekingen	1	2	3	4	5
17	Kendinden emin	1	2	3	4	5	40	Alıngan	1	2	3	4	5
18	Huysuz	1	2	3	4	5	41	Hoşgörülü	1	2	3	4	5
19	Yardımsever	1	2	3	4	5	42	Düzenli	1	2	3	4	5
20	kabiliyetli	1	2	3	4	5	43	Titiz	1	2	3	4	5
21	Üşengeç	1	2	3	4	5	44	Tedbirli	1	2	3	4	5
22	Sorumsuz	1	2	3	4	5	45	Azimli	1	2	3	4	5
23	Sevecen	1	2	3	4	5							

A.3 Balanced Integration Model of Self

Aşağıdaki maddelerin her birine ölçüde katıldığınızı lütfen 5'li ölçek üzerinde belirtiniz.

Hiç katılmıyorum	**Katılmıyorum**	**Ne katılıyorum, ne katılmıyorum**	**Katılyorum**	**Tamamen katılıyorum**
1	2	3	4	5

	Hiç katılmıyorum	**Katılmıyorum**	**Ne katılıyorum, Ne katılmıyorum**	**Biraz katılıyorum**	**Tamamen katılıyorum**
1. Kendi kendime kaldığımda yapacak ilginç şeyler bulabilirim.	1	2	3	4	5
2. Kendimi aileme hep yakın hissedeceğime inanıyorum.	1	2	3	4	5
3. İnsanlarla ilişki kurmakta güçlük çekiyorum.	1	2	3	4	5
4. Kendi isteklerimi yapabilmek için kendime mutlaka zaman ve imkan tanımaya çalışırım.	1	2	3	4	5
5. Kendimi duygusal olarak toplumun dışında kalmış gibi hissediyorum.	1	2	3	4	5
6. Kendimi duygusal olarak aileme çok yakın hissediyorum.	1	2	3	4	5
7. Farklı olmaktansa, toplumla düşünsel olarak kaynaşmış olmayı tercih ederim.	1	2	3	4	5
8. Kendimi yakın çevremden duygusal olarak kopmuş hissediyorum.	1	2	3	4	5
9.Kendimi insanlardan olabildiğince soyutlayıp, kendi isteklerimi gerçekleştirmeye çalışırım.	1	2	3	4	5
10. Hayatta gerçekleştirmek istediğim şeyler için çalışırken, ailemin sevgi ve desteğini hep yanımda hissederim.	1	2	3	4	5
11. Kendimi yalnız hissediyorum.	1	2	3	4	5
12.Ailemle duygusal bağlarımın zayıf olduğunu hissediyorum.	1	2	3	4	5
13. Ailemle aramdaki duygusal bağların hayatta yapmak istediğim şeyler için bana güç verdiğini düşünüyorum.	1	2	3	4	5
14. Kendimi diğer insanlardan kopuk hissediyorum.	1	2	3	4	5
15. Toplumsal değerleri sorgulamak yerine benimsemeyi tercih ederim.	1	2	3	4	5

	Hiç katılmıyorum	Katılmıyorum	Ne katılıyorum, Ne katılmıyorum	Biraz katılıyorum	Tamamen katılıyorum
16. Kendimi sosyal çevreme duygusal olarak yakın hissediyorum.	1	2	3	4	5
17. Kendimi ilginç buluyorum.	1	2	3	4	5
18. İnsanın kendi kendini istediği gibi değil, toplumda geçerli olacak şekilde geliştirmesinin önemli olduğunu düşünüyorum.	1	2	3	4	5
19. İnsan geliştikçe, ailesinden duygusal olarak uzaklaşır.	1	2	3	4	5
20. İnsanın en önemli amacı sahip olduğu potansiyeli hakkıyla geliştirmek olmalıdır.	1	2	3	4	5
21. İnsanın kendi farklılığını geliştirip ortaya çıkarabilmesi gerekir.	1	2	3	4	5
22. Kişinin kendine değil, topluma uygun hareket etmesi, uzun vadede kendi yararına olur.	1	2	3	4	5
23. İnsanın yapmak istediklerini yapabilmesi için, ailesiyle olan duygusal bağlarını en aza indirmesi gerekir.	1	2	3	4	5
24. Çevremdekilerin onayladığı bir insan olmak benim için önemlidir.	1	2	3	4	5
25. Zamanımızda insanlar arasında güçlü duygusal bağların olması, kendileri için destekleyici değil, engelleyici olur.	1	2	3	4	5
26. Sahip olduğum potansiyeli ve özelliklerimi geliştirip kendime özgü bir birey olmak benim için çok önemlidir.	1	2	3	4	5
27. Çevreme ters gelse bile, kendime özgü bir misyon için yaşayabilirim.	1	2	3	4	5
28.Herkesin kendi farklılığını geliştirmeye uğraşması yerine toplumsal beklentilere uygun davranmaya çalışmasının daha doğru olduğu kanısındayım.	1	2	3	4	5
29.Toplumlar geliştikçe, insanlararası duygusal bağların zayıflaması doğaldır.	1	2	3	4	5

A.4 Preference for Communication Channels

Anketin bu bölümünde, bir arkadaşınızla iletişim kurmanızı gerektirecek çeşitli durumlar sıralanmıştır. Kendinizi bu durumları yaşayan kişinin yerine koyun. Bu görüşmelerden her birini yüz yüze yapmayı veya sıralanan iletişim kanallarından birini kullanmayı (telefon, internet-chat, görüntülü internet-chat veya e-mail) tercih ediyor olabilirsiniz. Sizden istediğimiz, yüz yüze iletişimi ya da size verilen diğer iletişim kanallarından birini tercih etmeniz söz konusu olduğunda, öncelikli olarak hangisini kullanmayı tercih edeceğinizi 5'li ölçek üzerinde işaretlemenizdir.

Ölçek üzerinde

1. "Asla tercih etmem"
2. "Büyük olasılıkla tercih etmem"
3. "Kararsızım"
4. "Büyük olasılıkla tercih ederim"
5. "Kesinlikle tercih ederim" **anlamına gelmektedir.**

Lütfen, hayatınızdaki tek bir arkadaşınızı değil, arkadaş ilişkilerinizi genel olarak düşünün ve 5'li ölçek üzerinde, her bir maddeyi değerlendirin.

DİKKAT! Durumları değerlendirirken, iletişim kanallarından herhangi birini kullanmakla ilgili teknik bir problem bulunmadığını (sizin ve arkadaşınızın telefon, bilgisayar, internet bağlantısı ve web-cam imkanlarına sahip olduğunu) ve arkadaşınıza yüz yüze ulaşma imkanının da var olduğunu (aranızda aşılması zor bir fiziksel mesafe olmadığını) varsayın. Hangi kanalı seçeceğiniz tümüyle sizin kişisel tercihinize kalmış olsaydı her bir iletişim seçeneğini seçmeye ne kadar istekli olacağınızı düşünün.

Çalışmada incelenen iletişim kanalları hakkında açıklamalar:

Yüz yüze: Kişinin aynı mekanda karşı karşıya gelerek konuşması

Mektup: Kağıt-kalem kullanılarak oluşturulan yazılı mesajların iletilmesi. Sadece posta aracılığıyla gönderilen mektuplar değil, arkadaşınızın odasına/masasına elden bırakabileceğiniz veya bir tanıdık aracılığıyla gönderebileceğiniz yazılı mesajlar da mektup olarak kabul edilmektedir.

Sabit telefon: Sabit telefonla (ev ya da ofis telefonu) yapılan konuşmalar
Cep telefonu (sesli görüşme): Cep telefonuyla yapılan karşılıklı konuşmalar
Cep telefonu (SMS mesaj): Cep telefonuyla yapılan yazılı görüşmeler (metin mesajı alma-verme)
Internet-chat : MSN, ICQ...vb. kanallarla gerçekleştirilen, tarafların eş-zamanlı olarak yazışabildikleri internet iletişimi
Internet-chat (görüntülü): Internet chat kanallarının webcam aracılığıyla görüntü ve ses işlevleri kazandırılmış hali
E-posta: İnternet üzerinden gönderilen sanal mektup; e-mail

1. Arkadaşınızı üzecek ya da kızdıracak bir hata yaptınız ve bu hatanızı ona itiraf edeceksiniz.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

2. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi soruyor. Siz, yaptığı çalışmayı pek beğenmediniz ve kendisine eleştirilerinizi söyleyeceksiniz.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

3. Arkadaşınız bir konuda karar verme aşamasında. Sizi o konuda kendinden daha bilgili ve deneyimli biri olarak gördüğünden karar vermeden önce sizin bilginizden yararlanmak, sizden fikir almak istiyor. Ona konuyla ilgili deneyimlerinizi ve kişsel fikrinizi aktaracaksınız.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

4. Arkadaşınız, kendisini çok sevindiren ve gururlandıran bir başarı kazandı. Bu başarısından ötürü onu tebrik edeceksiniz.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

5. Geçmişte yaşadığınız bir başarısızlığınızı ya da utandığınız bir olayı arkadaşınıza anlatacaksınız.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

6. Arkadaşınızın size yönelik bir hatası/kusuru olduğunu düşünüyorsunuz. Bu hatasını ona söyleyecek ve özür dilemesini isteyeceksiniz.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

7. Arkadaşınızla bir görüşme yapacaksınız ve bu görüşmede arkadaşınız, ona daha önce yapmış olduğunu bir iyilik ya da yardımdan ötürü size teşekkür edecek.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

8. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi soruyor. Ona yaptığı çalışmayı çok beğendinizi ve onu takdir ettiğinizi söyleyeceksiniz

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

9. Yaptığınız ya da söylediğiniz bir şeyin arkadaşınızı üzdüğünü ya da kızdırdığını fark ettiniz. Kendisinden özür dileyeceksiniz.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

10. Arkadaşınızla bir görüşme yapacaksınız ve bu görüşmede, ona, sizin için daha önce yapmış olduğunu bir iyilik ya da yardımdan ötürü teşekkür etmeyi planlıyorsunuz.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

11. Arkadaşınızın yaptığı ya da söylediği bir şey kalbinizi kırdı. Hissettiğiniz kırgınlığı arkadaşınıza ifade edeceksiniz.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

12. Sizi çok mutlu eden ve gururlandıran bir başarı kazandınız. Bu sevincinizi ve gururunuzu arkadaşınıza anlatacaksınız.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

13. Yaptığınız bir çalışmayı/ödevi nasıl bulduğunu arkadaşınıza soracaksınız. Arkadaşınızın çalışmanızı pek başarılı bulmadığını, çalışmanızı eleştireceğini tahmin ediyorsunuz**.**

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

14. Arkadaşınızın yaptığı ya da söylediği bir şey sizi kızdırdı. Duyduğunuz öfkeyi arkadaşınıza ifade edeceksiniz..

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

15. Yaptığınız bir çalışmayı/ödevi nasıl bulduğunu arkadaşınıza soracaksınız. Arkadaşınızın çalışmanızı başarılı bulduğunu ve size takdirlerini ileteceğini tahmin ediyorsunuz.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

16. Arkadaşınız, belirli bir konuda sizden daha bilgili ve deneyimli biri olduğundan o konuyla ilgili bir karar vermeden önce arkadaşınıza danışmak ve ondan fikir almak istiyorsunuz.

	Asla tercih etmem	Büyük olasılıkla tercih etmem	Kararsızım	Büyük olasılıkla tercih ederim	Kesinlikle tercih ederim
Yüzyüze	1	2	3	4	5
Mektup	1	2	3	4	5
Sabit telefon	1	2	3	4	5
Cep telefonu (sesli görüşme)	1	2	3	4	5
Cep telefonu (SMS mesaj)	1	2	3	4	5
İnternet-chat	1	2	3	4	5
Internet-chat (görüntülü)	1	2	3	4	5
E-mail	1	2	3	4	5

A.5 Perceived Difficulty of Communication Situations

Bazı duygu ve düşünceleri arkadaşımıza ifade etmek kolaydır, bazıları ise zordur. Sizden istediğimiz, bir sonraki sayfadaki iletişim durumlarından her birinin arkadaşlarınızla iletişiminizde sizin için ne ölçüde zor olduğunu 5'li ölçek üzerinde belirtmenizdir**.**

LÜTFEN ŞUNA DİKKAT EDİNİZ:

Size, durumun kendisinin değil, o durumda arkadaşınızla iletişim kurmanın ne ölçüde zor olduğunu soruyoruz.

Örneğin, "*Arkadaşınıza bir hatanızı ya da suçunuzu itiraf etmek*"" maddesi söz konusu olduğunda, bir hata yapmış ya da suç işlemiş olma durumunun size yaşattığı zorluğu değil, bu hatayı veya suçu arkadaşınıza itiraf etmenin size göre ne ölçüde zor olduğunu soruyoruz.

Lütfen, hayatınızdaki tek bir arkadaşınızı değil, arkadaş ilişkilerinizi genel olarak düşünün ve 5'li ölçek üzerinde, her bir maddeyi değerlendirin.

1. Çok kolay **2. Kolay** **3. Ne kolay ne zor**

4. Zor **5. Çok zor**

	Çok kolay	Kolay	Ne kolay	Zor	Çok zor
1) Arkadaşınızı üzecek ya da kızdıracak bir hata yaptığınızda bu hatanızı ona itiraf etmek	1	2	3	4	5
2) Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi sorduğunda, yaptığı çalışmayı pek başarılı bulmadığınızı ona iletmek ve çalışmasına yönelik eleştirilerinizi söylemek	1	2	3	4	5
3) Sizi belirli bir konuda kendinden daha bilgili ve deneyimli olarak gören arkadaşınız, o konu hakkında size danıştığında onu bilgilendirmek ve konuyla ilgili kişisel fikirlerinizi aktarmak	1	2	3	4	5
4) Arkadaşınız kendisini çok sevindiren ve gururlandıran bir başarı kazandığında bu başarısından ötürü onu tebrik etmek	1	2	3	4	5
5) Geçmişte yaşadığınız bir başarısızlığınızı ya da utandığınız bir olayı arkadaşınıza anlatmak	1	2	3	4	5
6) Arkadaşınızın size yönelik bir hatası/kusuru olduğunda, bu hatasını ona söyleyerek özür dilemesini istemek	1	2	3	4	5
7) Arkadaşınızın, ona yapmış olduğunuz bir iyilik ya da yardımdan ötürü size teşekkür etmesi	1	2	3	4	5
8) Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi sorduğunda, ona çalışmasını başarılı bulduğunuzu söylemek ve onu takdir etmek	1	2	3	4	5
9) Yaptığınız ya da söylediğiniz bir şeyin arkadaşınızı üzdüğünü ya da kızdırdığını fark ettiğinizde kendisinden özür dilemek	1	2	3	4	5
10) Arkadaşınıza sizin için yapmış olduğu bir iyilik ya da yardımdan ötürü teşekkür etmek.	1	2	3	4	5
11) Arkadaşınızın yaptığı ya da	1	2	3	4	5

	Çok kolay	Kolay	Ne kolay	Zor	Çok zor
söylediği bir şey kalbinizi kırdığında, hissettiğiniz kırgınlığı arkadaşınıza ifade etmek					
12) Sizi çok mutlu eden ve gururlandıran bir başarı kazandığınızda bu sevincinizi ve gururunuzu arkadaşınıza anlatmak	1	2	3	4	5
13) Yaptığınız bir çalışmayı/ödevi nasıl bulduğunu arkadaşınıza sorduğunuzda, arkadaşınızın çalışmanızı pek başarılı bulmadığını söylemesi, çalışmanızı eleştirmesi	1	2	3	4	5
14) Arkadaşınızın yaptığı ya da söylediği bir şey sizi kızdırdığında duyduğunuz öfkeyi arkadaşınıza ifade etmek.	1	2	3	4	5
15) Yaptığınız bir çalışmayı/ödevi nasıl bulduğunu arkadaşınıza sorduğunuzda, arkadaşınızın çalışmanızı başarılı bulduğunu söylemesi ve sizi takdir etmesi	1	2	3	4	5
16) Arkadaşınız, belirli bir konuda sizden daha bilgili ve deneyimli biri olduğundan o konuyla ilgili bir karar vermeden önce arkadaşınıza danışmak ve ondan fikir almak istiyorsunuz.	1	2	3	4	5

A.6 Attitudes about-Face-to-face and Mediated Communication

Günümüzde, iletişim kurmanın pek çok yöntemi vardır. Aşağıdaki iletişim yöntemlerinden her birine yönelik genel tutumunuzu aşağıdaki 1 (çok olumlu) ve 5 (çok olumsuz) arasında numaralandırılmış ifadelerden hangisi en iyi ifade eder?

Yüz yüze iletişim

1	2	3	4	5
çok olumlu	olumlu	ne olumlu ne olur	olumsuz	çok olumsuz

Mektup

1	2	3	4	5
çok olumlu	olumlu	ne olumlu ne olur	olumsuz	çok olumsuz

Sabit telefon

1	2	3	4	5
çok olumlu	olumlu	ne olumlu ne olur	olumsuz	çok olumsuz

Cep telefonu (sesli görüşme)

1	2	3	4	5
çok olumlu	olumlu	ne olumlu ne olur	olumsuz	çok olumsuz

Cep telefonu (SMS mesaj)

1	2	3	4	5
çok olumlu	olumlu	ne olumlu ne olur	olumsuz	çok olumsuz

E-mail

1	2	3	4	5
çok olumlu	olumlu	ne olumlu ne olur	olumsuz	çok olumsuz

İnternet chat

1	2	3	4	5
çok olumlu	olumlu	ne olumlu ne olur	olumsuz	çok olumsuz

İnternet görüntülü chat

1	2	3	4	5
çok olumlu	olumlu	ne olumlu ne olur	olumsuz	çok olumsuz

A.7 Anxiety about Face-to-face and Mediated Communication

Aşağıdaki iletişim yöntemlerin her birini kullanırken ne ölçüde kaygı duymaktasınız? Lütfen her birini 1 (çok az düzeyde) ve 5 (çok yüksek düzeyde) arasında değerlendiriniz.

Yüz yüze iletişim

1	2	3	4	5
Çok az düzeyde	Az düzeyde	Orta düzeyde	Yüksek düzeyde	Çok yüksek düzeyde

Mektup

1	2	3	4	5
Çok az düzeyde	Az düzeyde	Orta düzeyde	Yüksek düzeyde	Çok yüksek düzeyde

Sabit telefon

1	2	3	4	5
Çok az düzeyde	Az düzeyde	Orta düzeyde	Yüksek düzeyde	Çok yüksek düzeyde

Cep telefonu (sesli görüşme)

1	2	3	4	5
Çok az düzeyde	Az düzeyde	Orta düzeyde	Yüksek düzeyde	Çok yüksek düzeyde

Cep telefonu (SMS mesaj)

1	2	3	4	5
Çok az düzeyde	Az düzeyde	Orta düzeyde	Yüksek düzeyde	Çok yüksek düzeyde

E-mail

1	2	3	4	5
Çok az düzeyde	Az düzeyde	Orta düzeyde	Yüksek düzeyde	Çok yüksek düzeyde

Internet-chat

1	2	3	4	5
Çok az düzeyde	Az düzeyde	Orta düzeyde	Yüksek düzeyde	Çok yüksek düzeyde

Görüntülü Internet-chat

1	2	3	4	5
Çok az düzeyde	Az düzeyde	Orta düzeyde	Yüksek düzeyde	Çok yüksek düzeyde

A.8 Feelings & Thoughts towards Recently Developed Communication Technologies

Farz edin ki yeni bir iletişim teknolojisi geliştirildi ya da var olan teknolojilerin özellikleri, işlevleri arttırılarak piyasaya yeni bir ürün sürüldü. Sizce bu yeni teknolojik iletişim yöntemini öğrenirken aşağıdaki duygu ve düşünceleri ne ölçüde yaşarsınız?

Öğrenme arzusu	Çok az	Az	Orta	Yüksek	Çok yüksek
Korku ya da çekingenlik	Çok az	Az	Orta	Yüksek	Çok yüksek
Başarma duygusu	Çok az	Az	Orta	Yüksek	Çok yüksek
Öğrenmeye isteksizlik ya da üşengeçlik	Çok az	Az	Orta	Yüksek	Çok yüksek
Merak	Çok az	Az	Orta	Yüksek	Çok yüksek
Başarısızlık duygusu	Çok az	Az	Orta	Yüksek	Çok yüksek
Sevinç	Çok az	Az	Orta	Yüksek	Çok yüksek
Şüphe	Çok az	Az	Orta	Yüksek	Çokyüksek
Hayranlık	Çok az	Az	Orta	Yüksek	Çok yüksek
Öğrenmede güçlük çekme ve kendini yetersiz hissetme	Çok az	Az	Orta	Yüksek	Çok yüksek

A9 Demographics

Cinsiyetiniz: _____ Bölüm: _____ Yaş: _____

Ne sıklıkta internet kullanıyorsunuz?

a. hergün b. gün aşırı c. haftada 1 veya 2 kez d. 2 haftada 1 kez e. Ayda 1 kez veya daha az

Kendinize ait bilgisayarınız var mı?

a. Evet b. Kendime ait değil, ama ev halkı ile ortak paylaştığımız bir bilgisayar var. c. Hayır

Yaşadığınız mekanda (ev ya da yurt) internet bağlantısı sağlayabiliyor musunuz?

a. Evet, evde/yurtta her istediğimde internet'e bağlanabiliyorum.

b. Evet, evde/yurtta internet bağlantısı var ama her istediğimde kullanamıyorum (sınırlı bağlantı süresi ya da teknik problemler, bilgisayarı kullanabilmek için sıra beklemek...vs. gibi sorunlar nedeniyle)

c. Hayır, evde/yurtta internet bağlantısı yok.

Kendinize ait bir cep telefonunuz var mı? Varsa ne kadar süredir cep telefonu sahibisiniz? (yıl olarak)

____Hayır, yok ____ Evet, var ..... yıldır kullanıyorum

Gündelik yaşamınızda ne sıklıkta telefonla iletişim kuruyorsunuz?

a. hergün b. gün aşırı c. haftada 1 veya 2 kez d. 2 haftada 1 kez e. Ayda 1 kez veya daha az

Gündelik yaşamınızda ne sıklıkta mektup yoluyla iletişim kuruyorsunuz?

a. hergün b. gün aşırı c. haftada 1 veya 2 kez d. 2 haftada 1 kez e. Ayda 1 kez veya daha az

Gündelik **yaşamınızda ne sıklıkta sabit telefonla iletişim kuruyorsunuz?**

a. hergün b. gün aşırı c. haftada 1 veya 2 kez d. 2 haftada 1 kez e. Ayda 1 kez veya daha az

Gündelik yaşamınızda ne sıklıkta cep telefonuyla <u>konuşarak</u> iletişim kuruyorsunuz?

a. hergün b. gün aşırı c. haftada 1 veya 2 kez d. 2 haftada 1 kez e. Ayda 1 kez veya daha az

Gündelik yaşamınızda ne sıkılıkta cep telefonuyla <u>yazılı mesajlaşma yoluyla</u> iletişim kuruyorsunuz?

a. hergün b. gün aşırı c. haftada 1 veya 2 kez d. 2 haftada 1 kez e. Ayda 1 kez veya daha az

Gündelik yaşamınızda ne sıklıkta internet chat ile <u>yazışarak</u> iletişim kuruyorsunuz?

a. hergün b. gün aşırı c. haftada 1 veya 2 kez d. 2 haftada 1 kez e. Ayda 1 kez veya daha az

Gündelik yaşamınızda ne sıklıkta görüntülü internet chat ile iletişim kuruyorsunuz?

a. hergün b. gün aşırı c. haftada 1 veya 2 kez d. 2 haftada 1 kez e. Ayda 1 kez veya daha az

Gündelik yaşamınızda ne sıklıkta e-posta ile iletişim kuruyorsunuz?

a. hergün b. gün aşırı c. haftada 1 veya 2 kez d. 2 haftada 1 kez e. Ayda 1 kez veya daha az

APPENDIX B

PSYCHOMETRIC CHARACTERISTICS OF THE NEW SCALES USED IN THE FIRST STUDY

B.1. The results of Factor Analyses for the Preference Ratings for Face-to-Face and Mediated Communication

Preference Ratings for Face-to-Face Communication

A Principal Component Factor Analysis was conducted to determine the factor structure of the Preference Ratings for Face-to-Face Communication. Varimax rotation procedure (which is an orthogonal and also the most commonly used rotation in the exploratory analyses) was used (Tabachnick & Fidell, 2001). Three scenarios which were not loading highly (less than .30) on any factor were excluded. The excluded items were the number 3(advising), 9 (apologizing) and 13 (getting criticism). After the exclusion of three scenarios, Principal Component Factor Analysis yielded two factors explaining 51.3% of the total variance. The first factor included items related to *giving positive messages*. It explained 26.96% of the total variance. The second factor included items related to *giving negative messages.* It explained 24.39% of the total variance. The subscale of *giving positive messages* consisted of 7 scenarios, with a reliability coefficient of .83. The subscale of *giving negative messages* consisted of 6 scenarios, with a reliability coefficient of .81. The items, their loadings, eigenvalues, percent of variances and reliabilities are presented in Table B.1.1.

Table B.1.1

Factors, Factor Loadings and Eigenvalues of the Factor Analyses for the Preference Ratings for Face-to-face Communication and for Several Technologically Mediated Channels

	FACE-TO-FACE		LETTER		PHONE		CELL-PHONE TALK		SMS MESSAGE		E-CHAT (textual)		E-CHAT (audio-visual)		E-MAIL	
	F1 α= .83	F2 α=.81	F1 α=.89	F2 α=.87	F1 α=.89	F2 α=.83	F1 α=.87	F2 α=.79	F1 α=.90	F2 α=.84	F1 α=.92	F2 α=.88	F1 α= .93	F2 α=.86	F1 α= .93	F2 α=.86
Positive Messages																
10. Arkadaşınızla bir görüşme yapacaksınız ve bu görüşmede, ona, sizin için daha önce yapmış olduğunu bir iyilik ya da yardımdan ötürü teşekkür etmeyi planlıyorsunuz.	.77	.14	.62	.51	.66	.30	.70	.28	.77	.27	.71	.37	.81	.37	.78	.31
08. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi soruyor. Ona yaptığı çalışmayı çok beğendiğinizi ve onu takdir ettiğinizi söyleyeceksiniz.	.73	.23	.53	.59	.81	19	.82	.09	.77	.23	.82	78	.83	.28	.78	.28
16. Arkadaşınız, belirli bir konuda sizden daha bilgili ve deneyimli biri olduğundan o konuyla ilgili bir karar vermeden önce arkadaşınıza danışmak ve ondan fikir almak istiyorsunuz.	.75	.10	.16	.79	.78	.23	.74	.22	.72	.29	.75	30	.75	.33	.76	.30
04. Arkadaşınız, kendisini çok sevindiren ve gururlandıran bir başarı kazandı. Bu başarısından ötürü onu tebrik edeceksiniz.	.59	.19	.60	.44	.66	.24	.59	.14	.63	.32	.75	.31	.73	.33	.62	.25

	FACE-TO-FACE		LETTER		PHONE		CELL-PHONE TALK		SMS MESSAGE		E-CHAT (textual)		E-CHAT (audio-visual)		E-MAIL	
	F1 α= .83	F2 α=.81	F1 α=.89	F2 α=.87	F1 α=.89	F2 α=.83	F1 α=.87	F2 α=.79	F1 α=.90	F2 α=.84	F1 α=.92	F2 α=.88	F1 α= .93	F2 α=.86	F1 α= .93	*F2* α=.86
15. Yaptığınız bir çalışmayı/ödevi nasıl bulduğunu arkadaşınıza soracaksınız. Arkadaşınızın çalışmanızı başarılı bulduğunu ve size takdirlerini ileteceğini tahmin ediyorsunuz.	.74	.12	.19	.86	.79	.17	.77	.18	.76	.28	.77	.37	.75	.39	.82	.19
07. Arkadaşınızla bir görüşme yapacaksınız ve bu görüşmede arkadaşınız, ona daha önce yapmış olduğunu bir iyilik ya da yardımdan ötürü size teşekkür edecek.	.57	.33	.42	.49	.69	.20	.64	.13	.74	.22	.76	.28	.68	.40	.70	.33
12. Sizi çok mutlu eden ve gururlandıran bir başarı kazandınız. Bu sevincinizi ve gururunuzu arkadaşınıza anlatacaksınız.	.66	.16	.23	.78	.77	.16	.75	.18	.66	.34	.78	.36	.80	.35	.76	.25
Negative Messages																
11. Arkadaşınızın yaptığı ya da söylediği bir şey kalbinizi kırdı. Hissettiğiniz kırgınlığı arkadaşınıza ifade edeceksiniz.	.21	.81	.63	.43	.24	.79	.27	.77	.52	.60	.45	.71	.42	.73	.66	.46
14. Arkadaşınızın yaptığı ya da söylediği bir şey sizi kızdırdı. Duyduğunuz öfkeyi arkadaşınıza ifade edeceksiniz.	.17	.70	.48	.59	.38	.66	.48	.61	.50	.57	.50	.66	.43	.74	.67	.46
06. Arkadaşınızın size yönelik bir hatası/kusuru olduğunu düşünüyorsunuz. Bu hatasını ona	.10	.78	.80	.18	.34	.70	.27	.67	.37	.69	.38	.70	.25	.80	.40	.68

	FACE-TO-FACE		LETTER		PHONE		CELL-PHONE TALK		SMS MESSAGE		E-CHAT (textual)		E-CHAT (audio-visual)		E-MAIL	
	F1 α= .83	F2 α=.81	F1 α=.89	F2 α=.87	F1 α=.89	F2 α=.83	F1 α=.87	F2 α=.79	F1 α=.90	F2 α=.84	F1 α=.92	F2 α=.88	F1 α= .93	F2 α=.86	F1 α= .93	*F2* α=.86
söyleyecek ve özür dilemesini isteyeceksiniz.																
05. Geçmişte yaşadığınız bir başarısızlığınızı ya da utandığınız bir olayı arkadaşınıza anlatacaksınız.	.17	**.62**	.60	.29	.12	.70	.01	.64	.11	.81		.83		.68		.79
02. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi soruyor. Siz, yaptığı çalışmayı pek beğenmediniz ve kendisine eleştirilerinizi söyleyeceksiniz.	.21	**.49**	.62	.51	.43	.47	.30	.42	.41	.53	.51	.45	.62	.36	.46	.58
01. Arkadaşınızı üzecek ya da kızdıracak bir hata yaptınız ve bu hatanızı ona itiraf edeceksiniz.	.15	**.72**	.83	.20	.07	.78	.04	.78	.25	.74	.34	.73	.35	.69		.82
Total Variance Explained(%)	26.96	24.39	32.42	28.72	33.03	24.67	31.56	21.87	35.23	24.60	39.32	27.75	39.44	67.54	40.56	23.54
Eigenvalue	3.50	3.17	4.21	3.73	4.33	3.20	5.30	1.64	4.58	3.20	5.11	3.61	5.13	3.65	5.27	3.06
Principal Component Analysis, with Varimax Rotation, 2-factor solutions																

Preference Ratings for Mediated Communication

A series of Principal Component Factor Analysis with Varimax rotation were conducted to examine whether the same factor structure existed in the scales for preference for other communication channels. In all scales, except for "Preference for Letter" and "Preference for E-chat with audi-visual chat", a similar two-factor structure was found. The scales for "the Preference for Letter" and "the Preference for E-chat with audio-visual chat" exhibited a one factor structure. When they were forced to two factors, as can be seen in Table B.1.1, the items were loaded highly on both factors. As the items of those two scales were not loading clearly to the appropriate factors, it was decided to exclude those two scales from further analyses.

The same three items which were not loading highly (less than .30) on any factor in the scale of preference for face-to-face communication did not load highly on the factors in many of the scales of preference for other communication channels as well. Therefore, those items were excluded. Some items cross-loaded: Item 2 in the scales for Phone talk, and SMS message; item 14 in the scales for cell-phone talk, SMS message and e-chat; item 6 in the scale for e-mail; item 11 in the scales for SMS message and e-mail. All these items (item 2, 14, 6 and 11) were decided to be included into the subscale of "giving negative messages" as the contents of the items were negative. Also, the contributions of each of those items to the reliabilities of the subscales were examined and it was decided that keeping those items in the "giving negative messages" subscale would be better. The first one of

the two factors, *giving negative messages*, explained 33.03%, 31.56%, 35.23%, 39.32%, 40.36% of the total variance of the preference for phone talk, cell phone talk, SMS message, e-chat and e-mail, respectively. The second factor, *giving positive messages*, explained 24.67%, 35.23%, 24.60%, 27.75%, 23.54% of the total variance of the scales. The reliability coefficients of the subscales of *giving positive messages* were found to be .89, .87, .90, .92 and .93 for phone talk, cell phone talk, SMS messages, e-chat and e-mail, respectively. The reliability coefficients of the subscales of *giving negative messages* were found to be .83, .79, .84, .88 and .86 for phone talk, cell phone talk, SMS messages, e-chat and e-mail, respectively. The item loadings, eigenvalues, percent of variances and reliabilities were presented in Table B.1.1. The items were ordered for an easy interpretation. Only the items with a loading higher than .30 were shown.

The items on each subscale were averaged for further analysis. In sum, twelve scores were computed: One composite score for the preference for face-to-face communication in giving positive messages, one composite score for the preference for face-to-face communication in giving negative messages, five composite scores for the preferences for technological channels in giving positive messages, and five composite scores for preferences of technological channels in giving negative messages (namely the preference for phone talk, cell phone talk, SMS message, e-chat and e-mail). After computation of those scores, a Principal Component Analysis with Varimax rotation was conducted on the composite scores of the preference for technological communication channels in giving positive messages. Then, a similar analysis was conducted on the computed scores of

the preference for technological communication channels in giving negative messages. The results of the first analysis yielded two factors: Preferences for auditory channels (phone talk and cell phone talk) and preferences for written channels (e-chat, e-mail, SMS message). The first one of the two factors, *auditory channels*, explained 37.87% of the total variance; the second factor, *written channels*, explained 34.09% of the total variance. The results of the second analysis also yielded a two-factor structure. The first one of the two factors, *auditory channels*, explained 37.28% of the total variance; the second factor, *written channels*, explained 36.99% of the total variance. The factor loadings can be seen in Table B.1.2.

Table B.1.2.

Factors, Factor Loadings and Eigenvalues of the Factor Analyses for the Composite Scores of Preferences for Technological Mediated Channels in Giving Negative Messages, and for the Composite Scores of Preferences for Technological Mediated Channels in Giving Positive Messages

	☹ Messages		☺ Messages	
	F1	F2	F1	F2
	α=.84	α=.71	α=.75	α=.72
Auditory Channels				
Cellular phone talk	.91	.20	.83	.33
Phone	.90	.04	.91	.07
Written Channels				
E-chat	.24	.82	.08	.88
E-mail	.12	.78	.13	.69
SMS messages	.39	.74	.41	.73
Total Variance Explained (%)	37.28	36.99	37.87	34.09
Eigenvalue	2.48	1.24	2.60	1.00

Principal Component Analysis with Varimax Rotation
Note: ☹ stands for "negative", ☺ stands for "positive"

B.2 The Results of Factor Analyses for the Perceived Difficulty of Communication Situations

In the study, as explained B.1, participants were described several hypothetical situations, and were asked to rate their preference for several communication methods if they were in these situations. Next, the same hypothetical situations were given again, and this time, participants were asked to rate the difficulty of these situations. As a result of a statistical examination of the Preference Ratings for Face-to-Face and Mediated Communication the items tapping to three situations ("advising", "apologizing", "getting criticism") were decided to be excluded (See B.1.1). In order to make the measure of "Perceived Difficulty of Communication Situations" relevant to the Preference Ratings of Face-to-Face and Mediated Communication, the items tapping to the same hypothetical situations ("advising", "apologizing", "getting criticism") were excluded from it as well. A principal Component Analysis with Varimax rotation was performed on the remaining thirteen items of the Scale for Perceived Difficulty of Communication Situations. A two-factor structure was gathered. The first factor consisted of 7 items with a content of "giving positive message". The second factor consisted of 6 items with a content of "giving negative items". The first factor explained 24.29% of the total variance, and the second factor explained 21.46%. The reliability coefficients were .91 and .87, respectively. The items, their factor loadings, eigenvalues, total variances explained, and the reliabilities were given in Table B.2.

Table B.2

Factors, Factor Loadings and Eigenvalues of the Factor Analyses for the Scale of Perceived Difficulty of Communication Situations

	F1	F2
Positive Messages (α = .91)		
10. Arkadaşınıza sizin için yapmış olduğu bir iyilik ya da yardımdan ötürü teşekkür etmek.	.81	.01
8. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi sorduğunda, ona çalışmasını başarılı bulduğunuzu söylemek ve onu takdir etmek	.79	.10
16. Arkadaşınız, belirli bir konuda sizden daha bilgili ve deneyimli biri olduğunda o konuyla ilgili bir karar vermeden önce arkadaşınıza danışmak ve ondan fikir almak istemeniz	.71	-.03
4. Arkadaşınız kendisini çok sevindiren ve gururlandıran bir başarı kazandığında bu başarısından ötürü onu tebrik etmek	.66	.03
15. Yaptığınız bir çalışmayı/ödevi nasıl bulduğunu arkadaşınıza sorduğunuzda, arkadaşınızın çalışmanızı başarılı bulduğunu söylemesi ve sizi takdir etmesi	.63	.09
07. Sizi çok mutlu eden ve gururlandıran bir başarı kazandığınızda bu sevincinizi ve gururunuzu arkadaşınıza anlatmak	.48	.12
12. Arkadaşınızın, ona yapmış olduğunu bir iyilik ya da yardımdan ötürü size teşekkür etmesi	.44	.27
Negative Messages (α = .87)		
11. Arkadaşınızın yaptığı ya da söylediği bir şey kalbinizi kırdığında, hissettiğiniz kırgınlığı arkadaşınıza ifade etmek	.15	.81
14. Arkadaşınızın yaptığı ya da söylediği bir şey sizi kızdırdığında duyduğunuz öfkeyi arkadaşınıza ifade etmek	.03	.82
6. Arkadaşınızın size yönelik bir hatası/kusuru olduğunda, bu hatasını ona söyleyerek özür dilemesini istemek	.07	.75
5. Geçmişte yaşadığınız bir başarısızlığınızı ya da utandığınız bir olayı arkadaşınıza anlatmak	.08	.54
2. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi sorduğunda, yaptığı çalışmayı pek başarılı bulmadığınızı ona iletmek ve çalışmasına yönelik eleştirilerinizi söylemek	.29	.52
01. Arkadaşınızı üzecek ya da kızdıracak bir hata yaptığınızda bu hatanızı ona itiraf etmek	-.05	.48
Total Variance Explained (%)	24.29	21.46
Eigenvalue	3.16	2.79

Note. Principal Component Analysis with Varimax Rotation

B.3 The Results of Factor Analyses for the Negative Attitudes about Mediated Communication

A principal Component Analysis with Direct Oblimin rotation was performed on the five items of the scale for the Negative Attitudes about Mediated Communication. A two-factor structure was gathered. The first factor consisted of 3 items: E-chat (textual), email and SMS message. The second factor consisted of 2 items: Phone-talk and cell-phone talk. The first factor explained 40.03% of the total variance, and the second factor explained 13.50%. The reliability coefficients were .70 and .74, respectively. The items, their factor loadings, eigenvalues, total variances explained, and the reliabilities were given in Table B.3.

Table B.3 Factors, Factor Loadings and Eigenvalues of the Factor Analyses for the Scale of the Negative Attitudes about Mediated Communication

	Negative Attitudes about Mediated Communication	
	F1	F2
Written channels		
SMS Message	.71	-.48
E-chat	.69	-.24
E-mail	.60	-.20
Auditory channels		
Cellular phone talk	.47	-.91
Phone talk	.21	-.65
Total Variance Explained (%)	40.03	13.50
Eigenvalue	2.42	1.15

Note: Principal Axis Analysis, Direct Oblimin Method

B.4 The Results of Factor Analyses for the Anxiety about Mediated Communication

A principal Component Analysis with Direct Oblimin rotation was performed on the data involving five items of the scale for Anxiety about Mediated Communication. A two-factor structure was obtained. The first factor consisted of 3 items: E-chat (textual), email and SMS message. The second factor consisted of 2 items: Phone-talk and cell-phone talk. The first factor explained 44.78% of the total variance, and the second factor explained 26.67%. The reliability coefficients were .84 and .89, respectively. The items, their factor loadings, eigenvalues, total variances explained, and the reliabilities were given in Table B.4.

Table B.4 Factors, Factor Loadings and Eigenvalues of the Factor Analyses for the Scale of t he Anxiety to about Mediated Communication

	Anxiety about Mediated Communication	
	F1	**F2**
Written Channels (ά = .84)		
E-Chat (textual)	.88	.10
E-mail	.79	.32
SMS Message	.75	.16
Oral Channels (ά = .89)		
Phone talk	.16	.89
Cellular phone talk	.25	.89
Total Variance Explained (%)	44.78	26.67
Eigenvalue	2.54	1.57

Note: Principal Axis Analysis, Direct Oblimin Method

APPENDIX C

THE NEW AND THE REVISED SCALES IN THE STUDY 2

C1. Liebowitz Social Anxiety Scale

Tüm seçeneklere geçen haftayı düşünerek-bugün de dahil olacak şekilde puan veriniz. Eğer durumlardan biri geçen hafta içerisinde oluşmadıysa, bu durumla karşılaştığınızda göstereceğiniz tepkiyi puanlayınız. Her bir durum için (yaşanmış olan ya da yaşanmış olduğu varsayılan) hem "korku ya da kaygı"nın derecesini hem de "kaçınma" sıklığını puanlayınız.

	Korku ya da kaygı 1=yok 2=hafif 3=orta 4=şiddetli	**Kaçınma davranışı** 1=asla (% 0) 2=ara sıra (% 1-33) 3=sıkça (% 34-67) 4=genellikle (% 68-100)
1. Topluluk içerisinde telefon etmek		
2. Küçük bir grupla beraber bir aktiviteye katılmak		
3. Toplulukta yemek yemek		
4. Toplulukta içecek içmek		
5. Yönetici konumundaki biri ile konuşmak		
6. Seyirci önünde rol yapmak, oynamak ya da konuşmak		
7. Bir partiye / davete gitmek		
8. Biri ya da birileri tarafından izlenirken çalışmak		
9. Biri ya da birileri tarafından izlenirken yazı yazmak		
10. Çok iyi tanımadığınız birine telefon etmek		
11. Çok iyi tanımadığınız biri ile yüz yüze konuşmak		
12. Yabancılarla tanışmak		

	Korku ya da kaygı 1=yok 2=hafif 3=orta 4=şiddetli	**Kaçınma davranışı** 1=asla (% 0) 2=ara sıra (% 1-33) 3=sıkça (% 34-67) 4=genellikle (% 68-100)
13. Genel bir tuvalette idrar yapmak		
14. Başkalarının oturuyor olduğu bir odaya girmek		
15. İlgi merkezi olmak		
16. Ön hazırlık olmadan bir toplulukta konuşmak		
17. Beceri, bilgi ya da yetenek ile ilgili bir sınava girmek		
18. Çok iyi tanımadığınız birine karşı görüş bildirmek ya da onunla aynı fikirde olmadığınızı söylemek		
19. Çok iyi tanımadığınız birinin doğrudan gözlerinin içine bakmak		
20. Bir gruba sözlü rapor vermek		
21. Cinsel ya da romantik bir ilişki amacıyla biriyle yakınlaşmaya çalışmak		
22- Bir malı parası iade edilmek üzere geri götürmek		
23. Bir parti / davet vermek		
24. Israrcı bir satıcıyı reddetmek		

C2. Shyness Scale

Bazı duygu ve davranışlara ilişkin olarak aşağıda verilen ifadelerden size uygun olan ve olmayanları özenle saptadıktan sonra yanıtlarınızı, her ifadenin karşısındaki "Bana hiç uygun değil, uygun değil, kararsızım, bana uygun, bana çok uygun" seçeneklerinden yalnız biri için (X) işareti koyarak belirtiniz. Lütfen boş bırakmayınız ve her ifade için bir işaretleme yapınız.

	Bana hiç uygun değil	**Uygun Değil**	**Kararsızım**	**Bana uygun**	**Bana çok uygun**
1. İyi tanımadığım kişilerle birlikteyken kendimi tedirgin hissederim.	1	2	3	4	5
2. Toplumsal ilişkilerimde hiç rahat değilim.	1	2	3	4	5
3. Başkalarından herhangi bir konuda bilgi istemek bana zor gelir.	1	2	3	4	5
4. Arkadaş toplantıları ve diğer sosyal etkinliklerde genellikle rahat değilimdir.	1	2	3	4	5
5. Başkaları ile birlikte iken konuşacak uygun konuları bulmakta güçlük çekerim.	1	2	3	4	5
6. Yeni girdiğim bir ortamda utangaçlığımı yenmek uzun zaman alır.	1	2	3	4	5
7. Yeni tanıştığım insanlara doğal davranmakta güçlük çekerim.	1	2	3	4	5
8. Yetkili bir kişi konuşurken kendimi gergin hissederim.	1	2	3	4	5
9. Sosyal yeterliliğim konusunda kuşkularım var.	1	2	3	4	5
10. Karşımdaki kişinin gözlerinin içine bakmak bana zor gelir.	1	2	3	4	5
11. Sosyal ortamlarda kendimi baskı altında hissederim.	1	2	3	4	5
12. Tanımadığım kişilerle konuşmak bana zor gelir.	1	2	3	4	5
13. Karşı cinsten kişilerle birlikteyken daha utangaç olurum.	1	2	3	4	5

	Bana hiç uygun değil	Uygun Değil	Kararsızım	Bana uygun	Bana çok uygun
14. Topluluk önünde konuşmakta güçlük çekerim.	1	2	3	4	5
15. Kalabalıkta herkesin bakışlarını üzerimde hissetmekten rahatsız olurum.	1	2	3	4	5
16. Başkalarının yanında hata yapmaktan çekinirim.	1	2	3	4	5
17. Birisinden bir şey ödünç isterken güçlük çekerim.	1	2	3	4	5
18. Tek başıma alışverişe gitmekten çekinirim.	1	2	3	4	5
19. Başkalarına duygularımı açıklamakta güçlük çekerim.	1	2	3	4	5
20. Birisine ödünç verdiğim bir şeyi istemekten çekinirim.	1	2	3	4	5

C3. Cognitive Flexibility Scale

Aşağıdaki maddeler, kendi davranışlarınıza yönelik bazı duygu ve düşünceler ile ilgilidir. Her birine ne ölçüde katıldığınızı "Hiç katılmıyorum", katılmıyorum", "Pek katılmıyorum", "Biraz katılıyorum", "Katılıyorum", "Kesinlikle katılıyorum" ifadelerinden uygun olanını seçeneklerinden birini işaretleyerek belirtiniz.

	Hiç katılmıyorum	**Katılmıyorum**	**Pek katılmıyorum**	**Biraz katılıyorum**	**Katılıyorum**	**Tamamen katılıyorum**
1. Bir fikri pek çok farklı biçimde iletebilirim.	1	2	3	4	5	6
2. Yeni ve alışılmadık durumlardan kaçınırım.	1	2	3	4	5	6
3. Bir türlü karar veremem.	1	2	3	4	5	6
4. Çözümsüz gibi görünen sorunlara işe yarar çözümler bulabilirim.	1	2	3	4	5	6
5. Nasıl davranacağıma karar verirken nadiren seçeneklerim olur.	1	2	3	4	5	6
6. Problemlere yaratıcı çözümler üretmek için uğraşabilirim.	1	2	3	4	5	6
7. Durum neyi gerektirirse gerektirsin, ona uygun hareket ederim.	1	2	3	4	5	6
8. Yaptığım bilinçli seçimlere göre davranırım.	1	2	3	4	5	6
9. Herhangi bir durumda olası pek çok farklı biçimde davranabilirim.	1	2	3	4	5	6
10. Gerçek yaşam durumlarında elimdeki bilgiyi kullanmada zorluk yaşarım.	1	2	3	4	5	6
11. Bir problemi ele alırken alternatifleri dinleme ve dikkate almaya istekliyimdir.	1	2	3	4	5	6
12. Farklı biçimlerde davranmayı denemek için gerekli olan özgüvene sahibim.	1	2	3	4	5	6

C4. The Measure of the Need for Preparation before Responding and The Measure for Oversensitivity to Negative Bodily Feedback

Aşağıdaki tablonun her bir satır başlığında çeşitli iletişim durumları verilmiştir. Her bir sütun başlığında ise, bu iletişim durumlarında bir kişinin sahip olabileceği duygu ve düşünceler sıralanmıştır. Eğer söz konusu iletişim durumlarını yaşayan kişi siz olsaydınız bu duygu ve düşünceler size ne kadar uyardı? Her bir hücrede 1'den 5'e kadar bir sayıyı işaretleyerek o hücrenin satırında belirtilen iletişim durumunda hücrenin sütununda belirtilen duygu ya da düşünceyi ne ölçüde taşıyacağınızı belirtiniz. LÜTFEN her bir iletişim durumunu A'dan F'ye kadar sıralanan duygu/düşünce ifadeleri açısından teker teker değerlendirip <u>hiçbirini atlamadan</u> işaretleyiniz.

1'den 5'e kadar sayıların anlamı aşağıda verilmiştir:

1: "Bana hiç uygun değil" 2: "Uygun değil" 3: "Kararsızım" 4: "Bana uygun" 5: "Bana çok uygun"

	A. **Ben konuşurken onun duruşunda ve yüz ifadesinde olumsuz değişimler olursa kendimi çok kötü hissederim.**					**B.** **Söylediklerimden rahatsız olduğunu fark edersem hemen susmayı ya da konu değiştirmeyi tercih ederim.**					**C.** **Konuşurken gözlerinin içine bakmakta zorlanırım.**				
1. Arkadaşınızı üzecek ya da kızdıracak bir hata yaptınız ve bu hatanızı ona itiraf edeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
2. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi soruyor. Siz, yaptığı çalışmayı pek beğenmediniz ve kendisine eleştirilerinizi söyleyeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
3. Geçmişte yaşadığınız bir başarısızlığınızı ya da utandığınız bir olayı arkadaşınıza anlatacaksınız.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
4. Arkadaşınızın size yönelik bir hatası/kusuru olduğunu düşünüyorsunuz. Bu hatasını ona söyleyecek ve özür dilemesini isteyeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
5. Arkadaşınızın yaptığı ya da söylediği bir şey kalbinizi kırdı. Hissettiğiniz kırgınlığı arkadaşınıza ifade edeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
6. Yaptığınız ya da söylediğiniz bir şeyin arkadaşınızı üzdüğünü ya da kızdırdığını fark ettiğiniz için kendisinden özür dileyeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
7. Arkadaşınızın yaptığı ya da söylediği bir şey sizi kızdırdı. Duyduğunuz öfkeyi arkadaşınıza ifade edeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**

	D. **Ben konuşurken onun duruşunda ve yüz ifadesinde olumsuz değişimler olursa kendimi çok kötü hissederim.**					**E.** **Söylediklerimden rahatsız olduğunu fark edersem hemen susmayı ya da konu değiştirmeyi tercih ederim.**					**F.** **Konuşurken gözlerinin içine bakmakta zorlanırım.**				
8. Arkadaşınızı üzecek ya da kızdıracak bir hata yaptınız ve bu hatanızı ona itiraf edeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
9. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi soruyor. Siz, yaptığı çalışmayı pek beğenmediniz ve kendisine eleştirilerinizi söyleyeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
10. Geçmişte yaşadığınız bir başarısızlığınızı ya da utandığınız bir olayı arkadaşınıza anlatacaksınız.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
11. Arkadaşınızın size yönelik bir hatası/kusuru olduğunu düşünüyorsunuz. Bu hatasını ona söyleyecek ve özür dilemesini isteyeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
12. Arkadaşınızın yaptığı ya da söylediği bir şey kalbinizi kırdı. Hissettiğiniz kırgınlığı arkadaşınıza ifade edeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
13. Yaptığınız ya da söylediğiniz bir şeyin arkadaşınızı üzdüğünü ya da kızdırdığını fark ettiğiniz için kendisinden özür dileyeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**
14. Arkadaşınızın yaptığı ya da söylediği bir şey sizi kızdırdı. Duyduğunuz öfkeyi arkadaşınıza ifade edeceksiniz.	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**

C5. Preference Ratings for Face-to-Face and Mediated Communication (Short)

Anketin bu bölümünde, bir arkadaşınızla iletişim kurmanızı gerektirecek çeşitli durumlar size verilecektir. Kendinizi bu durumları yaşayan kişinin yerine koyun. Bu görüşmelerden her birini **YÜZ YÜZE** yapabilir ya da **YAZILI TEKNOLOJİK İLETİŞİM KANALLARI**ndan birini (e-mail, MSN, cep telefonu mesajı… gibi) kullanabilir, ya da **İŞİTSEL TEKNOLOJİK İLETİŞİM KANALLARI**nı (telefon konuşması gibi) tercih edebilirsiniz. Sizden istediğimiz, yüz yüze iletişim, yazılı teknolojik iletişim veya işitsel teknolojik iletişimden birini tercih etmeniz söz konusu olduğunda, öncelikli olarak hangisini kullanmayı tercih edeceğinizi 5'li ölçek üzerinde işaretlemenizdir.

DİKKAT! DİKKAT!

Durumları değerlendirirken, iletişim kanallarından herhangi birini kullanmakla ilgili <u>teknik bir problem bulunmadığını</u> (sizin ve arkadaşınızın telefon, bilgisayar, internet bağlantısı imkanlarına sahip olduğunu) ve arkadaşınıza yüz yüze ulaşma imkanının da var olduğunu (aranızda aşılması zor bir fiziksel mesafe olmadığını) varsayın. Hangi kanalı seçeceğiniz tümüyle

Arka sayfadaki tabloda satırlar çeşitli iletişim durumlarını, sütunlar ise iletişim yollarını (yüz yüze, yazılı, işitsel) ifade etmektedir. Eğer söz konusu iletişim durumlarını yaşayan kişi siz olsaydınız bu iletişim yollarından her birini ne ölçüde tercih ederdiniz?

Ölçek üzerinde 1-5 arasında sayılar şu anlamlara gelmektedir:

1. "Asla tercih etmem"
2. "Büyük olasılıkla tercih etmem"
3. "Kararsızım"
4. "Büyük olasılıkla tercih ederim"
5. "Kesinlikle tercih ederim"

Lütfen, hayatınızdaki tek bir arkadaşınızı değil, arkadaş ilişkilerinizi genel olarak düşünün ve 5'li ölçek üzerinde, her bir iletişim durumunda, verilen 3 iletişim yolunun her biri için ayrı ayrı değerlendirme yapın.

Çalışmada incelenen iletişim kanalları hakkında açıklamalar:

YÜZ YÜZE: Kişinin aynı mekânda karşı karşıya gelerek konuşması

YAZILI TEKNOLOJİK İLETİŞİM: Tarafların e-mail, MSN, cep telefonu mesajı gibi araçlar kullanarak sadece yazılı mesajlar aracılığıyla kurduğu iletişim

İŞİTSEL TEKNOLOJİK İLETİŞİM: Tarafların telefon ya da benzeri bir araçla birbirlerinin sesini işiterek ve birbirlerine seslerini ileterek kurdukları iletişim

	A. **Yüz yüze iletişim**					**B.** **Yazılı teknolojik iletişim**					**C.** **İşitsel teknolojik iletişim**				
1. Arkadaşınızı üzecek ya da kızdıracak bir hata yaptınız ve bu hatanızı ona itiraf edeceksiniz.	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5
2. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi soruyor. Siz, yaptığı çalışmayı pek beğenmediniz ve kendisine eleştirilerinizi söyleyeceksiniz.	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5
3. Geçmişte yaşadığınız bir başarısızlığınızı ya da utandığınız bir olayı arkadaşınıza anlatacaksınız.	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5
4. Arkadaşınızın size yönelik bir hatası/kusuru olduğunu düşünüyorsunuz. Bu hatasını ona söyleyecek ve özür dilemesini isteyeceksiniz.	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5
5. Arkadaşınızın yaptığı ya da söylediği bir şey kalbinizi kırdı. Hissettiğiniz kırgınlığı arkadaşınıza ifade edeceksiniz.	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5
6. Yaptığınız ya da söylediğiniz bir şeyin arkadaşınızı üzdüğünü ya da kızdırdığını fark ettiğiniz için kendisinden özür dileyeceksiniz.	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5
7. Arkadaşınızın yaptığı ya da söylediği bir şey sizi kızdırdı. Duyduğunuz öfkeyi arkadaşınıza ifade edeceksiniz.	1	2	3	4	5	**1**	**2**	**3**	**4**	**5**	1	2	3	4	5

APPENDIX D

PSYCHOMETRIC CHARACTERISTICS OF THE NEW SCALES USED IN THE SECOND STUDY

D.1 The Results of Factor Analyses for The Measure of the Need for Preparation before Responding

Participants' need for preparation before responding was measured by asking them to evaluate their potential behaviors in seven hypothetical situations. Participants were asked to rate three items for each of the situations. For each situation, the mean of participants' three ratings was calculated. Thus, seven composite scores were gathered. The factor structure of the scale was examined by entering those composite scores into a factor analysis with Principal Axis Factoring. A two-factor structure was found in which all items heavily loaded into both factors. The solution was forced to have a one-factor structure. The analysis extracted a factor explaining 38.07 % of the whole variance. For scores involving all the scenarios across all items (7 scenarios X 3 items), Cronbach's alpha was found to be .88. The items and their loadings are provided in Table D.1

Table D.1 Factor Loadings and Eigenvalues of the Factor Analyses for the Measure of the Need for Preparation before Responding

Need for Preparation before Responding (*)	
	F1
5. Arkadaşınızın yaptığı ya da söylediği bir şey kalbinizi kırdı. Hissettiğiniz kırgınlığı arkadaşınıza ifade edeceksiniz.	.74
4. Arkadaşınızın size yönelik bir hatası/kusuru olduğunu düşünüyorsunuz. Bu hatasını ona söyleyecek ve özür dilemesini isteyeceksiniz.	.71
7. Arkadaşınızın yaptığı ya da söylediği bir şey sizi kızdırdı. Duyduğunuz öfkeyi arkadaşınıza ifade edeceksiniz.	.69
6. Yaptığınız ya da söylediğiniz bir şeyin arkadaşınızı üzdüğünü ya da kızdırdığını fark ettiğiniz için kendisinden özür dileyeceksiniz.	.62
Arkadaşınızı üzecek ya da kızdıracak bir hata yaptınız ve bu hatanızı ona itiraf edeceksiniz.	.55
2. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi soruyor. Siz, yaptığı çalışmayı pek beğenmediniz ve kendisine eleştirilerinizi söyleyeceksiniz.	.53
3. Geçmişte yaşadığınız bir başarısızlığınızı ya da utandığınız bir olayı arkadaşınıza anlatacaksınız.	.40
Total Variance Explained (%)	38.07
Eigenvalue	3.25

*Note.*Principal Axis Factoring
(*)For each situation listed, three ratings was taken and the mean rating was calculated
1-"Söyleyeceklerimi kafamda defalarca evirip çeviririm.",
2-Söyleyeceklerime nasıl karşılık vereceğini önceden tahmin edip kendimi buna hazırlamak için zamana ihtiyaç duyarım",
3-"Söyleyeceklerimi önceden prova etmemiş olsam da rahatlıkla konuşabilirim." (Reversed)

D.2 The Measure for Oversensitivity to Negative Bodily Feedback

Participants' oversensitivity to negative bodily feedback was measured by asking them to evaluate their most likely behaviors in response to seven hypothetical situations. Participants were asked to rate three items for each of the situations. For each situation, the mean of participants' three ratings was calculated. Thus, seven composite scores were gathered. The factor structure of the scale was examined by entering those composite scores into a factor analysis with Principal Axis Factoring. A one-factor structure was obtained. The analysis extracted a factor explaining 51.97 % of the whole variance. For scores involving all the scenarios across all items (7 scenarios X 3 items), Cronbach's alpha was .91. The items and their loadings are provided in Table D.2

Table D.2 Factor Loadings and Eigenvalues of the Factor Analyses for the Measure of the Oversensitivity to Bodily Negative Feedback

Oversensitivity to Bodily Negative Feedback (*)	F1
5. Arkadaşınızın yaptığı ya da söylediği bir şey kalbinizi kırdı. Hissettiğiniz kırgınlığı arkadaşınıza ifade edeceksiniz.	.84
4. Arkadaşınızın size yönelik bir hatası/kusuru olduğunu düşünüyorsunuz. Bu hatasını ona söyleyecek ve özür dilemesini isteyeceksiniz.	.80
7. Arkadaşınızın yaptığı ya da söylediği bir şey sizi kızdırdı. Duyduğunuz öfkeyi arkadaşınıza ifade edeceksiniz.	.70
1. Arkadaşınızı üzecek ya da kızdıracak bir hata yaptınız ve bu hatanızı ona itiraf edeceksiniz.	.70
6. Yaptığınız ya da söylediğiniz bir şeyin arkadaşınızı üzdüğünü ya da kızdırdığını fark ettiğiniz için kendisinden özür dileyeceksiniz.	.69
2. Arkadaşınız yaptığı bir çalışma/ödev hakkında düşüncenizi soruyor. Siz, yaptığı çalışmayı pek beğenmediniz ve kendisine eleştirilerinizi söyleyeceksiniz.	.67
3. Geçmişte yaşadığınız bir başarısızlığınızı ya da utandığınız bir olayı arkadaşınıza anlatacaksınız.	.64
Total Variance Explained (%)	51.97
Eigenvalue	4.10

*Note.*Principal Axis Factoring
(*)For each situation listed, three ratings was taken and the mean rating was calculated/
1-“ Ben konuşurken onun duruşunda ve yüz ifadesinde olumsuz değişimler olursa kendimi çok kötü hissederim.”,
2- “Söylediklerimden rahatsız olduğunu fark edersem hemen susmayı ya da konu değiştirmeyi tercih ederim.”,
3-“Konuşurken gözlerinin içine bakmakta zorlanırım.”

APPENDIX E

THE TURKISH SUMMARY OF RESEARCH (TÜRKÇE ÖZET)

Günümüzde bireyler, kişilerarası iletişim için yüz yüze iletişimi kullanmanın yanı sıra, pek çok farklı teknolojik kanal arasından tercih de yapabilmektedir. Cep telefonları ve internet teknolojileri gibi çeşitli seçenekler arasından hangi kanalın arkadaşlar arası iletişimde tercih edildiğini ve bu tercihin sebeplerini anlayabilmek, genel anlamda kişilerarası ilişkileri anlayabilmek için gerekli hale gelmiştir. Bu çalışma, arkadaşlık ilişkilerinde iletişim kanal tercihlerini incelemeyi amaçlamaktadır.

1. BÖLÜM

GİRİŞ

1.1 Kişilerarası İlişkilerde Teknolojik İletişim Kullanımı

Yüz yüze iletişim, insanlık tarihindeki en eski iletişim yöntemidir ve gündelik yaşantımızda halen yoğun olarak kullanılan yöntemdir. Ancak yazının icadından başlayarak, insanların iletişim kapasitesini arttıran pek çok gelişme olmuştur. Yirminci yüzyılda telefonun ve telgrafın insanlığın hizmetine sunulmuş, günümüze çok yakın yıllarda ise cep telefonları ve internet teknolojileri hayatımızda yerini almıştır. İletişim yazınındaki pek çok çalışmada teknolojik araçlarla gerçekleştirilen iletişimin özellikleri yüz yüze iletişimin özellikleri ile karşılaştırılmış ve şu farklılıklar ortaya konmuştur (McKenna ve ark.,2002):

1) Kullanıcılara kimliklerini gizleme imkanı sağlamaları;
2) Görüntü aktarımı sağlamayan teknolojik iletişimde, kullanıcıların dış görüntülerinin önemini yitirmesi;
3) İletişimin zamanlaması ve hızı üzerinde teknoloji kullanıcılarının daha çok kontrol sahibi olması;
4) Kişilerin kendilerine benzeyen nitelikte insanlarla tanışma fırsatının teknolojik iletişim ile artması .

Bütün bu özellikler, birbirine yabancı kişilerin birbirleriyle iletişim kurmalarını kolaylaştırmıştır. Ama aynı zamanda yukarıdaki 2 ve 3 numaralı özellikler, birbirlerini önceden tanıyan ve yüz yüze iletişim imkanına sahip olan insanların da iletişimine kolaylıklar getirmiştir. Literatürdeki pek çok çalışma, iletişim teknolojilerinin birbirine yabancı insanların tanışmasına ve ilişki kurmasına etkisini araştırmıştır. Söz konusu teknolojilerin hali hazırda var olan kişilerarası ilişkileri sürdürmeye ve güçlendirmeye yönelik etkisi daha az araştırılmıştır. Günümüzde sadece teknolojik araçlarla sürdürülen "sanal" ilişki ve sadece yüz yüze iletişim ile sürdürülen " gerçek" ilişki diye bir ayrım çok geçerli değildir; insanlar sanal ya da gerçek ilişkiden birini tercih etmektense, çoğu zaman ilişkilerinde yüz yüze iletişim ile teknolojik iletişimi karma biçimde kullanmaktadır. Bu gerçeği dikkate alan çalışmalara ihtiyaç vardır. Mevcut çalışma, bu ihtiyacı gidermeye yönelik olarak, bir arkadaşlık ilişkisinde yüz yüze ve teknolojik iletişim olanaklarını aynı anda el altında bulunduran kişilerin yapacağı iletişim tercihinin ardında yatan kişisel ve durumsal özellikleri incelemeyi amaçlamaktadır.

1.2 İletişim Kanalı Tercihleri ile İlgili Kuramsal Modeller

İletişim teknolojilerinin kişilerarası ilişkilere etkisini açıklamaya yönelik araştırmalar 1970lerde başlamış, ve geliştirilen modeller başlıca iki gruba ayrılmıştır. İlk gruptaki modeller, şu fikre dayanır:Yüz yüze iletişim pek çok

iletişim ipucunun (beden dili ve ses tonu farklılıkları ile aktarılan mesajlar gibi) kullanılmasına imkan sağlarken, teknolojik iletim araçları aynı imkanı sağlayamaz.Farklı teknolojiler, farklı türde ipuçlarını aktarabilir, diğerlerini eler. Bu nedenle yüz yüze iletişim yerine teknolojik iletişimi kullanmak, kişilerarası iletişimin niteliğinde değişiklik yaratır.

Sosyal Var Olma Modeli (Short, Williams ve Christie, 1976) ile Medya Zenginliği Modeli (Daft ve Lengel 1986), bu ilk grupta yer alan modellerdendir. Bu modellere göre teknolojik iletişim, insan ilişkileri açısından her zaman için yüz yüze iletişime kıyasla daha az tatmin edicidir. Daha sonra geliştirilen Görev-Kanal Uygunluğu Modeli'nde ise (bknz. Sherman, 2003), önemli olanın üstlenilen iletişim görevinin niteliğine uygun kanalı bulmak olduğu savunulur. Yüz yüze iletişim her görev için en iyi tercih olmayabilir. Duygusal ya da bilişsel türde iletişimler için farklı ipuçları (görsel, işitsel, dokunsal gibi) daha etkili olabilir, buna bağlı olarak farklı iletişim görevleri için farklı kanallar tercih etmek mümkündür.

İkinci gruba giren modeller (Örnek: Sosyal Bilgi İşleme Kuramı, Sosyal Kimlikleşme/Kimliksizleşme Kuramı), bireylerin iletişim sürecindeki aktif rolünü vurgular. Kanalların teknolojik özelliklerinin yanı sıra, o kanalları kullanan bireylerin ve kanalların kullanıldığı sosyal ortamların özellikleri de önemlidir. Teknolojik iletişim yoluyla kurulan ve sürdürülen ilişkiler, yüz yüze iletişimle kurulan ve sürdürülenler kadar, ve hatta daha fazla, yakınlık yaratabilir (Whalter, 1996). Sözkonusu modellerde teknolojik iletişim ile ilk kez tanışan insanların birbirlerine yakınlık hissetmesinin yüz yüze iletişimle tanışmaya kıyasla daha uzun sürebileceği, ama gerekli zaman tanındığında yüz yüze iletişim yoluyla sağlanan yakınlık düzeyinde yakınlık hissedebilmelerinin mümkün olduğu savunulur.

1.3 Yüz Yüze ve Teknolojik İletişimde Bireysel Farklılıklar

1.3.1 Kişilik

Kişilik yapısını incelemek için oluşturulan farklı sınıflandırmalar vardır. Sınıflandırmaların hemen hepsinde kişilik, 3-7 arasında değişen sayıda boyutlara sahiptir. İçedönüklük/Dışadönüklük ve Duygusal tutarlılık/Nörotisizm boyutlarının varlığı hakkında güçlü bir görüş birliği vardır. Dışadönüklük; insanlarla iletişim kurmaktan hoşlanma, konuşkanlık, risk almaktan hoşlanma, sözünü geçirebilme gibi özellikleri ifade eder. Duygusal Tutarlılık/Nörotisizm ise utangaçlık, suçluluk, huzursuzluk gibi hisleri ifade eder. Eyseck'in sınıflandırmasında bunlara ek olarak Psikotisizm boyutu vardır (Eysenck ve Eysenck, 1991). Bu boyut, yalnız olma, başkalarına karşı duyarsız olma, saldırganlık ve sosyal normlara uymama gibi özellikleri ifade eder. Bazı sınıflandırmalarda bu kavram Uyumluluk, Sorumluluk, Açıklık gibi bölümlere ayrılmıştır. Uyumluluk, kibar ve sevgi dolu olmayı; Sorumluluk, düzenli ve kendini kontrol edebilen biri olmayı; Açıklık ise yaratıcı, sezgi dolu olmayı ve pek çok farklı şeye ilgi duymayı ifade eder.

Kişilik faktörleri ile yüz yüze ve teknolojik iletişim değişkenleri arasındaki ilişkiyi inceleyen çeşitli çalışmalar yapılmıştır. Yüz yüze iletişimle ilişkisi en çok araştırılan kişilik değişkenleri İçedönüklük/Dışadönüklük ve Duygusal Tutarlılık faktörleridir (Örnek: (McCroskey, Heisel ve Richmond, 2001; McCroskey, Richmond, Heisel ve Hayhurst, 2004). Dışadönük ve duygusal tutarlılığı yüksek bireylerin, yüz yüze iletişimi, içedönük ve nörotik bireylerden daha rahat kullanabildiğine dair araştırma bulguları vardır. Ayrıca deneyime açık, uyumlu ve sorumlu bireylerin, yüz yüze iletişimde deneyime

kapalı uyumsuz ve sorumsuz bireylere kıyasla daha başarılı olduklarına dair bazı bulgular, ilgili literatürde yer almaktadır (Örnek: Jensen-Campbell, Knack, Waldrip ve Campbell, 2006; Sneed, McCrae, & Funder, 1998).Teknolojik iletişimle ilgili olarak ise, dışadönüklük, duygusal tutarlılık, sorumluluk, deneyime açıklık ve uyumluluk düzeyi düştükçe teknolojik iletişime yönelişin arttığı ilgili literatürden anlaşılmaktadır (Örnek: Butt ve Philipps,2008; Tuten and Bosnjak, 2001).

1.3.2 Kavrama İhtiyacı

Kavrama İhtiyacı, insanların bilişsel etkinliklere olan ilgisini ve bu tür etkinlikler için çaba harcama eğilimini gösterir (Cacioppo ve Petty, 1982). Bilişsel uyarıcılardan hoşlanma, karmaşık olanı basit olana yeğleme, ve anlamaya-kavramaya yönelik ilgi gibi unsurları içerir (Lord ve Putrevu, 2006). Zihinsel bir yetenekten çok, zihinsel etkinliklerde bulunma motivasyonu olarak düşünülmelidir. Çalışmalar, bu kavramın ikna etme, sosyal biliş, karar verme ve kişilerarası ilişkiler gibi pek çok farklı alanla ilişkisini ortaya koymuştur (bknz. Petty, Briñol, Loersch,ve McCaslin, 2009). Bu kavramın kişilerarası yüz yüze iletişim ile ilişkisini gösteren bazı çalışmalar da vardır. Örneğin, hem Kavrama İhtiyacı hem de girişkenlik düzeyi yüksek olan bireyler tartışma içeren iletişim durumlarından hoşlanırlar (Nusbaum ve Bendixen, 2003); fakat sözel saldırganlık göstermezler (Sanders, Gass, Wiseman & Bruschke, 1992).

Kavrama ihtiyacının teknolojik iletişim ile ilişkisini inceleyen çalışmalar da vardır. Ancak bu çalışmalar genellikle Web kullanımı ile ilgilidir: E-öğrenme, ürün bilgisi araştırma ve eğlence gibi (örn.: Amichai ve Kaynar, 2006; Tuten ve

Bosnjak, 2001). Kavrama ihtiyacının kişilerarası iletişimde kanal tercihi yapma üzerindeki etkisi ise çalışılmamıştır. Kişilerarası iletişimde kanal tercihi yapmak, düşünme ve karar verme süreçlerini içerdiğinden zihinsel bir etkinliktir. Aynı zamanda da başkaları ile iyi ilişkiler sürdürme ile ilgili olduğundan sosyal bir etkinliktir. Zihinsel bir etkinlik olmasından ötürü, kanal tercihi Kavrama İhtiyacı ile bağlantılı olabilir. Bu çalışmada, Kavrama İhtiyacı düşük olan bireylerin zor iletişim durumlarından kaçıma eğilimi gösterecekleri ve dolayısıyla bu tür iletişim durumlarında, yüz yüze iletişime kıyasla daha az bilginin aktarımına imkan veren (sözel olmayan iletişim ipuçlarını eleyen) teknolojik iletişim kanallarını tercih edebilecekleri beklenmektedir.

1.3.3 Dengeli Bütünleşme ve Ayırdetme-Ayrışma Benlik (Denge) Modeli

Dengeli Benlik Modeli, doğa düzeni ve insanın bu düzen içindeki yeri üzerine iki temel fikre dayanmaktadır:

> "Doğal düzen, farklılaşmış parçaların bir denge içinde karşılıklı bütünleşmesini içerir. Ve insanlar bu doğal düzenin bir parçası olduklarından, farklılaşma ve bütünleşmeye yönelik doğal eğilimlerin her ikisine de sahiptirler.

Model, insanların kişilerarası bütünleşme ve kişisel farklılaşma eğilimlerini anlayabilmeyi hedefler (İmamoğlu, 2003). Kişilerarası bütünleşme, başkaları ile yakın ilişki içinde olmayı; kişisel farklılaşma ise kendine has özellikleri ile kendini tanımlayan özgün bir birey olmayı ifade eder.Modelde, kişilerarası bütünleşme yönelimi "ilişkililik; kişisel farklılaşma yönelimi ise "kendileşme" olarak adlandırılmıştır.

İlişkililik ve kendileşme yönelimlerinin nitelikleri birbirinden farklı pek çok psikolojik değişkenle olan ilişkisini gösteren çalışmalar mevcuttur. Örneğin,

ilişkililik yönelimi, algılanan anne-baba sevgi ve kabulü, kendinden memnuniyet ve aile memnuniyeti, olumlu "ben" ve "öteki" modelleri, güvenli bağlanma, olumlu gelecek beklentisi ve özgüven ile olumlu yönde ilişkili bulunmuştur. Kendileşme ise; kavrama ihtiyacı, merak, bilinmezliği tolere edebilme gibi değişkenlerle olumlu yönde ilişkili bulunmuştur. (İmamoğlu, 2003, 2006; İmamoğlu ve Guler-Edwards, 2007, İmamoğlu & İmamoğlu, 2007, 2010; İmamoğlu ve Karakitapoğlu-Aygün, 2006, 2007).

Benlik yönelimlerinin kişilerarası iletişim ile ilişkisini inceleyen önceki bir çalışmada, ilişkililik ve kendileşme yönelimlerinin her ikisinin de iletişim yetkinliği ile olumlu, yüksek bağlamlı iletişim ile olumsuz yönde ilişkili olduğu gösterilmiştir. Söz konusu çalışmada, iletişim yetkinliği; anlam çözme yeteneği, duyguları davranışların rehberi olarak kullanma ve iletişim kolaylığı değişkenlerinden oluşan bir üst kavramdır. Yüksek bağlamlı iletişim ise; dolaylı iletişim, kapalı ve muğlak iletişim, uyma davranışı gibi değişkenleri içermektedir (Tosun, İmamoğlu ve İmamoğlu, 2009). İlişkililik ve kendileşme eğilimlerinin yüz yüze ya da teknolojik iletişimi tercih etme üzerindeki etkisi ise daha önce çalışılmamıştır.

1.4 Aracı Değişkenler

1.4.1 İletişim Durumları

İletişimi anlayabilmek için, iletişim kuran insanların özellikleri kadar o kişilerin içinde bulundukları durumların özelliklerini de anlamak önemlidir (Hargie, 2006). Literatürde kişisel özellikleri anlayabilmek için geliştirilmiş ve

pek çok araştırmacı tarafından kabul gören sınıflandırma sistemleri var olsa da (Örneğin, Beş Faktörlü Kişilik Modeli), kişilerarası durumların özeliklerini sınıflandırmak için geliştirilmiş ve pek çok araştırmacının kabul edip kullandığı sınıflandırma sistem(ler)i yoktur. Durumları psikolojik açıdan değerlendirmede kullanılabilecek en temel özellik, o durumların olumlu ya da olumsuz oluşlarıdır. İletişim durumlarını değerlendirirken, olumlu durumların olumlu içeriğe sahip mesajların alınıp verildiği durumlar olduğu, olumsuz durumların ise olumsuz içeriğe sahip mesajların alınıp verildiği durumlar olduğu söylenebilir. Yani iletişim bağlamında durumların değerlendirilmesi, mesajların içeriğine göre olabilir. Birbirlerine olumsuz içerikte bilgi ve değerlendirmeleri aktaracakları durumlarda romantik partnerlerin teknolojik iletişimi yüz yüze iletişime tercih edeceklerine dair bir araştırma raporu bulunmaktadır (O'Sullivan, 2000). Ancak olumsuz içerikli mesaj aktarımı yapan her birey değil, bu aktarımları özellikle zor olarak tanımlayanlar teknolojik iletişime başvuruyor olabilir. Bilgileri, becerileri ve iletişim kurma motivasyonları yüksek olsa bile, bireyler bazı iletişim durumlarını zor olarak tanımlayabilirler.Çatışma, başkalarına geribildirim verme, ricada bulunma özür dileme, reddetme gibi durumlar herkes tarafından zor olarak algılanabilecek durumlardır; fakat bu durumları kimin ne ölçüde zor olarak algıladığı noktasında bireysel farklılıklar da söz konusu olabilir.

1.4.2 Yüz Yüze iletişim Kaygısı ve Teknolojik İletişim Kaygısı

İletişim kaygısı, sosyal kaygı ile ilişkilidir (Schlenker ve Leary, 1982). Sosyal kaygının bir alt türü olarak da düşünülebilir. Bu kaygı, insanların iletişim durumlarından kaçınmasına ve insanlarla sık sık iletişime girmelerini gerektiren görev ve işlerden uzak durmalarına sebep olur (McCroskey &Andersen, 1976).

Brown, Fuller ve Vician (2002) tarafından, "bilgisayar aracılıklı iletişim kaygısı" kavramı üretilmiştir. Bilgisayar teknolojisi kullanarak kurulacak iletişimden kaçınmayı ifade eder. Bu kavram, sözel iletişim kaygısıyla, bilgisayar kullanma kaygısıyla ve bilgisayar teknolojilerine aşina olma ile ilişkili bulunmuştur. Ancak Brown ve arkadaşları (2002) çalışmada, bilgisayar aracılıklı iletişim kaygısını, sadece e-posta iletişimine yönelik kaygı ile sınırlı tutmuşlardır. Bu çalışmada, "Teknolojik iletişim kaygısı" adlı genel bir kavram önerilmektedir. Bu kavram, mektup yazma kaygısı, telefonla konuşma kaygısı, SMS mesajı gönderme kaygısı ve bilgisayarın farklı iletişim olanaklarını (örn.: e-sohbet, e-posta…gibi) kullanmaya yönelik kaygıları içermektedir.

1.4.3 Yüz Yüze ve Teknolojik İletişime Yönelik Tutumlar

İletişim teknolojilerine yönelik tutumlar, kişinin çeşitli teknolojilere yönelik genel eğiliminin olumlu ya da olumsuz olması durumudur (Taylor & Todd, 1995). İletişim teknolojilerine yönelik tutumlar, bu teknolojilerin ne ölçüde kullanılacağı üzerinde etkili olabilir (Venkatesh, Ramesh, & Massey, 2003). Önceki pek çok çalışmada teknolojinin hem iletişim amaçlı hem de bilgi edinme amaçlı kullanımını kapsayacak şekilde "bilgi teknolojilerine yönelik tutumlar" çalışılmıştır. Bu çalışmada ise, söz konusu teknolojilerin yalnızca kişilerarası iletişim amaçlı kullanımını çalışmak hedeflenmiştir.

. Yüz yüze iletişime değer veren bireyler, İnternet'i –ya da diğer iletişim teknolojilerini- onun alternatifi olarak düşünmezler (Papacharissi ve Rubin, 2000). Dolayısıyla, kişinin teknolojik iletişime yönelik tutumlarında yüz yüze iletişime yönelik tutumları da bir rol oynar. Bazı mesajları yüz yüze iletişim sırasında vermek, bireylere kendini kötü hissettirebilir, onları utandırabilir. Ya

da bazı mesajları iyice düşünüp planlamadan söylemek, doğaçlama bir konuşma yapmak zor olabilir. Bu gibi durumlarda sıkıntı yaşayan bireyler, yüz yüze iletişime yönelik olumsuz tutumlara sahip olabilir. Bu kişilerin teknolojik iletişime olan ilgisi daha yüksek olabilir, çünkü iletişim teknolojilerini yüz yüze iletişim sırasında yaşanabilen olumsuzluklardan kaçınma araçları olarak görebilirler. Bu nedenle, hem çalışmada teknolojik iletişime hem de yüz yüze iletişime yönelik tutumlar ayrı ayrı ölçülmüş ve değerlendirilmiştir.

2. BÖLÜM

Bu çalışmada, kişilerarası ilişkilerde yüz yüze ve teknolojik iletişimi kullanan bireylerin iletişim tercihlerininin incelenmesi amaçlanmıştır. Bu noktada "iletişim kanalı tercihi" ile "iletişim kanalı kullanımı" arasındaki farka değinmekte fayda olabilir. Kullanım, bireylerin gerçek hayattaki davranışlarını ifade eder (her bir kanalın ne sıklıkta kullanıldığı gibi). Tercih ise, "eğer elinizde pek çok iletişim kanalını kullanma imkanı olursa, tanımlanan durumlarda hangi kanalı kullanmayı tercih ederdiniz?" şeklindeki hipotetik bir soruya verilen bilinçli cevapları ifade eder. İletişim teknolojileri kullanımının incelendiği çalışmaların pek çoğunda bireylerin gerçek kullanma davranışlarının ölçülmeyip, çeşitli kanalları kullanım sıklıkları katılımcıların kendilerine sorulmuştur. Bu çalışmalarda, kişilerin verdikleri cevaplar gerçek kullanım sıklıklarını yansıtmaktan çok, tercihlerini yansıtıyor olabilir. Teknolojik iletişim kullanımı ölçümlerini araştırmacının doğrudan kendisinin yap(a)madığı durumlarda, ölçümlerin kullanım sıklığını mı yoksa kullanım tercihini mi yansıttığı belirsiz kalmaktadır. Bu çalışmada ise, katılımcılara doğrudan doğruya kullanım tercihleri ile ilgili sorular yöneltilmiştir. Yüz yüze iletişimin

yanı sıra katılımcılara ne ölçüde tercih ettikleri sorulan kanallar şunlardır: Mektup, sabit telefon, cep telefonu (sesli görüşme), cep telefonu (SMS mesajı), e-posta, e-chat (yalnızca yazılı), e-chat (görsel-işitsel). Katılımcılara bir dizi kişilerarası iletişim durumu (örn.: yardım isteme, geribildirim verme, özür dileme…vb.) verilip her bir durumda listelenen iletişim yollarından hangisi ile iletişim kurmayı tercih edecekleri sorulmuştur. Ayrıca, aynı durumları ne derece "zor durum" olarak nitelendirdikleri sorulmuştur. Çalışmanın geri kalanında olumlu ve olumsuz iletişim durumlarında kişilerin yüz yüze iletişimi mi yoksa teknolojik iletişimin yazılı veya işitsel yöntemlerinden birini mi daha çok tercih ettikleri ve bu tercihler üzerinde hangi bireysel faktörlerin etkili olduğu sorularına yanıt aranmıştır. Değişkenler arasındaki ilişkilerin varlığı, olumlu ve olumsuz iletişim durumları için ayrı ayrı sorgulanmıştır.

2.1 Araştırma Soruları

Soru 1: Arkadaş ilişkilerinde yüz yüze iletişim mi yoksa teknolojik iletişim mi daha çok tercih edilmektedir?

Literatürde, teknolojik iletişimin, bireylerin iletişim ihtiyacını yüz yüze iletişim kadar tatmin etmesinin asla mümkün olmadığı, dolayısıyla teknolojik iletişim tercihinin her zaman yüz yüze iletişimden düşük olacağı iddiası vardır. Aynı zamanda, teknolojik iletişimin zaman içinde kişilerarası ilişkilerde yüz yüze iletişim kadar tatmin edici olabileceğine, hatta bazen yüz yüze iletişimden daha çok tercih edilebileceğine dair bir karşı iddia da bulunmaktadır. Bu çalışmada, söz konusu iddiaların doğruluğu, bir grup Türk üniversite öğrencisinden toplanan verilerle sınanmaktadır.

Soru 2: İletişim durumlarının olumlu/olumsuz oluşu iletişim kanalı tercihlerini etkiler mi?

İster yüz yüze ister teknolojik kanallar aracılığıyla verilecek olsun, olumlu içerikli mesaj verme durumunun olumsuz içerikli mesaj verme durumuna göre daha çok tercih edileceği beklenmektedir. Ayrıca,farklı kişilik özelliklerinin kanal tercihleri üzerindeki etkisinin kendisini en çok olumsuz iletişim durumlarında göstermesi beklenmektedir.

Soru 3: Yüz yüze ve teknolojik iletişim tercihleri birbiri ile nasıl bir ilişki içindedir?

Bireylerin, yüz yüze iletişimden kaçındıkları durumlarda teknolojik iletişimi tercih etmeleri beklenmektedir. Özellikle bireylerin "zor durum" olarak algıladıkları olumsuz içerikli mesaj verilen durumlarda yüz yüze iletişim ile teknolojik iletişim tercihleri arasındaki ilişkinin negatif olması öngörülmüştür.

Soru 4: Genel bireysel farklılıklar iletişim kanalı tercihleri üzerinde etkisi var mıdır?

Çalışmada ele alınan genel bireysel farklılık değişkenleri; Beş Faktörlü Kişilik Modeli'ndeki kişilik faktörleri, Kavrama İhtiyacı ve Dengeli Benlik Modeli'ndeki Kendileşme ve İlişkililik yönelimleridir. Bu değişkenlerin kimisinde sosyal ve duygusal içerik, kimisinde ise bilişsel içerik daha yoğundur. İletişim tercihi değişkenleri ile ilişkisi bulunan genel bireysel farklılık değişkenlerinin sosyal-duygusal içerikli ve bilişsel içerikli olmak üzere iki grup altında toplanabileceği ve her iki grup değişkenin de yüz yüze iletişimi teknolojik iletişime tercih etme düzeyini pozitif yönde etkileyeceği beklenmiştir.

Soru 5: İletişime özgü bireysel farklılık değişkenleri kanal tercihlerini etkiler mi?

Çalışmada ele alınan İletişime özgü bireysel farklılık değişkenleri şunlardır: İletişim durumlarının algılanan güçlüğü, yüz yüze ve teknolojik iletişim kaygısı, yüz yüze ve teknolojik iletişime yönelik tutumlar. İletişim durumlarını güç olarak algılayan, yüz yüze iletişim kaygısı yüksek ve yüz yüze iletişime yönelik olumsuz tutumları yüksek olan, aynı zamanda da teknolojik iletişim kaygısı düşük ve teknolojik iletişime yönelik olumsuz tutumları düşük olan bireylerin yüz yüze iletişimi teknolojik iletişime tercih etme düzeylerinin düşük olması beklenmiştir. Ayrıca, iletişime özgü bireysel farklılık değişkenlerinin genel bireysel farklılık değişkenleri ile ilişkili olması beklenmiştir. Daha açık olarak; dışadönük, duygusal tutarlılığı yüksek, deneyime açık, sorumlu, uyumlu, kavrama ihtiyacı yüksek, kendileşmiş ve ilişkili bireylerin iletişim durumlarını "kolay durum" olarak algılaması, yüz yüze ve teknolojik iletişim kaygılarının düşük olması, yüz yüze ve teknolojik iletişime yönelik olumsuz tutumlarının az olması beklenmektedir. Önce bu beklentiler test edilip beklentileri doğrulayan değişkenler tespit edilecek, sonra beklentileri doğrulayan değişkenler kullanarak, iletişime özgü bireysel farklılık değişkenlerinin genel bireysel değişkenlerle yüz yüze iletişimi teknolojik kanala tercih etme düzeyi arasındaki ilişkide aracı rol oynadığı bir kavramsal model sınanacaktır.

2.2 Yöntem

2.2.1 Katılımcılar

Çalışmanın katılımcıları, 178 ODTÜ lisans öğrencisidir (128 kız, 50 erkek). Katılımcıların yaşları 18-28 arasında değişmektedir (O = 20.55, SS = 1.75).

2.2.2 Ölçüm

Kişilik faktörleri (Dışadönüklük, Duygusal Tutarlılık, Sorumluluk, Uyumluluk ve Deneyime Açıklık) toplam 45 sıfatın 5 noktalı ölçek üzerinde değerlendirildiği Genel Kişilik Özellikleri Ölçeği ile ölçülmüştür (Gençöz ve Öncül, hazırlık aşamasında). Bilme İhtiyacı, Cacioppo ve Petty (1982) tarafından geliştirilen 27 maddelik ve yine 5 noktalı bir ölçekle, Benlik Modeli'nde belirtilmiş olan iki temel benlik yönelimi (kendileşme ve ilişkililik) ise toplam 29 maddelik 5 noktalı ölçek ile (İmamoğlu, 1998, 2003) ölçülmüştür. Yüz yüze ve Teknolojik İletişim Kanalı Tercihleri değişkenini ve iletişime özgü bireysel farklılık değişkenlerini (İletişim Durumlarının Algılanan Zorluğu, Yüz Yüze İletişim Kaygısı ve Teknolojik İletişim Kaygısı, Yüz Yüze ve Teknolojik İletişime Yönelik Tutumlar) ölçmek için yeni ölçekler geliştirilmiştir. Ölçek geliştirme çalışmaları eklerde sunulmuştur.

Verilerin elde edilmesinin ardından, araştırma sorularına yönelik analizlerin öncesinde, değişkenleri oluşturmaya yönelik bir dizi ön analiz yapılmıştır. Kanal tercihi puanlamalarının üzerinde yapılan faktör analizi çalışmaları sonucunda, katılımcıların tercih puanlamalarının "olumlu içerikli mesaj verirken yapılan tercihler" ve "olumsuz içerikli mesaj verirken yapılan

tercihler" olmak üzere iki grupta ele almanın mümkün olduğu; teknolojik iletişim kanallarının ise yazılı (SMS mesajı, e-mail- ve yazılı e-chat) ve işitsel (sabit telefon konuşması ve cep telefonu ile sesli görüşme) olarak iki grupta incelenebileceği görülmüştür. İki iletişim kanalı (mektup ve görsel-işitsel e-chat) analizlerden çıkartılmıştır. Böylelikle, 6 adet iletişim tercihi puanı elde edilmiştir:

Olumsuz durumlarda	Olumlu durumlarda
1) yüz yüze iletişim tercihi	2) yüz yüze iletişim tercihi
3) işitsel iletişim tercihi	4) işitsel iletişim tercihi
5) yazılı iletişim tercihi	6) yazılı iletişim tercihi

Olumsuz durumlarda yüz yüze iletişim tercihi ile işitsel iletişim tercihinin farkını alarak "Olumsuz Durumlarda Yüz Yüze İletişimi İşitsel İletişime Tercih Etme Düzeyi" hesaplanmış; sonra olumsuz durumlarda yüz yüze iletişim tercihi ile yazılı iletişim tercihinin farkını alarak "Olumsuz Durumlarda Yüz Yüze İletişimi Yazılı İletişime Tercih Etme Düzeyi" hesaplanmıştır. Aynı işlemler olumlu durumlar için tekrarlanmıştır. Çalışmanın geri kalanında bu dört fark puanı, sonuç değişkeni olarak ele alınmıştır.

2.2.3 İşlem

ODTÜ Psikoloji Bölümü denek havuzundaki öğrencilerden veri toplanmıştır. Anket, 15-30 dakika arası sürmüştür.

2.2.3 Bulgular

Birinci ve ikinci araşma sorularına cevap verebilmek üzere 2 (İletişim durumu: Olumlu veya olumsuz) x 3 (Kanal tercihi: Yüz yüze, yazılı veya işitsel) tekrarlı varyans analizi uygulanmıştır. Olumlu durumların olumsuz durumlara;

yüz yüze iletişimin yazılı ve işitsel teknolojik iletişim, işitsel teknolojik iletişimin yazılı teknolojik iletişime kıyasla daha çok tercih edildiği görülmüştür.

Üçüncü araştırma sorusuna cevap verebilmek için yüz yüze, yazılı ve işitsel iletişim tercihleri arasındaki korelasyonlar incelenmiştir. Olumlu ve olumsuz iletişim durumlarında işitsel ve yazılı iletişim tercihlerinin birbirleri ile pozitif ilişkisi olduğu, ancak yüz yüze iletişimin olumlu durumlarda sadece işitsel iletişim ile pozitif korelasyon gösterdiği, olumsuz durumlarda ise sadece yazılı iletişim ile negatif korelasyonunun olduğu görülmüştür.

Dördüncü araştırma sorusuna cevap verebilmek için genel bireysel farklılık değişkenleri ile göreceli kanal tercihi değişkenleri arasındaki ilişki incelenmiştir. Bulgular, bireylerin dışadönüklük, deneyime açıklık, kavrama ihtiyacı ve kendileşme düzeyleri yükseldikçe, olumsuz durumlarda yüz yüze iletişimi teknolojik iletişime (hem yazılı hem de işitsel) tercih etme düzeylerinin de yükseldiğini göstermiştir. Olumlu durumlarda da Dışadönüklük, deneyime açıklık ve kendileşme düzeyleri yüz yüze iletişimi teknolojik iletişime (hem yazılı hem de işitsel) tercih etme düzeyleri ile olumlu ilişki içindedir. Ancak olumlu durumlarda, kavrama ihtiyacı sadece yüz yüze iletişimi yazılı iletişime tercih etme ile olumlu ilişkiye sahiptir.

Beşinci araştırma sorusuna cevap verebilmek için öncelikle, iletişime özgü bireysel farklılık değişkenleri ile

a)yüz yüze iletişimi teknolojik (yazılı ve işitsel) iletişime tercih etme değişkenleri arasındaki ilişki,

b) genel bireysel farklılık değişkenleri arasındaki ilişki incelenmiştir.

İletişime özgü bireysel farklılık değişkenlerinin hangisinin ya da hangilerinin genel bireysel farklılık değişkenlerinden hangisi ya da hangileri ile yüz yüze iletişimi teknolojik (yazılı ve işitsel) iletişime tercih etme değişkenleri arasındaki ilişkide aracı rol oynayabileceğini görmek için Baron ve Kenny (1996) kuralları doğrultusunda bir inceleme yapılmıştır. Olumsuz durumlarda, iletişim durumlarının algılanan zorluğu değişkeninin aşağıda sıralanan genel bireysel farklılık değişkenleri ile yüz yüze iletişimi teknolojik (yazılı ve işitsel) iletişime tercih etme arasında aracı değişken görevi üstlenme potansiyeli taşıdığına karar verilmiştir: Dışadönüklük, deneyime açıklık, kendileşme ve kavrama ihtiyacı.

Bu dört değişkene uygulanan faktör analizi, dışadönüklük ve deneyime açıklık değişkenlerinin bir faktörde, kendileşme ve kavrama ihtiyacı değişkenlerinin başka bir faktörde toplandığı iki değişkenliği bir yapı ortaya koymuştur. İlk faktöre Sosyal Açıklık, ikinci faktöre ise Kendileşmiş İşleyiş adı verilmiştir. Sosyal Açıklık ve Kendileşmiş İşleyiş faktörlerinin iletişim durumunun algılanan zorluğu değişkenini; iletişim durumunun algılanan zorluğunun ise yüz yüze iletişimi teknolojik (yazılı ve işitsel) iletişime tercih etme değişkenini olumsuz yönde yordadığı bir model yapısal eşitlik analizi ile test edilmiştir. Analizler sonucunda, Sosyal Açıklık faktörünün iletişim durumunun algılanan güçlüğü değişkeni üzerinden sonuç değişkeni ile dolaylı

olarak ilişkili olduğu; Kendileşmiş İşleyiş'in ise sonuç değişkenini doğrudan yordadığı görülmüştür.

2.4 Tartışma

Bu çalışmada, bireylerin arkadaşlık ilişkilerinde yaşanabilecek çeşitli olumlu ve olumsuz iletişim durumlarında yüz yüze iletişimi mi, yoksa teknolojik iletişimin işitsel ya da yazılı formlarından birini mi tercih edecekleri araştırılmıştır. Her durumda yüz yüze iletişimin daha çok tercih edildiği, onu işitsel teknolojik iletişimin takip ettiği ve en son olarak yazılı iletişimin tercih edildiği görülmüştür. Yüz yüze iletişim, mesajı değişik ipuçları ile (görsel, işitsel, tensel..vb.) iletebilir, yazılı iletişim ise sadece yazılı metin yoluyla iletebilir. Dolayısıyla bu çalışma bulgusu, iletişim kanalı tercihlerinde,mesajın iletiminde kullanılan ipuçlarının çeşitliliğinin önemli olabildiği iddiasını doğrulamıştır. Her ne kadar cep telefonları ve İnternet hayatımıza girse de, halen yüz yüze iletişim, arkadaşlarla iletişimde en çok tercih edilen yöntemdir. Bu nedenle çalışmanın geri kalanında hangi kişisel ve durumsal özelliklerin kişileri yüz yüze ya da teknolojik iletişimden birini seçmeye yönelttiği sorusu yerine, hangi işitsel ya da durumsal özelliklerin yüz yüze iletişimi teknolojik iletişime tercih etme düzeyini arttırdığı ya da azalttığı sorusuna cevap aranmıştır.

Durumların olumlu ya da olumsuz oluşunun iletişim tercihleri üzerindeki etkisi incelendiğinde, beklendiği gibi, olumlu durumlarda yüz yüze ya da teknolojik iletişim kullanımının olumsuz durumlarda yüz yüze ya da teknolojik iletişim kullanımına kıyasla daha çok tercih edildiği görülmüştür. Bu bulgu, işitsel iletişimin yüz yüze iletişim ve yazılı iletişim arasında bir ara pozisyonda

yer alışı ile ilgili olabilir: İşitsel iletişim, mesajın aktarımında kullanılan ipuçlarının çeşitliliği bakımından yüz yüze iletişimden daha düşük, yazılı iletişimden daha yüksek bir pozisyondadır.

Teknolojik iletişimin işitsel ve yazılı formlarını tercih etme düzeyleri birbiriyle olumlu yönde ilişkilidir, fakat her birinin yüz yüze iletişimi tercih etme düzeyi ile ilişkisi farklı yönlerdedir. İşitsel iletişim tercihi,olumlu iletişim durumlarında yüz yüze iletişim tercihi ile pozitif korelasyon gösterir; olumsuz iletişim durumlarında ise yüz yüze iletişim ile ilişkili değildir. Oysa yazılı iletişim, olumlu iletişim durumlarında yüz yüze iletişim ile ilişkili değildir, ama olumsuz durumlarda yüz yüze iletişim ile negatif korelasyon gösterir. Bu bulgu,teknolojik iletişimi çalışırken, tek bir kanala odaklanmak yerine, yazılı ve işitsel olmak üzere farklı türde kanalları çalışmanın yararlı olabileceğine işaret eder. Yazılı iletişimin sadece olumsuz durumlarda yüz yüze iletişimle negatif ilişkisinin olması, olumsuz durumlarda yazılı iletişimin yüz yüze iletişime alternatif oluşturduğunu düşündürmektedir. Olumsuz durumlarda duygu ve düşünceleri yüz yüze iletişimle ifade edebilmek kişilere zor gelebilir çünkü bu durumlarda yüz yüze iletişim sırasında kişiler, karşı taraftan gelebilecek olumsuz tepkilere tamamen açık durumdadırlar; oysa yazılı iletişim kişileri bu tepkilerle doğrudan karşılaşmaktan kurtarır.

Literatürde çeşitli bireysel farklılık değişkenlerinin iletişim kanalı tercihi üzerine etkilerine yönelik parça parça bulgular var olsa da, çok sayıdaki bireysel farklılık değişkeninin iletişim tercihleri ile ilişkisini bir arada çalışabilmek ve bu değişkenlerin yarattığı birbirine benzeyen ya da birbirinden farklı etkilerin ne olduklarını ve bunların sebeplerini anlayabilmek için nasıl bir yol izlenebileceği konusunda bir rehber yoktur. Hangi kişisel özelliklerin, çeşitli durumlarda

bireyleri bir iletişim kanalını tercih etmeye ittiğine yönelik bilgi, kişilerin bu durumlarla daha etkili bir biçimde baş etmesinde yardımcı olabilir. İletişim tercihi ile ilişkili olması muhtemel tüm bireysel farklılık değişkenlerini bu çalışmaya dahil etmek mümkün olamasa da, en azından bazıları ele alınıp iletişim tercihleri ile ilişkili bulunanlardan her biri, Sosyal Açıklık ve Kendileşmiş İşleyiş adı verilen üst-kavramlardan birine yerleştirilmiştir.

Çalışmada, Dışadönüklük ve Değişime Açıklık değişkenleri, Sosyal Açıklık üst-kavramını oluşturmuştur. Kendileşme ve Kavrama İhtiyacı değişkenleri ise Kendileşmiş İşleyiş'in elemanları olmuşlardır. Sosyal Açıklık kavramı, kişilerarası iletişim durumlarında olumlu duygu içinde olmayı ve kaçmaktan ziyade yaklaşma davranışına yönelik motivasyona sahip olmayı ifade eder. Kendileşmiş İşleyiş ise bir kişisel gelişim motivasyonunu, yani bilgili, yetkin ve özgün bir birey olmaya yönelik eğilimi ifade eder. Sosyal Açıklık ve Kendileşmiş İşleyiş, birbirini tamamlayan ama birbirinden farklı iki kavramdır. Birbirleri ile olumlu yönde anlamlı ilişki içinde olmaları, ancak her ikisinin yüz yüze iletişimi teknolojik iletişime tercih etme düzeyi ile ilişkisinin farklı yollardan olması buna işaret etmektedir. Sosyal Açıklık, söz konusu tercih düzeyi ile dolaylı olarak –olumsuz iletişim durumunun algılanan zorluğu yoluyla- ilişkili iken, kendileşmiş İşleyiş ise söz konusu tercih ile doğrudan ilişkilidir. Bulgulara göre, Sosyal Açıklık düzeyi yükseldikçe, olumsuz durumları "zor durum" olarak algılama eğilimi düşmektedir; durumlar ne kadar "kolay durum" olarak algılanırsa, yüz yüze iletişimi teknolojik iletişime tercih etme o kadar yüksek olmaktadır. Oysa Kendileşmiş İşleyiş, olumsuz iletişim durumunun algılanan zorluğu ile ilişkili değildir.

Çalışmanın bulguları, çalışma sorularına yönelik bazı cevaplar üretmekle beraber, bir sonraki çalışmaya yönelik bazı soruların geliştirilmesine de yol açmıştır. Bir sonraki çalışmanın amaçlarından biri, daha geniş bir örneklemden toplanacak verilerin analiziyle elde edilecek bulguların, bu çalışmada elde edilen bulgularla tutarlılığını incelemektir. Öte yandan, ikinci çalışma, tamamıyla bu çalışmanın bir replikasyonu olarak tasarlanmamıştır. Bu çalışma, bireysel farklılık değişkenlerinin yüz yüze iletişim ve teknolojik iletişim tercihleri ile ilişkisinin daha çok olumsuz iletişim durumlarında ortaya çıktığını göstermiş olması sebebiyle, yeni çalışmada yalnızca olumsuz iletişim durumlarındaki iletişim kanalı tercihleri incelenmiştir. Birinci çalışmada, pek çok farklı iletişim kanalını tercih etme eğilimleri ayrı ayrı incelenmiş, fakat faktör analizi çalışmaları, bu kanalları işitsel ve yazılı olarak iki başlık altında toplamanın mümkün olabileceğini ortaya koymuştur. Bu nedenle ikinci çalışmada kişilere tek tek farklı kanallarla ilgili tercihlerini sormak yerine, yüz yüze, işitsel ve yazılı iletişim olmak üzere üç farklı iletişim türü ile ilgili tercihleri sorulmuştur. Birinci çalışmada, genel bireysel farklılık değişkenleri ile iletişim tercihleri ile ilgili değişkenler arasında açıklayıcı bir mekanizma olma potansiyeli bulunan bir dizi iletişime özgü bireysel farklılık değişkeni ele alınmış olsa da, bulgular, bunların içinde olumsuz iletişim durumlarının algılanan güçlüğü değişkeninin bu açıklayıcı rolü en iyi taşıyabildiğine işaret ettiğinden, ikinci çalışmada diğer iletişime özgü bireysel farklılık değişkenleri ele alınmamıştır. Bunun yerine, bireyleri olumsuz içerikli mesajların verildiği iletişim durumlarını "zor durum" olarak değerlendirmeye iten daha spesifik özellikler belirlenmeye çalışılmıştır. Bu amaçla iki kavram otaya atılmıştır: 1) bireylerin olumsuz içerikli mesajların karşılığında gelebilecek olumsuz bedensel

geribildirime karşı aşırı duyarlı olması, ve 2) bireylerin, olumsuz mesaj vermelerini gerektiren görüşmelerin öncesinde söyleyeceklerini hazırlayabilmek için zamana ihtiyaç duymaları. İkinci çalışmada, olumsuz durumların algılanan zorluğu kavramı yerine, bu iki kavram çalışmaya dahil edilmiştir. İkinci çalışmada, ilkinde ele alınana genel bireysel farklılık değişkenlerine yenileri de eklenmiştir: Utangaçlık, sosyal kaygı ve bilişsel esneklik.

3. BÖLÜM

3.1 GİRİŞ

Daha önceki çalışmada olduğu gibi, bu çalışmada da amaç, genel bireysel farklılık değişkenleri, iletişime özgü iletişim değişkenleri ve iletişim kanalı tercihleri arasındaki ilişkileri incelemektir. Önceki çalışmadaki genel bireysel farklılık değişkenlerine ek olarak utangaçlık, sosyal kaygı ve bilişsel esneklik değişkenleri incelenmiştir. İlk çalışmada olduğu gibi, iletişim değişkenleri ile ilişkili bulunan genel bireysel farklılık değişkenlerinin Sosyal Açıklık ve Kendileşmiş İşleyiş adı altında gruplandırılabileceği; sosyal kaygı ve utangaçlık değişkenlerinin ters çevrilerek Sosyal Açıklık üst-kavramına dahil edilebileceği; bilişsel esneklik değişkeninin ise Kendileşmiş İşleyiş üst-kavramının bir parçası olabileceği öngörülmüştür.

Bu çalışmada şu sorulara cevap aranmıştır:

1.Araştırma Sorusu : İki arkadaş arasındaki görüşmelerde, hangi iletişim yolu daha çok tercih edilmektedir?: Yüz yüze iletişim mi, işitsel iletişimi mi, yazılı iletişim mi?

2. Araştırma Sorusu: Yüz yüze iletişim, işitsel iletişim ve yazılı iletişim tercihlerinin birbirleri ile ilişkileri nasıldır?

3 Araştırma Sorusu: Genel bireysel faklılık değişkenleri (Sosyal Açıklık ve Kendileşmiş İşleyiş) yüz yüze iletişimi teknolojik iletişime tercih etme düzeyi ile nasıl bir ilişki içindedir?

Bu sorular, yalnızca olumsuz iletişim durumlarını araştırmak için sorulmuştur. Son olarak, genel bireysel farklılık değişkenler ile iletişim kanalı tercihi arasındaki ilişkide aracı rol oynayacak bir değişken olarak "olumsuz durumlarla baş etmede güçlük" adı verilen bir değişken ortaya atılmıştır. Bu değişken, iki unsurdan oluşmaktadır:

1)Olumsuz bedensel geribildirime karşı aşırı duyarlılık

2) Yanıt vermeden önce hazırlanma gereksinimi

Sosyal Açıklık ve Kendileşmiş İşleyiş değişkenlerinin olumsuz durumlarla baş etmede güçlük ile negatif ilişkili olduğu ve bu değişkenin de yüz yüze iletişimi teknolojik iletişime tercih etme düzeyi ile negatif ilişkili olduğu bir yapısal eşitlik modeli ile test edilmiştir.

Bu bölümün geri kalanında, ilk çalışmada olmadığı halde ikinci çalışmaya dahil edilen kavramlarla ilgili literatür bilgileri verilmiştir.

3.1.2 Bilişsel Esneklik ve İletişim

Bilişsel esneklik; esnek olmaya ve kendini durumlara uyarlamaya yönelik arzu duyma, bir problemi çözmek için pek çok farklı çözüm yolunun olabileceğinin farkında olma, ve öz-etkinlik (self-efficacy) gibi unsurları içeren bir kavramdır. Bilişsel esneklik kavramı; sözel saldırganlık ile ve iletişim kurmaya isteksiz olma ile olumsuz yönde ilişkili bulunmuştur. Bir taraftan da

etkileşime katılma, öz-izleme (self-monitoring), kişilerarası iletişim yetkinliği, kararlılık, karşı görüşlere hoşgörü ile olumlu yönde ilişkilidir.

Bilişsel esneklik düzeyi yüksek bireyler, düşük olanlara kıyasla, bir mesajı yüz yüze iletmede güçlük yaşadıklarında, alternatif iletişim kanallarının varlığını kolayca fark edebilir, bunları kullanmaya daha çok heves gösterebilirler. Dolayısıyla, Bilişsel Esneklik ile olumsuz durumlarda yüz yüze iletişimi teknolojik iletişime tercih etme düzeyi arasında olumsuz yönde ilişki beklenebilir. Ancak şu da var ki, bilişsel esnekliği yüksek bireyler, kişilerarası iletişimde, diğerlerinden daha başarılıdır. (Martin ve Anderson, 1998). Bu nedenle onlar, Bilişsel Esneklik düzeyleri düşük bireylere kıyasla, yüz yüze iletişime bir alternatif arama eğilimine daha az girebilirler.

3.1.3 Sosyal Kaygı, Utangaçlık ve İletişim

Kaygı, tehdit içeren durumlara verilen bir tepkidir. Sosyal kaygı ise, bireylerin, başkalarının ortamdaki varlığı sebebiyle hissettikleri rahatsızlıktır. Bu kaygı, başkalarından kaçınma davranışını ve olumsuz değerlendirilme korkusunu da içerebilir (Leary, 1991). İnsanlar, sosyal ortamlarda olumlu bir izlenim yaratma arzusu duyuyor ancak kendi özelliklerini başkalarına olumlu bir şekilde sunabilecekleri konusunda güvensizlik yaşıyorlarsa sosyal kaygı hissederler.Utangaçlık ise sosyal ortamlarda haddinden fazla kendine odaklanma sonucunda ortaya çıkar ve hafif düzeyde sosyal beceriksizlikten sosyal ortamda tamamen ketlenmeye varan bir aralıkta değişebilen davranışsal sonuçlar doğurur. Utangaç/Sosyal kaygısı yüksek insanlar yüz yüze kişilerarası iletişimde daha az yetkindirler ve teknolojik iletişime daha çok başvururlar.

3.1.3 Olumsuz Durumlarla Baş Etmede Güçlük

3.1.3.1 Yanıt Vermeden Önce Hazırlanma Gereksinimi

Etkili iletişim kurabilmek için, kişilerin kendilerini görüşmelere hazırlama becerisinin olması gerekir. Bu hazırlanma, kişilerin, görüşme sırasında kendilerini diğerlerine nasıl sunduklarını kontrol etmeye yönelik bir çaba olabilir. Zor bir görüşme esnasında, örneğin görüşmedeki diğer kişinin duymaktan hoşlanmayacağı olumsuz bir mesajın verileceği bir görüşmede, kendiyle ilgili olumlu bir imaj oluşturabilmek, görüşme öncesinde zaman ve emek harcayarak yapılan bir hazırlık ile mümkün olabilir. Bu gibi zor durumlarda, mesajı verecek kişiler, kendilerinin karşı tarafa nasıl göründüklerini mümkün olan en üst düzeyde kontrol edebilecekleri bir iletişim yolunu tercih edebilirler.Teknolojik iletişim araçları, bu noktada kişilere kolaylık sağlayabilir. Özellikle eş zamanlı görüşmeyi gerektirmeyen iletişim araçları –yazılı iletişim kanalları gibi- kişinin bir şeyi ifade etmeden önce sözlerini hazırlamasına daha çok imkan verir. Bu nedenle, bu çalışmada, yanıt vermeden önce hazırlanma gereksinimi arttıkça, yüz yüze iletişimi teknolojik iletişime tercih etme düzeyinin düşeceği öngörülmüştür. Ayrıca, bu gereksinimin; utangaçlık ve sosyal kaygı ile negatif, dışadönüklük, bilişsel esneklik, değişime açıklık, duygusal tutarlılık, uyumluluk, kavrama ihtiyacı, kendileşme ve ilişkililik ile pozitif bağlantı içinde olması beklenmiştir.

3.1.3.2 Olumsuz Bedensel Geribildirime karşı Aşırı Duyarlılık

Herhangi bir durumun olumsuz sonuçlanacağını (cezalandırılma, tehlike ya da başarısızlık gibi) sezinleyen insanlar, ya bu durumu değiştirmeye ya da bu durumdan kaçmaya çalışırlar. Bir iletişim durumunun olumsuz sonuçlanacağı hissi, hem sözel hem de sözel olmayan ipuçları yoluyla edinilir. Bu yüzden bir görüşme anında bireyler, birbirlerinin sadece sözel ifadelerini dinlemekle kalmayıp sözel olmayan ifadeleri de gözlemlerler. Bazı bireyler, olumsuz geribildirimin bedensel ifadelerine karşı aşırı duyarlıdırlar. Görüştükleri kişinin ses tonundaki bir gerginliği ya da yüzündeki olumsuz bir ifadeyi hemen fark edip bu gibi durumlarda geri çekilmeyi (susmak ya da konu değiştirmek gibi) tercih ederler.Teknolojik iletişim araçlarının sözel olmayan ifadeleri yüz yüze iletişim kadar iletemiyor olması, bu tarz kişiler için bir avantaj olarak kullanılabilir. Bu nedenle, bu çalışmada, olumsuz bedensel geribildirime karşı aşırı duyarlılık yükseldikçe, yüz yüze iletişimi teknolojik iletişime tercih etme düzeyinin düşeceği öngörülmüştür. Ayrıca, bu özelliğin; utangaçlık ve sosyal kaygı ile negatif, dışadönüklük, bilişsel esneklik, değişime açıklık, duygusal tutarlılık, uyumluluk, kavrama ihtiyacı, kendileşme ve ilişkililik ile pozitif ilişki içinde olması beklenmiştir.

3.2 Yöntem

3.2.1 Katılımcılar

Katılımcılar, yaşları 17-27 20. 74 (SS =1.4) arasında değişen 343 üniversite öğrencisidir (202 kız, 101 erkek).

3.2.2 Ölçüm

Birinci ve ikinci çalışmalarda bazı ortak ölçüm araçları kullanılmıştır: Genel Kişilik Özellikleri Envanteri, Kavrama İhtiyacı Ölçeği ve Dengeli Bütünleşme-Ayrışma Ölçeği. Bunlara ek olarak, Bilişsel Esnekliği ölçmek için 12 maddelik ve 6 noktalı bir ölçek (Martin & Rubin, 1995);Utangaçlığı ölçmek için 20 maddelik ve 5 noktalı bir ölçek (Cheek & Buss, 1981; Türkçe adaptasyonu: Güngör, 1991); Sosyal Kaygıyı ölçmek için 26 maddelik ve 4 noktalı bir ölçek (Liebowitz, 1987) kullanılmıştır.

"Olumsuz Bedensel Tepkilere Aşırı Duyarlılık" ölçümü için katılımcılara 7 adet olumsuz durum senaryosu verilmiş ve bu senaryoların her biri için şu maddeleri 5 noktalı ölçek kullanarak değerlendirmeleri istenmiştir:

> Ben konuşurken onun duruşunda ve yüz ifadesinde olumsuz değişimler olursa kendimi çok kötü hissederim.
>
> Söylediklerimden rahatsız olduğunu fark edersem hemen susmayı ya da konu değiştirmeyi tercih ederim.
>
> Konuşurken gözlerinin içine bakmakta zorlanırım.

Benzer bir biçimde, "Yanıt Vermeden Önce Hazırlanma İhtiyacı" ölçümü için katılımcılara aynı 7 olumsuz durum senaryosu verilmiş ve bu senaryoların her biri için bu sefer şu maddeleri 5 noktalı ölçek kullanarak değerlendirmeleri istenmiştir:

> Söyleyeceklerimi kafamda defalarca evirip çeviririm.
>
> Söyleyeceklerime nasıl karşılık vereceğini önceden tahmin edip kendimi buna hazırlamak için zamana ihtiyaç duyarım.
>
> Söyleyeceklerimi önceden prova etmemiş olsam da rahatlıkla konuşabilirim (ters madde).

İletişim kanalı tercihleri için yine aynı senaryolar verilmiş ve katılımcılardan anlatılan durumlarda kendileri olsalardı, yüz yüze, yazılı ve işitsel iletişim yollarından her birini ne düzeyde tercih edecekleri sorulmuştur. Verilerin elde edilmesinin ardından, yüz yüze iletişim tercihi ile işitsel iletişim tercihinin farkı alınarak "Olumsuz Durumlarda Yüz Yüze İletişimi İşitsel İletişime Tercih Etme Düzeyi" hesaplanmış; sonra yüz yüze iletişim tercihi ile yazılı iletişim tercihinin farkı alınarak "Olumsuz Durumlarda Yüz Yüze İletişimi Yazılı İletişime Tercih Etme Düzeyi" hesaplanmıştır.

3.3 Bulgular

Birinci araştırma sorusuna cevap verebilmek üzere 3 (Kanal tercihi: Yüz yüze, yazılı veya işitsel) tekrarlı varyans analizi uygulanmıştır. Yüz yüze iletişimin yazılı ve işitsel teknolojik iletişime tercih edildiği görülmüştür. Yazılı ve işitsel teknolojik iletişim tercihlerinin düzeyleri arasında anlamlı bir fark bulunamamıştır.

İkinci araştırma sorusuna cevap verebilmek için yüz yüze, yazılı ve işitsel iletişim tercihleri arasındaki korelasyonlar incelenmiştir. İşitsel ve yazılı iletişim tercihlerinin birbirleri ile pozitif ilişkisi olduğu, ancak yüz yüze iletişimin yazılı iletişim ile negatif korelasyonunun olduğu, yüz yüze iletişim ile işitsel iletişim arasında anlamlı korelasyon ilişkisi olmadığı görülmüştür.

Üçüncü araştırma sorusuna cevap verebilmek için genel bireysel farklılık değişkenleri ile göreceli kanal tercihi değişkenleri arasındaki ilişki incelenmiştir. Bulgular, bireylerin dışadönüklük, deneyime açıklık, kavrama ihtiyacı ve kendileşme ve bilişsel esneklik düzeyleri yükseldikçe ve de utangaçlık ve sosyal

kaygı düzeyleri düştükçe, olumsuz durumlarda yüz yüze iletişimi teknolojik iletişime (hem yazılı hem de işitsel) tercih etme düzeylerinin de yükseldiğini göstermiştir.

Dördüncü araştırma sorusuna cevap verebilmek için öncelikle, olumsuz durumlarla baş etmede güçlük değişkeninin iki ayrı unsuru kabul edilen olumsuz bedensel tepkilere aşırı duyarlılık ve yanıt vermeden önce hazırlanma ihtiyacı değişkenlerinin

a) yüz yüze iletişimi teknolojik (yazılı ve işitsel) iletişime tercih etme değişkenleri ile ilişkisi ve

b) genel bireysel farklılık değişkenleri ile ilişkisi incelenmiştir.

Olumsuz durumlarla baş etmede güçlük unsurlarından hangisinin ya da hangilerinin genel bireysel farklılık değişkenlerinden hangisi ya da hangileri ile yüz yüze iletişimi teknolojik (yazılı ve işitsel) iletişime tercih etme değişkenleri arasındaki ilişkide aracı rol oynayabileceğini görmek için Baron ve Kenny (1996) kuralları doğrultusunda bir inceleme yapılmıştır. Bu her iki değişkenin de aşağıda sıralanan Genel bireysel farklılık değişkenleri ile yüz yüze iletişimi teknolojik (yazılı ve işitsel) iletişime tercih etme arasında aracı değişken görevi üstlenme potansiyeli taşıdığına karar verilmiştir:

a) Dışadönüklük, b) Deneyime Açıklık,
c) Utangaçlık (ters), d) Sosyal Kaygı (ters)
e) Kendileşme, f) Kavrama İhtiyacı g) Bilişsel Esneklik.

Bu yedi değişkene uygulanan faktör analizi, dışadönüklük, deneyime açıklık, utangaçlık (ters) ve sosyal kaygı (ters) değişkenlerinin bir

faktörde, kendileşme ve kavrama ihtiyacı değişkenlerinin başka bir faktörde toplandığı iki değişkenli bir yapı ortaya koymuştur. Bilişsel esneklik, her iki faktörde de yüksek yük aldığı için elenmesine karar verilmiştir. Tıpkı ilk çalışmada olduğu gibi, ilk faktöre Sosyal Açıklık, ikinci faktöre ise Kendileşmiş İşleyiş adı verilmiştir. Sosyal Açıklık ve Kendileşmiş İşleyiş faktörlerinin olumsuz durumlarla baş etmede güçlük değişkenini; olumsuz durumlarla baş etmede güçlüğün ise yüz yüze iletişimi teknolojik (yazılı ve işitsel) iletişime tercih etme değişkenini olumsuz yönde yordadığı bir model yapısal eşitlik analizi ile test edilmiştir. Analizler sonucunda, Sosyal Açıklık Faktörü'nün Olumsuz Durumlarla Baş Etmede Güçlük değişkeni üzerinden sonuç değişkeni ile dolaylı olarak ilişkili olduğu; Kendileşmiş İşleyiş'in ise sonuç değişkenini hem doğrudan hem de dolaylı olarak yordadığı görülmüştür.

3.4 Tartışma

İkinci çalışmanın sonucunda,ilk çalışma ile tutarlı bazı bulgular elde edilmiştir. Her iki çalışmada da, yüz yüze iletişimin teknolojik iletişimden (hem işitsel hem de yazılı) daha çok tercih edildiği görülmüştür. Her iki çalışmada da, olumsuz durumlarda yüz yüze, yazılı ve işitsel iletişim türlerinin birbirleriyle ilişkisi incelenip yazılı ve işitsel iletişimin birbirleriyle pozitif yönde ilişkili olduğu; yüz yüze iletişim ile işitsel iletişimin pozitif, yazılı iletişimin negatif yönde ilişkili olduğu saptanmıştır. Her iki çalışmada da kendileşme, kavrama ihtiyacı, değişime açıklık ve dışadönüklük değişkenleri kişilerin yüz yüze

iletişimi teknolojik iletişime tercih etme düzeyleri ile olumlu ilişki içinde bulunmuştur. İkinci çalışmada ayrıca, bu iletişim tercihiyle sosyal kaygı ve utangaçlık değişkenlerinin olumsuz yönde, bilişsel esneklik düzeyinin ise olumlu yönde ilişkili olduğu görülmüştür. Her iki çalışmada da yüz yüze iletişimi teknolojik iletişime tercih etme düzeyi ile anlamlı ilişki içinde bulunan değişkenler iki faktörlü bir yapı altında toplanmıştır: Sosyal Açıklık ve Kendileşmiş İşleyiş. Sosyal Açıklık faktörü, ilk çalışmada dışadönüklük ve değişime açıklık değişkenlerinden oluşturulmuştur; ikinci çalışmada ise dışadönüklük ve değişime açıklık ile beraber sosyal kaygı (ters olarak) ve utangaçlık (ters olarak) değişkenleri Sosyal Açıklık faktöründe yer almışlardır. Kendileşmiş İşleyiş ise, her iki çalışmada da kendileşme ve kavrama ihtiyacı değişkenlerini içermektedir. İlk çalışmada, iletişim durumlarının algılanan zorluğu değişkeni, Sosyal Açıklık kavramı ile yüz yüze iletişimi teknolojik iletişime tercih etme düzeyi arasında aracı rol oynamıştır. İkinci çalışmada ise, aracı rolü incelenen kavram, olumsuz bedensel geribildirime karşı aşırı duyarlılık ve yanıt vermeden önce hazırlanma gereksinimi değişkenlerinin bir araya gelmesiyle oluşan olumsuz durumlarla baş etmede güçlüktür. Bu kavramları içeren bir yapısal model test edilmiş, Sosyal Açıklık ile yüze iletişimi teknolojik iletişime tercih etme düzeyi arasında olumsuz durumlarla baş etmede güçlük üzerinden dolaylı bir ilişkisi olduğu, Kendileşmiş İşleyiş'in ise hem dolaylı hem de doğrudan ilişkisi olduğu görülmüştür. Bu iki çalışmanın bulguları, genel tartışma bölümünde bir arada tartışılmıştır.

4. BÖLÜM

GENEL TARTIŞMA

Bu tezde, genç yetişkinlerin arkadaşlarıyla iletişimde yaptıkları iletişim kanalı tercihlerinin araştırılması amaçlanmıştır. Hem yüz yüze iletişim, hem de çeşitli iletişim kanalları aracılığı ile iletişim imkanı bulunduğunda, gençlerin ne tür iletişimi tercih edecekleri ve bu tercihler üzerinde kişilerin ve iletişim durumlarının hangi özelliklerinin etkili olacağı sorularına cevap aranmıştır. Bu amaçla, üniversite öğrencilerinden veri toplanılan iki anket çalışması yapılmıştır.

En temel çalışma bulgusu, yüz yüze iletişimin herkes tarafından ve her koşulda (hem olumlu hem de olumsuz mesaj aktarımında) teknolojik iletişimden daha fazla tercih edildiğidir. Bu bulgu, teknolojik iletişim kullanımının gündelik hayatta yaygınlaşması ile "insanların teknoloji bağımlısı ve de teknolojinin kölesi durumuna gelecekleri, sosyal yapının ve değerlerin yıkılacağı" (Thurlow, Lengel ve Tomic, 2004) gibi endişeler taşıyan araştırmacıları rahatlatacak niteliktedir. Bu tezdeki çalışmalar, katılımcıların gerçekte ne sıklıkta yüz yüze ve teknolojik iletişimi kullandıklarına dair bilgi vermese de, ellerinde yüz yüze iletişim imkanı bulunduğu sürece arkadaşlarına çeşitli mesajların aktarımında yüz yüze iletişimi tercih edeceklerini göstermektedir. Veriler, iletişim teknolojilerine en kolay uyum sağlayabilen kişilerden –üniversite öğrencilerinden- toplanmıştır. Buna rağmen, bulgular, teknolojik iletişimin değil, yüz yüze iletişimin daha çok tercih edildiği yönündedir.

Anket çalışmalarında, bazılarının iletişim kanalı tercihleri ile ilişkisi daha önceki çalışmalarda incelenmiş olan, bazısı ise ilk defa bu çalışmada incelenen bir dizi genel bireysel farklılık değişkeni ölçülmüştür. Verilerin analizi sırasında, ele alınan genel bireysel faklılık değişkenlerinin her birinin Sosyal Açıklık ve Kendileşmiş İşleyiş olarak adlandırılan iki üst kavramdan birine yerleştirilmesi hem kavramsal hem de ampirik açıdan uygun bulunmuştur. İlki, insanların kişilerarası deneyimler yaşamak konusundaki hevesine ve cesaretine; ikincisi ise kişilerin kendini geliştirmeye yönelik motivasyonuna işaret eden bu iki kavram, iletişim kanalı tercihleri literatürüne yeni bir katkıdır.

Daha önceki pek çok çalışma, genel bireysel özelliklerin iletişim kanalı tercihlerine doğrudan etkisini araştırmış, ama bu etkinin nasıl bir süreç sonucunda ortaya çıktığını incelememiştir. Bu çalışmanın sunduğu bir başka yenilik de, bazı iletişime-özgü bireysel farklılık değişkenlerinin sağladığı dolaylı etkinin de incelenmiş olmasıdır.

İlk çalışma kişisel özelliklerin kanal tercihleri üzerindeki etkisinin, verilecek mesajın olumsuz olduğu durumlarda daha çok kendini gösterdiğini ortaya koymuştur. Bundan sonraki çalışmalarda, spesifik olarak hangi olumsuz mesajları (öfke, kırgınlık, eleştiri…gibi) iletmenin, hangi özellikteki bireylerin kanal tercihleri üzerinde etkili olduğu ya da mesajın olumlu/olumsuz oluşu haricinde iletişim durumunun ne gibi özelliklerinin kanal tercihinde etkili olabileceği araştırılabilir.

Son söz olarak, burada sunulan çalışmalar, arkadaşlarla iletişimde yapılan kanal tercihlerinin neye göre şekillendiğini anlamaya katkıda bulunmaktadır ve bu anlayış, ilerideki çalışmalarda, ister yüz yüze ister

teknolojik iletişim yoluyla gerçekleşsin, her türlü kişilerarası iletişim sürecini anlamayı hedefleyen daha kapsayıcı kuramsal modeller içinde değerlendirilebilir.

APPENDIX F

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name:	Tosun, Leman Pınar
Date and Place of Birth:	7 April 1977, Adana
E-mail:	tpinar@metu.edu.tr

EDUCATION

Degree	**Institution**	**Year of Graduation**
MS	Boğaziçi University	2002
BS	Boğaziçi University	1999
High School	Bursa Cumhuriyet High School	1994

WORK EXPERIENCE

Year	**Place**	**Enrollment**
2004- Present	METU Psychology Department	Research Assistant
2001-2004	Uludağ University Psychology Department	Research Assistant

FOREIGN LANGUAGES

Advanced English, Intermediate Japanese

SCHOLARSHIPS AND AWARDS

2006	METU Social Sciences Institute Graduate Students Best Performance Award
2005-continues	Middle East Technical University Faculty Development Program Scholarship
2004	The Best Poster Presentation Prize in 13th Turkish Psychology Congress, Istanbul
2000-2001	A financial support from Association of International Education of Japan for attending to a one-year bound Japanese language education in Keio University, Tokyo, Japan

PUBLICATIONS

2. **Tosun, L.P.** and Lajunen, T. (2010). Does Internet use reflect your personality?: Relationship between Eysenck's personality, *Computers in Human Behavior, 26,* 162-167.

3. **Tosun, L.P.** and Lajunen, T. (2009). Why do young adults develop a passion for Internet activities?: The associations among personality, revealing "true self" on the Internet and passion for the Internet, *Cyberpsychology and Behavior,12(4),* 401-406.

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5. Berkay, F., Çelen, N., Kuşdil, M.E, Tekok-Kılıç, A., Kayaoğlu, A., Mermutlu, B., Demir, G.Y.,Yorulmaz, O. and **Tosun, L.P.** (2003). 1999 Marmara Depreminin Mudanya halkı üzerindeki psiko-sosyal etkileri (The psycho-social effects of 1999 Marmara Earthquake on Mudanya's people), *Uludag Uni. Fen-Ed. Fak Sosyal Bilimler Dergisi, 4,* 1-24.

PAPERS PRESENTED IN INTERNATIONAL CONGRESSES

1. **Tosun, L.P.**, İmamoğlu, S. & İmamoğlu, E.O. (2009). *Impact of cultural and authentic self orientations on high or low-context communication styles,* Paper presented at the Mini-Conference of the International Association of Relationship Research, Lawrence, KS, November 5–7, 2009.

2. **Tosun, L.P.** and Lajunen, T. (2009). *Are technology-mediated channels helpful to shy people in difficult communication situations?* Poster presented at the 11th European Congress of Psychology, Oslo, Norway, 7-10 July

3. **Tosun, L.P.** and Lajunen, T. (2008).*Who Communicates with whom in which situations through which channel? : The role of personal, relational and situational characteristics in face-to-face and*

4. *technology-mediated communication,* Poster presented at the 4th International Association for Relationship Research Conference 17-20 July, Province, Rhode Island, the USA.

5. **Tosun, L. P.**, İmamoğlu, E. O. and İmamoğlu, S. (2007). *Communication styles of Turkish young adults with different self-*

orientations, Paper presented at 10th European Congress of Psychology 3 - 6 July, Prague, Czech Republic.

6. **Tosun, L. P**. and Ataca, B. (2006).*The effects of culture, gender and self-construals on friendship and intimacy in face-to-face and computer-mediated communication environments,* Paper presented at the 3rd International Association for Relationship Research Conference at the University of Crete, 6-10 July, Greek.

7. Kusdil, M.E., Tekok-Kılıç, A., Kayaoğlu, A., Çelen, N. ,Yorulmaz, O. and **Tosun, L.P.** (2002). *Psycho-social effects of 1999 Marmara Earthquake on Mudanya's people,* Paper presented in 9th International Symposiumon Natural and Human-Made Hazards, 3-6 October, Antalya, Turkey.

PAPER PRESENTED IN NATIONAL CONGRESSES

1. **Tosun, L.P.**, İmamoğlu, S. and İmamoğlu, O. (2008). Beş alanda dengeli benlik: Benlik yönelimleri, kültürel eğilimler ve iletişim stilleri (*Balanced self in five domains: Self-orientations, cultural orientations and communication styles*), Paper presented at 15th National Psychology Congress, 3-5 September, Istanbul, Turkey.

2. **Tosun, L.P.** and Lajunen, T. (2007). Internet iletişiminde bireysel farklılıklar: Eysenck'in kişilik boyutları ve Internet kullanımı *(Individual differences on Internet communication: Eysenck's personality dimensions and the Internet usage),* Paper presented at the 1st Psychology Graduate Student Congress, 21-24 June, Izmir, Turkey.

3. **Tosun, L.P.** and Sumer, N. (2006). Ebebeyn Bağlılık ölçeğinin faktör yapısı: Farklı faktör yapılarının Doğrulayıcı Faktör Analizi ile karşılaştırılması *(Factor structure of Parental Bonding Scale: Comparison of different factor models with confirmatory factor analysis)*, Poster presented at 14th National Psychology Congress, 6-8 September, Ankara, Turkey.

4. **Tosun, L. P.** and Ataca, B. (2004). Internet ortamı ve yüz yüze ortamda arkadaşlık üzerinde kültür ve cinsiyetin etkisi *(The effects of culture and gender on friendship and intimacy in face-to-face and computer-mediated communication environments)*, Poster presented at the 13rd National Psychology Congress, 7-11 September, Istanbul, Turkey.

5. Kuşdil, M.E., Tekok-Kılıç, A. Kayaoğlu, A. Çelen, N. Yorulmaz, O. and **Tosun, L.P.** (2002). 1999 Marmara Depreminin Mudanya Halkı Üzerindeki Psiko-Sosyal Etkileri *(Psychological effects of 1999 Marmara Earthquake on people living in Mudanya)*, Poster

presented at 12th National Psychology Congress, 11-13 September, *Ankara, Turkey.*