CMC v/s FtFC-MEDIA EFFECT ON MILLENNIALS'

SELF-DISCLOSURE BEHAVIOR

by

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ABSTRACT

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This study examines the effect that computer-mediated communication (CMC) and face-to-face communication (FtFC) have on Millennials' communication behaviors. The study specifically focuses on the self-disclosure aspect and attempts to analyze the possible effects that CMC and FtF communication may have on Millennials' self-disclosure behaviors. The methodology included a pre-test survey, followed by an experiment, and a post-test survey. Quantitative data analysis showed that for self-disclosure, Millennials do not exclusively consider one medium suitable over another. For them, the suitability of a medium is dependent on the task for which the medium is used.

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CHAPTER 1

INTRODUCTION

1.1 Internet as a Technology

Computers and, subsequently, the Internet have revolutionized the way in which we communicate. We live in a society which is fraught with new technologies and ultra-modern devices. Our computers and laptops are not the only channels via which we can communicate electronically! With the introduction of smartphones and tablets like iPads, staying connected has indeed become a very easy task.

In the present times we depend a lot on the Internet. Be it at work or at home, in various ways we do tend to come in contact with technology. Whether it is chatting online with friends, visiting social networking sites, video conferencing or simply phone calling, technology is so deeply embedded in our lifestyles and our very existence that it is almost impossible to isolate ourselves from it. Be it Baby Boomers or Millennials, the Internet has indeed made itself an indispensable part of our lives. Considering the fact that the Internet has such a pervasive role in our lives, it is important to explore how it impacts the communication behaviors or choices of Millennials who have not only grown up in a technological world but also born into it.

Sweeney (2006) found that Millennials portray behaviors very distinctly from the previous generations. He found that the decreasing number of strong speakers and the dwindling performances of the youth with regards to speaking their minds confidently could be a very close result of the increasing use of Computer-mediated communication (CMC).

Technology has definitely changed exponentially in the last two decades more than it has changed in the last two millennia. Technology in the form of television or telephone, has transformed the way in which we exist. In more ways than one, it has altered our lifestyle and

brought the world closer together. The introduction of new or digital media in the form of the Internet has further shrunk the world and, in the process, has transcended the barriers of time and space.

Easy access to various forms of media has increased the media consumption amongst the general public, irrespective of their ages. In fact, according to a survey conducted in March 2012, 53% of Americans aged 65 years or older used Internet daily to access their emails or for other general purposes (Pew Internet and American Life Project, 2012). The increasing popularity of e-books among adults increased from 17% in December, 2011 to 21% in February, 2012, and along with the rising demand for tablet computers, is considered as an indication of gradual shift from print to the digital media use (Pew Internet and American Life Project, 2012). The penetration of media into daily communication practices, as well as into recreational activities among the general public, is definitely on the rise.

Technology, in its various forms has definitely affected people irrespective of their age. E-books are just one of the many examples that ascertain this fact. With easy access to the Internet from their cell-phones, people are able to stay connected even when they are on the go. Times have long gone when the desktop computers or laptops were the only machines that enabled people to stay connected with their friends and families. This is the scenario that can be observed among people belonging to the older generation and Millennials are those that have never known a life without the various technological gadgets. Millennials are so attuned to the technological advances that they do not even question their existence. Owing to this factor, it is very important to understand the Millennials' use and dependence on technology and the possible reasons underlying it.

1.1.1 Internet and Society

According to a study conducted by the Kaiser Family Foundation (2010) over a five year span, youth consumed 10 hour 45 minutes of media content daily, which was 2 ¼ hours more than the previous five year span. Although email has been used for quite some time now in order to communicate electronically, it is not the only source of computer mediated communication (CMC) prevalent these days. The introduction of the video sharing site Youtube and social networking sites like MySpace, Facebook, and Twitter have garnered a wide following from the masses. According to 2010 demographic data, Facebook boasts a total of 500 million total users out of which 41% log in every day. Twitter has 106 million users out of which 27% log in every day. Moreover, Facebook is more popular among the age group of 18-25 year olds. Twitter is used mostly by those within the age range of 26-34 year olds (Digitalbuzz blog, 2010). According to a 2011 Pew survey, Twitter use by those aged 25 to 34 years doubled since late 2010 from 9% to 19% (Pew Internet and American Life Project, 2011). Studies have brought to the fore the immense dependence on social networking sites like Facebook by the viewers to maintain friends and also to forge new, virtual friendships (Madge, Meek, Wellens & Hooley, 2009). The youth especially is more inclined to be a part of and also influenced by these sites.

The increasing acceptance and incorporation of CMC into most of our daily lives is an indication of the ubiquitous nature of the Internet. "Today's college students have never known a world without computers. For them to communicate electronically is natural. Many presume and are usually correct that they are more familiar and comfortable with electronic communication than their older peers, parents, and teachers" (Krohn, 2004, p. 325). Therefore, it is with this thought that I try to analyze the effect that this phenomenon might have on people's, especially on the Millennials' ability to disclose information about themselves in the face-to-face context.

The increasing use of CMC has generated a wide interest among the scholars. Scholars have found that the growing dependence on the Internet has an adverse impact on an individual's

involvement in the society as well as on his/her mental health and psychological well-being (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay & Scherlis, 1998). However, studies have also been conducted which reveal that though the excessive dependence on the Internet may lead to isolation and depression, it also allows one to connect with those who are close to them; who will be readily available to give one the moral support and strength and in doing so will help in alleviating the feeling of desolation, loneliness and depression (LaRose, Eastin & Gregg, 2001).

Owing to the popularity of CMC, as well as the complex nature of this phenomenon with regard to its contribution to the society, I believe that it is imperative to measure whether this mode of communication, in some way, has enabled Millennials to effectively disclose information online, but has given them less experience in engaging in effective face-to-face interactions as a means of self-disclosure.

Self-disclosure is an essential part for any relationship to develop and foster. It is only by sharing meaningful information about oneself, information that is more concerned with baring one's feelings and thoughts, rather than talking about mundane everyday things, that is instrumental in generating intimacy and closeness and in the process developing a relationship between the communicating partners (Laurenceau, Barrett & Pietromonaco, 1998).

CHAPTER 2

Literature Review

<u>Introduction</u>

Communication as a concept has been defined in a variety of ways. One definition states that communication is a process which affords an individual the opportunity to transfer information, while another definition of communication is an exchange of thoughts or ideas (Littlejohn & Foss, 2008). An amalgamation of these two definitions would lead us to define the communication process as an exchange of information, thoughts and ideas, in an attempt to create understanding between the communicating partners. Initially, communication as a discipline consisted of only the interpersonal channel which consisted of face-to-face interactions which took place between only a limited number of people, and the mass media channel like newspapers, radios etc. which reached far and wide in order to share information with the general public (Rogers, 1986). However, with the continuous advancement of technology, human communication has transcended the face-to-face mode of interpersonal communication. As Rogers explains, being involved in and interacting with one's partner forms the basis of a desired and effective communication process. Communication technology in the form of CMC has enabled people outside mass media to interact and communicate with others irrespective of the distance between them. The use of emails, Instant Messenger (IM), and video chat (e.g. Skype) for connecting and communicating among each other has indeed changed the dimensions of the human communication process.

Considering the penetration of new media into the human communication process, and its subsequent popularity among youth, the concern for this complex phenomenon of technology with regard to its effects on youth is justified. To analyze its impact on youth, it becomes

necessary to first understand the various concepts that govern the communication practices of today's youth. This literature review will set the backdrop for the study by explaining the concepts of interpersonal communication channel and computer mediated communication (CMC), as well as put forth the need to study these concepts with regard to Millennials and their use of different media for disclosing information.

<div align="center">2.1. Interpersonal Communication</div>

Interpersonal communication differs from communication as a whole in the way that interpersonal communication is based on the quality of an interaction. Wood (1999) defines interpersonal communication by citing Buber's (1970) I-Thou relationships. She states that I-Thou relationships are rare and are formed when people meet each other as unique, whole, existential persons. They form deep bonds and reveal themselves to the other. According to Wood (1999), such relationships represent true interpersonal relationships which involve interpersonal communication. Interpersonal communication is immaterial of the context in which it occurs, and the number of individuals involved in such communication is also unimportant. Interpersonal communication can be conceptualized as "the confirmation of self-concepts and self-esteem through genuine, spontaneous dialogue between two persons based on psychological information about one another" (Cissna, 1980, p. 58). As such, effective interpersonal communication is imperative in building any successful relationship. Knapp (1984), through his relational development model, explains the ways in which individuals, through interpersonal communication, bring about a change in their intimacy levels, thereby bringing about a desired change in their respective relationships. Schutz (1958) also developed a three dimensional theory which states that for a successful relationship, three social needs must be met: inclusion, control, and affection.

Undoubtedly, for any interpersonal relationship to be successful, self-disclosure is a central phenomenon. In order to develop an interpersonal relationship, one has to be able to

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interact and disclose information about oneself. Wood (1982) also talks about the importance of communication in building human relationships. She stresses on communication as being central to the development and fostering of any successful and close relationship.

2.1.1. Self-Disclosure

Self-disclosure can be defined as the "verbal exchange of self-relevant information" (Chulene, 1981, p. 269). According to Chulene (1981), self-disclosure enables individuals "to express their emotional experiences, clarify personal beliefs and opinions, seek social validation of their self-concepts, develop close relationships, and maintain social control and privacy" (p. 269). The intimate nature of self-disclosure depends on the context and culture in which it is conveyed. Self-disclosure is an honest, intentional and purposeful revelation of self to another person which usually consists of information that cannot be obtained from any other source (Adler, Rosenfeld & Proctor II, 2004). Self-disclosure can be of mundane, everyday things or it can be of a more personal nature. It is this personal information that is essential in defining the development and maintenance of any relationship (Greene, Derlega & Mathews, 2006). For any relationship to be successful, the breadth and depth of self-disclosure play a crucial role. Altman & Taylor (1973), through their social penetration model, emphasized the importance of revealing in-depth as well as broader information about oneself in order to help any personal relationship to grow. Breadth of self-disclosure usually means the variety of information shared between the communicating partners. This does not necessarily mean that one should disclose one's most private thoughts or intimate or personal information, but is more connected with sharing a wide array of things about oneself. One may converse about more general things that one is more comfortable revealing to one's communication partner. Conversely, depth of self-disclosure is more connected with the level of information that a person wishes to disclose. It is one's ability to share personal and intimate information about oneself, which otherwise would have been impossible to have been gathered from elsewhere.

People who disclose more information about themselves tend to form more close friendships than those with less self-disclosure. People with a high self-disclosive behavior were found to be liked more in the course of a relationship than those who demonstrated low self-disclosure (Miller, Berg & Archer, 1983). Chulene (1975) also found that individuals, who adapted to different interpersonal situations by disclosing information according to the given situations, were able to survive and function more effectively than those who were less flexible.

Gender also plays a major role in human self-disclosure behavior. Sprecher (1987) conducted a study on couples and found that females disclosed more information about themselves in the relationship as compared to their male counterparts. Another study by Niebrzydowski (1996) found that males disclosed more information about themselves when conversing with a stranger as compared to their female counterparts. Hence, it is evident that gender does affect the self-disclosure behaviors exhibited by individuals.

2.1.1.1. Face-to-Face Communication (FtFC)

Face-to-face communication is a process in which both communicators are actively involved in the planned interaction (Thompson, Malloy, Cone & Hendrickson, 2010, p. 338). This is so because of the access to nonverbal communication between the two with regard to the space between them and the added advantage of immediacy with respect to feedback. Physical closeness allows the participants opportunities to gauge and investigate whether or not they are being understood and if not, also enables them to do whatever is necessary in order to clearly state their point during the planned interaction (Freiermuth, 2011).

Face-to-face communication, therefore, offers the participants an opportunity to communicate with clarity. According to Nebergall (1958), a clear message is the one which the audience perceives in exactly the same way as the sender of the message wishes them to perceive it. In FtFC, the nonverbal channels are expressed as much as the verbal dialogue, and there arises a possibility for these nonverbal cues to communicate information about personal

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relationships that one does not wish to disclose. Thus, nonverbal cues are more likely to give away information about one's thoughts and feelings even without them being aware of it (IJsselsteijn, van Baren & van Lanen, 2003). In a study conducted by Mallen, Day & Green (2003), individuals who had face-to-face interactions, as opposed to online chat, felt more close to their partners and were more satisfied with the overall experience. They also experienced a higher level of self-disclosure than those using chat. The richness of the medium with regards to social presence is, hence, evident unlike in that of the computer mediated scenario.

<center>2.2. Computer Mediated Communication (CMC)</center>

The dawn of the 21st century is witnessing a steady rise in electronic communication. "Computer Mediated Communication (CMC) is rapidly becoming an integral part of our lives at work and also at home. CMC has been described as a modified form of interpersonal communication which includes altered physical environments, altered time and space, and altered structures in communication" (Vallee, Johansen & Sprangler, 1975, as cited in Santra & Giri, 2009, p. 101).

CMC has been instrumental in building romantic relationships between people belonging to considerably distant geographical areas or culturally different units. Concepts like trust, intimacy, mutual understanding, and relationship satisfaction are the core concepts which are influenced by CMC (Anderson & Emmers-Sommer, 2006). Although, earlier research has showed that text-based communication does not inspire trust, since it lacks nonverbal cues, the use of IM and video chat have been shown to be more effective than email in the process of trust formation (Scissors, Gill, Geraghty & Gergle, 2009). Mutual understanding, however, is found to be more probable in asynchronous communication like emails as compared to synchronous communication like IM. This is so because in synchronous CMC, people send messages simultaneously and sometimes this gives rise to cognitive load, thereby diminishing the participants' attention (Cornelius & Boos, 2003).

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2.2.1. Asynchronous and Synchronous Computer Mediated Communication

Asynchronous CMC can be operationalized as communication that does not take place in real time, unlike that of synchronous computer mediated communication which occurs when the conversation takes place in the real time frame. Instant messaging (IM) and video chatting are synchronous CMC; and emailing, on the other hand, is asynchronous CMC.

Development and incorporation of CMC in the day-to-day lives have almost brought FtFC and mass communication channels closer together and in the process have helped to build meaningful personal relationships, thus offering new opportunities for the ways in which individuals relate to and connect with one another (Parks & Floyd, 1996). Instant messaging, though in written form, heightens the idea of orality in the way that it fosters a feeling of community, of togetherness and takes place in real time (Kibby, 2005). Ong (2002) calls this electronic age, where computers play an essential role in our daily communication practices 'secondary orality'. According to Ong, in the age of secondary orality, technology brings to the fore a fusion of both the oral and written cultures. Even though people use the written word to communicate with each other, the conversation is rooted in real time and as such offers immediate feedback, without wasting any time.

2.2.2. CMC and Self-Disclosure

The importance of self-disclosure in relational development is as crucial in online environments as it is in the face-to-face (FtFC) process (Dindia, 2000, as cited in Jinsuk, Klautke & Serota, 2009, p. 4). Self-disclosure is not a natural instinct; instead it is a deliberate action. Hence, there might be some factors which may be responsible in persuading people to reveal themselves in various degrees in an online medium (Jinsuk, Klautke & Serota, 2009). In the CMC context, previous studies show that CMC and general Internet-based behavior tend to consist of high levels of self-disclosure (Joinson, 2001). Especially when disclosing intimate or sensitive information, also termed as intimate self-disclosure, CMC affords anonymity to the participants,

thereby allowing them to engage in conversations without any inhibitions. According to Walther (1996), visual anonymity allows CMC users to form favorable as well as glorifying impressions about their communication partner. Walther (1996) confirms that over a period of time, as the use of CMC increases, the favorable opinions and positive reactions that the communication partners harbor will continue to grow. Social networks and virtual worlds, which are part of the social networking category, are forcing researchers to re-examine the ways in which people interact. The concept of community is based on communities of interest rather than geographic space and hence many personal interactions are now conducted on the Internet instead of face-to-face. Internet communities allow for communication to take place in the same manner as physically being a part of a community. The only difference is that Internet communities exist in the electronic medium and are not restricted to time or space (Rothaermel & Sugiyama, 2001). However, CMC also harbors some drawbacks with regards to gauging one's communication partner's true identity. It is found that the impressions derived from subsequent face-to-face meetings rarely correspond to those initially formed online (Jacobson, 1999). Fabrications about obvious physical attributes such as age, height, and weight, and less obvious characteristics, such as communication skills or humor, are likely to be exposed in such situations (Cornwell & Lundgren, 2001).

2.3. Millennials

Although there is no specific range of birth years, Howe and Strauss identify Millennials as those born roughly between 1982 and 2002 (Howe & Strauss, 2000, as cited in Schwalbe, 2009). They have also been recognized as Generation Why, Generation I, Echo Boomers, and Nintendo Generation, among other names (Keif & Donegan, 2006). Krohn (2004) describes the Millennial generation as consisting of those born after 1980 and who come of age after 2000. Although individual differences exist among generations that span decades, media use during childhood influences how youngsters learn. Millennials are accustomed to multi-tasking and are familiar with the process of gathering information from a variety of online sources (Dede, 2005).

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According to a 2010 Pew survey, the percentage of Millennials who use Internet, or in other words, those who go online is 95%, which is closely followed by Generation X or those aged between 33-45 years with 86% (Pew Internet & American Life Project, 2010).

Millennials grew up during a time in which the Internet brought great change to all traditional media. A majority of the members of the millennial generation view technology as a functional necessity and not just a modern convenience (Abram, 2007, as cited in Pearson, Carmon, Tobola & Fowler, 2009). Their communication and information-seeking behaviors noticeably vary from other generations and are fundamentally different from the Baby Boomer generation. Sweeney (2006) has identified preferences of the Millennials that include: more choices, more selectivity, flexibility/convenience, personalization and customization (p. 2-5). He has also identified common characteristics of this group that include: experiential and exploratory learning style; impatience; practical, results oriented thinking; multi-tasking; and nomadic communication style (p. 2-5). As college students, Millennials are innovators in digital consumption (Harris Interactive, 2004, as cited in Pearson, Carmon, Tobola & Fowler, 2009). "Millennials are natives of this new, digital, consumer driven, flat, networked, instant satisfaction world" (Sweeney, 2006, p. 1). Internet has afforded the Millennials the opportunity to interact with peers and strangers alike. They grew up in the age where the Internet experienced a rapid development in terms of various new platforms for sending and receiving information. Owing to these characteristics, Millennials are more privy to communicating effectively via the online medium than the previous generations.

2.4. Theoretical Foundations

It is evident from the literature review that the influence of media on Millennials is, indeed, phenomenal and research has shown considerable support of the fact that CMC as a medium of communication has gained extreme popularity among Millennials. Bearing this in mind, it is extremely important to understand the effect that the various media have on the self-disclosure

behaviors of the Millennials. It is important to use a theoretical background to strengthen the assumptions of this study as well. The researcher uses three theories as the theoretical backbone to conduct this study. Firstly, Uncertainty Reduction Theory offers an explanation of the initial interaction between strangers and the steps that are taken to reduce uncertainty in an unknown situation. Secondly, Media Richness Theory, which emphasizes on the reasons for the suitability of a medium for a planned interaction, and lastly Channel Expansion Theory, which explains the suitability or richness of a medium as perceived by the individual.

2.4.1. Uncertainty Reduction Theory (URT)

Uncertainty Reduction Theory (Berger & Calabrese, 1975) addresses the basic process of how we gain knowledge about other people, especially that of strangers in order to help reduce uncertainty. It proposes that people do not like ambiguity or confusion in their interactions and, in order to avoid these, they try various means by which to gather as much information as possible from their communication partner. According to Axiom 1 of the uncertainty reduction theory, as the level of verbal communication increases between the participants, their uncertainty gradually decreases. This axiom is supported by a study conducted on self-disclosure through Facebook (Palmieri, Prestano, Gandley, Overton & Qin, 2012), where researchers have found that as the level of self-disclosure increases, perceived uncertainty decreases. Scholars have found that students who communicate via CMC with other students use more direct uncertainty reduction strategies (i.e. more intimate questions and self-disclosures) than students in face-to-face conversations (Tidwell & Walther, 2002, as cited in Mazer, Murphy & Simonds, 2007).

Self-disclosure is a process which demands competency and is best articulated when a mutual understanding is reached between the communicating partners. Therefore, it is necessary to understand the ways in which Millennials manage uncertainty and decipher the reasons behind these uncertainty management tactics. For any message to be shared clearly and effectively, it is very important that there exists minimal or no misunderstanding between the two communicators.

A message can be assumed to be clear if it evokes the desired response and action from the receiver and there exists a mutual understanding between the two communicators. Therefore, with respect to this study, the Millennials' uncertainty while communicating with others in different media is truly essential in understanding their dependence on a particular medium for self-disclosure.

2.4.2. Media Richness Theory (MRT)

Media Richness Theory was initially formulated to describe information processes in an organizational set-up (Daft & Lengel, 1986). However, the theory is now used for generally describing the differences in communication media and the tasks for which they are suited (Pieterson & Deursen, 2006). Media Richness Theory proposes that for effective communication to occur, a medium must have the capacity which allows the communicating partners to understand each other without any equivocality and uncertainty. A medium which does not have this richness may lead to ambiguity between the communicating partners since they may understand and interpret a sent message differently (Daft & Lengel, 1986).

The four criteria that determine richness are the "medium's (a) proficiency for immediate feedback, (b) its capacity for multiple cues, (c) the provisions for the use of natural language, and (d) lastly, the potential to convey a personal focus" (Trevino, Daft & Lengel, 1990, as cited in Timmerman & Kruepke, 2006, p.78). According to the Media Richness Theory, CMC is a lean or weak medium of communication as it inhibits the scope of nonverbal cues as compared to the FtFC medium, which is a richer medium and allows for the uninterrupted sharing of nonverbal cues. However, with interactive CMC, like IM or Video conferencing, the scope of Media Richness Theory has broadened in terms of its applications to the different media for different purposes. The theory can help update the choice of communication technology chosen for an activity by helping the sender of the message choose a communication technology that has the greatest efficiency or the most desirable characteristics for a planned interaction. However, it is also

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essential to state that Media Richness Theory is a theory of the use of media rather than the choice of media. The theory does not look from the individual's point of view of choosing a medium that best suits his/her task (Dennis & Kinney, 1998). Taking this into consideration, the researcher decided to use the application of another theory to fill this gap.

2.4.3. Channel Expansion Theory (CET)

Channel Expansion Theory identifies certain experiences as important in shaping how an individual develops richness perceptions for a given channel. "Four experiences are identified as being particularly relevant: experience with the channel, experience with the messaging topic, experience with the organizational context, and experience with communication coparticipants" (Carlson & Zmud, 1999, p.155). Experience is important because it allows communicators to "develop associated knowledge bases that may be used to more effectively both encode and decode rich messages on a channel" (Carlson & Zmud, 1999, p.155). However, it is important to state here that the theory was applied only to a single medium of communication, email. Not much research has yet been conducted on the theory's applications towards other, more advanced media (Timmerman & Madhavapeddi, 2008). This theory directs attention to the perceptions of people with regards to the suitability of the medium for a planned interaction. These perceptions are developed over time via people's uses of different media for various communication tasks and are best reflected in people's preferences and usage of media.

Therefore, the above theories approach media use by the audience in fundamentally different manners. While Uncertainty Reduction Theory talks about the use of CMC in reducing anxiety when conversing with strangers, Media Richness Theory addresses the issue of the type of media outlet which can be best suited for any planned interaction such that the conversation is fluent and the communicators can share true meaning. Channel Expansion Theory, on the other hand, focuses on the audiences' perceptions about a media outlet. Here, the audience preference

for a particular medium depends on the audience's idea of the level of the medium's suitability for their planned interaction or their need for self-disclosure.

In order to understand the effects of media on Millennials' communication behaviors, I propose the following research questions:

RQ1: Does clarity of message influence perceived uncertainty while self-disclosing information in face-to-face interactions as opposed to computer mediated communication interactions?

RQ2: Does media richness influence perceived effectiveness for self-disclosure?

RQ3a: Does media usage affect Millennials' depth of self-disclosure while communicating with strangers?

RQ3b: Does media usage affect Millennials' breadth of self-disclosure while communicating with strangers?

RQ4a: Does the dependence on a particular medium chosen for various purposes affect Millennials' depth of self-disclosure?

RQ4b: Does the dependence on a particular medium chosen for various purposes affect Millennials' breadth of self-disclosure?

CHAPTER 3

Methodology

3.1. Research Design

This study design focused on quantitative data analysis and two sets of questionnaires were developed to gather the required data. In the first phase of the study, 80 undergraduate students, 40 males and 40 females, 18-24 years of age were recruited to participate in the pre-test survey administered online to determine the second phase participants. Based on their responses on the pre-test survey, 40 students were to be invited to participate in the second phase of this study, an experiment. The pre-test survey questionnaire was developed with the aim of selecting suitable study subjects for the experiment. This questionnaire consisted of close ended, straightforward questions, which mainly focused on the potential subjects' Internet usage practices. The survey also gauged the respondents' personality as well as their dependence on the Internet and face-to-face communication for various tasks using Likert-scaled questions.

Male and female subjects participated in the experiment separately in an effort to maintain a gender balance within the study. Of the 40 selected subjects, 20 were to be male subjects and 20 were to be female subjects. The researcher recruited one male confederate and one female confederate to assist in the experiment. The male confederate conducted the experiment with the male participants, while the female confederate conducted the experiment with the female participants. Within these two groups, students were to be divided in such a way that ten male participants would belong to the high CMC use group and the remaining ten would belong to the low CMC use group. The participants would be further divided amongst themselves and organized in such a way that both groups would consist of five male subjects with high CMC use and five with low CMC use each. One of these groups would participate in a face-to-face

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meeting with the male confederate and the other group would participate in an online conversation via IM with the same confederate. The group members would hold their interactions individually with the confederate. The same process was to be repeated for the female participants and their respective female confederate.

The original research design for the experiment consisted of a 2*2 factorial design (high CMC/low CMC*face-to-face/CMC). Participating students were to be asked to discuss their dating experiences with their confederate. For those who had not been on a date before, they were to be encouraged to talk about their ideal first date with the confederate. Once the experiment concluded, each participant was to be given a post-test survey questionnaire to fill out.

The second questionnaire, a post-test survey, which the selected participants were to be invited to fill out after having participated in the experiment, consisted of mainly open-ended questions, which reflected the subjects' opinions and reactions towards the experiment. Open-ended questions are those that ask for unforced opinions or in other words, there are no fixed set of responses, and the participant is free to answer however he/she chooses. Open-ended questions are helpful in gathering rich data as they allow the researcher to gather information which predominantly consists of the views and opinions exhibited by the subjects. This also allows the researcher an opportunity to sometimes acquire valuable and insightful information from the subjects which may have been missed otherwise (Center for Psychology Resources, n.d.).

3.1.1. Confederate

Confederates played a crucial role in the experimental set-up. One male confederate and one female confederate were selected by the researcher from among the group of students whose names were suggested by some of the researcher's professors. The researcher held face-to-face meetings with the students where she explained the study to them. Based on their availability, two undergraduate students were recruited to assist the researcher. The whole

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recruitment process took place within a span of one week. The researcher gave both the confederates a script to follow. This script formed the basic outline of the conversation that the confederates would have with the study subjects. However, the researcher did not allow the confederates to read from the script while talking to the subjects, as the researcher wanted the subjects to feel as though they were having a conversation, rather than being part of an experiment. Confederates were recruited in exchange for extra course credit. They went through the IRB (Institutional Review Board) training mandatory in preparation for involvement with human subjects.

3.1.2. Instant Messaging (IM)

Instant Messaging (IM) is a synchronous form of computer mediated communication. Synchronous communication is a type of communication in which the communicators involved are all connected at the same time. Unlike in the asynchronous communication, the participants do not have to wait for the message to be delivered or received as all the conversation takes place in real time. "Like chat, IM allows users to type messages into a window, but it is based on a dyadic "call" model, very similar to the telephone" (Nardi, Whittaker & Bradner, 2000, p.80). With instant messaging, a person can communicate with only one other person at a given time. However, one person can be connected with several other people with distinct dyadic conversions (Nardi, Whittaker & Bradner, 2000).

3.2. Data Collection

The data collection process basically consisted of three phases. The first phase was a pre-test survey questionnaire, followed by an experiment, and lastly a post-test survey questionnaire respectively. Through the pre-test survey, of all the parameters, the researcher mainly focused on the section which concentrated on the amount of time that the respondents' spent on social networking sites every day. Since the purpose of the study is to gauge the media's effect on Millennials' communication behaviors, the researcher felt that social networking

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sites afforded an individual the opportunity to self-disclose information, as well as to respond to others' self-disclosures, without having to interact on a face-to-face basis. The number of hours that a student spent on social networking sites, therefore, enabled the researcher to estimate the subject's dependence on Internet for communication purposes.

Based on the responses, the researcher selected thirteen students with high computer mediated communication usage. These students represented the top 20% of high Internet usage in terms of their daily social networking sites use. These students were those who used social networking sites for a minimum of four hours per day. Additionally, nine students with low usage of computer mediated communication were also invited to participate in the experiment. These students formed the bottom 20% of daily social networking sites which was 60 minutes or less time per day.

These subjects were given a topic which asked them to talk about their dating experiences with another person, a stranger. For those who had never had a date, the subjects were asked to talk about their ideal first date. The subjects were required to communicate via Instant Messenger (IM), a synchronous communication method, with a stranger. The stranger in this case was one of the two confederates who assisted the researcher in the experiment. Each confederate was assigned to two high and low CMC usage groups. The confederates followed a script which helped them to follow a specific order while communicating with the students.

The assigned confederates also conducted FtFC meetings with the individual participants from their respective groups in which they were required to talk on the same topic as that in the CMC experiment. A post-test survey was conducted which allowed the participants to report on their perceptions on the communication channels and rate their experiences in the experiment including the levels of self-disclosure. Some examples of the questions asked included the level of comfort while communicating via a particular channel (i.e., IM or FtFC), the clarity of message

in IM as opposed to FtFC, and the ability to disclose information, (i.e., in which setting the participants felt more comfortable while sharing their views).

3.2.1 Subject Recruitment

Before starting the subject recruitment, the study proposal, along with all the other required documents was initially sent to The University of Texas at Arlington Institution Review Board (IRB) for approval. The researcher contacted professors via emails, requesting that they allow their students to participate in the study in exchange for extra course credit. The professors agreed and administered the pre-test survey online to their students. Most of these professors used Blackboard to administer the survey which was then sent back to the researcher. The researcher also visited undergraduate classes and spoke directly to the students about her study. She explained the procedure involved and the possibility of an extra course credit was mentioned as well. Flyers including the researcher's contact details were distributed, so that the interested students could contact the researcher directly and volunteer to participate.

The recruitment process began in Spring, 2012 and continued throughout the 2012 Summer I semester. Over this period, subjects were recruited from ten communication undergraduate classes to participate in the pre-test survey. The total number of students who participated in the pre-test survey was N=158 males M=56 and females F=102.

Though the number of students participating in the pre-test survey was more than sufficient for the purposes of this study, the researcher faced problems in getting the selected students to participate in the experiment. The researcher contacted the selected students via email in order to inform them about their selection and to also notify them about the time and location of the experiment. However, most of the students failed to participate in the experiment. Over the recruitment period, the researcher sent invitations to participate in the experiment to a total of 85 selected students. Out of these, females F=49 and males M=36. Moreover, some of the students agreed to participate and, yet, did not attend at the said time. As a result, the

researcher found it difficult to acquire suitable subjects to participate in the study. Finally, the researcher was able to recruit a total of 23 subjects to participate in the experiment. Out of these, females comprised the majority of the study population with females F=22 and male M=1. These numbers were much lower than the proposed numbers of 40 subjects. Moreover, all the participants, save one were females. Another important factor to note is that although the female confederate completed all her sessions with the female subjects, the male confederate failed to arrive for the experiments after the first two sessions. As a result, even though there were some interested male subjects, they could not participate in the experiment.

3.2.2. Measurements

All measures for major variables were adopted from a Communication Research Measures Sourcebook (Rubin, Palmgreen & Sypher, 2004). The measures were modified to best suit the variables as presented in the research questions.

3.2.2.1. Perceived Uncertainty

Perceived uncertainty is operationalized as the uncertainty experienced by the participants while communicating with their communication partners. The perceived uncertainty scale was modified from Burgoon's Unwillingness-to-Communicate Scale which consisted of twenty items (Burgoon, 1976). This scale measures the participants' communicating experience when communicating in a society or group setting. Owing to the requirements of the study, the scale is edited and modified so as to fit the task. For perceived uncertainty, subjects were asked to answer questions which allowed them to adjust with their uncertainty. Four questions were asked- 'I tried to make the interaction less awkward', 'I started interaction with some ice-breaker questions', 'I was tensed' and 'I was nervous'.

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3.2.2.2. Message Clarity

Message clarity was operationalized as the correct interpretation of the messages sent and received by the participants via the given medium (CMC or FtFC) in the way that led to a successful or satisfactory exchange of information between the communicating partners. For message clarity, subjects were asked about their experience with regards to the communication that they undertook in the given communication medium. A measure of six items was selected and modified from Hecht's Interpersonal Communication Satisfaction Inventory (Hecht, 1978a) to gauge the subjects' experiences with regard to the clarity of message. These items were-'I was easily able to follow the conversation with my partner', 'I felt that sometimes I was unable to properly convey the message to my partner', 'I was sometimes unclear about the message that my partner wished to convey', 'I felt that I was able to connect well with my partner because we understood one another clearly,' I made an effort to convey the message as clearly as possible' and 'There were minimal or no misunderstandings in the conversation that I shared with my partner'.

3.2.2.3. Depth of Self-Disclosure

Depth of self-disclosure is operationalized as the amount of information of personal nature disclosed by the participant with their communication partners. The scale for depth of self-disclosure was modified from Burgoon and Hale's Relational Communication Scale which consisted of 41 items (Burgoon & Hale, 1987). The measurements for depth of self-disclosure consisted of four items as chosen by the researcher. These were- 'I felt that I had in-depth conversation', 'I felt that my partner revealed more information about himself/herself (than I did about myself)', 'I felt close to my partner' and 'I felt that I revealed more information about myself (than my partner did)'. These items reflected on the amount of information that the subjects revealed on the given topic.

3.2.2.4. Breadth of Self-Disclosure

Breadth of self-disclosure is operationalized as the variety of discussion that the participants had with their communication partners. The scale for breadth of self-disclosure was modified from Burgoon & Hale's Relational Communication Scale which consisted of 41 items (Burgoon & Hale, 1987). For breadth of self-disclosure, the researcher used four items- 'I felt that I talked about a lot of things', 'I felt that we had a wide discussion on the topic', 'I felt that we talked beyond the given topic' and 'I disclosed the information without feeling pressured to do so'. These items reflected the variety of discussion that the subjects had beyond the given topic.

3.2.2.5. Effective Medium for Self-Disclosure

Effectiveness of the medium is operationalized as the suitability of the particular medium, CMC or FtFC, as perceived by the subjects for the planned interaction. In a nutshell, the medium's effectiveness is dependent on the subjects' idea of the medium being suitable for the task or for the topic which was given to them. Their satisfaction and comfort while talking on a sensitive topic via the given medium, forms the crux of the medium's effectiveness. The scale for effectiveness of the medium for self-disclosure was modified from Hecht's Interpersonal Communication Satisfaction Inventory originally consisting of nineteen items (Hecht, 1978a). The measures for media effectiveness consisted of five items- 'I encouraged my partner to talk', 'I tried to make my partner comfortable during the conversation', 'I was able to talk freely about the topic', 'I felt pressured to reveal information', and 'I felt I could have a better interaction with my partner in some other medium of communication'. The emphasis of these items is on the suitability and effectiveness of the given medium for the planned interaction.

3.2.3. Data Analysis

In order to analyze the collected data, the researcher performed various statistical data analysis procedures. First, the researcher conducted factor analysis procedures on various

variables of the research questions in order to check the dimensionality of the measures and form scales. Secondly, reliability tests measuring Cronbach's alpha (α) were conducted to check the reliability of the scales for each variable. To answer the various research questions, statistical tests of Correlation or One-way ANOVA were also performed for each research question as needed. Finally, the researcher also conducted some post-hoc analyses to further explore the collected data.

The first measure to be reduced to form a scale was 'perceived uncertainty'. From the post-test survey data of 22 respondents, those questions that formed the 'perceived uncertainty' scale were used for conducting principal component analysis. From the literature review, four questions most reflected the perceived uncertainty scale, 'I tried to make the interaction less awkward', 'I started interaction with some ice-breaker questions', 'I was tensed' and 'I was nervous'. After conducting the extraction through principal component analysis, it was found that only one component was extracted and the variance within this component was 49.644%. Therefore, there seemed to be only one dimension of the perceived uncertainty construct. Also, within this component there was no loading for the question 'I tried to make the interaction less awkward'. It is important to note that for interpretation purposes, only those factor loadings which were greater than +0.50 or -0.50 were considered valid. There was loading for the other three questions, 'I started interaction with some ice-breaker questions', 'I was tensed' and 'I was nervous' Finally, the researcher conducted the reliability test for the three loaded items. It was found that α was 0.655 and this was lower than the standard, accepted value of α= 0.7. In these circumstances, the researcher excluded the least loaded item of the three variables. This item was the question 'I started interaction with some ice-breaker questions'. When this item was excluded followed by a reliability test for the two remaining items, it was found that α was 0.739 for the items 'I was tensed' and 'I was nervous'. Therefore, finally the measures were reliable and hence could be used as a scale for measuring perceived uncertainty. The scale was formed by taking the means of the two items and using it for answering RQ1.

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Table 1 Factor analysis for perceived uncertainty

Questions	Component 1
I tried to make interaction less awkward	.493
I started interaction with some ice-breaker questions	.675
I was tensed	.906
I was nervous	.682

For measuring 'message clarity', the researcher used six items to form the measure for message clarity. The researcher selected these six items from the post-test survey data which was collected from 23 respondents and performed a principal component analysis on them. Two components were extracted with a cumulative variance of 56.504% of all the factors. From the component matrix it can be found that there is loading in only the first component, and this loading appears in four items out of six. These four items are 'I was easily able to follow the conversation with my partner', 'I felt that sometimes I was unable to properly convey the message to my partner', which was reverse coded; 'I was sometimes unclear about the message that my partner wished to convey', which was reverse coded; and 'I felt that I was able to connect well with my partner because we understood one another clearly'. There was no loading in 'I made an effort to convey the message as clearly as possible' and 'There were minimal or no misunderstandings in the conversation that I shared with my partner'. Once the two items were excluded, the researcher performed a reliability test and found for the four items, α was 0.686. Since, α- value was less than 0.7, the researcher excluded the least loaded item 'I felt that sometimes I was unable to properly convey the message to my partner'. Again, α was calculated for the remaining three items and it was found to be 0.688, which was again less than 0.7. However, the researcher did not exclude another least loaded item from the analysis since instead of increasing the reliability, it further decreased α. The mean of the three items, 'I was easily able to follow the conversation with my partner', 'I was sometimes unclear about the message that my partner wished to convey', which was reverse coded; and 'I felt that I was able

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to connect well with my partner because we understood one another clearly' was used as the scale for message clarity.

Table 2 Factor analysis for message clarity

Questions	Component 1	Component 2
I was easily able to follow the conversation	.650	-.142
I was unable to properly convey message (reverse coded)	.548	-.256
I was sometimes unclear about the message (reverse coded)	.839	-.052
I made an effort to convey message clearly	.486	-.179
I felt I was able to connect well with my partner	.795	.183
There were minimal or no misunderstandings	.231	.942

To measure the depth of self-disclosure, the researcher used four items from the post-test survey and conducted principal component analysis based on 23 responses. The four items used were 'I felt that I had in-depth conversation', 'I felt that my partner revealed more information about himself/herself (than I did about myself?)', 'I felt close to my partner' and 'I felt that I revealed more information about myself (than my partner did?)', which was reverse coded. Only one component was extracted and the cumulative variance of all factors was 62.472%. Furthermore, there was loading in all four items, and the reliability test α was 0.794. Therefore, the final scale for depth of self-disclosure consisted of the mean of all the four items.

Table 3 Factor analysis for depth of self-disclosure

Questions	Component 1
I felt I had in-depth conversation	.786
I felt my partner revealed more information	.789
I felt close to partner	.854
I felt I revealed more information (reverse coded)	.728

To find the scale for breadth of self-disclosure, the researcher selected four items from the post-test survey. The number of respondents was 23, and a principal component analysis was conducted on these four items. The four items used were 'I felt that I talked about a lot of things', 'I felt that we had a wide discussion on the topic', 'I felt that we talked beyond the given

topic' and 'I disclosed the information without feeling pressured to do so'. Only one component was extracted and the cumulative variance of all the factors was 53.975%. Furthermore, there was no loading for one item 'I disclosed the information without feeling pressured to do so'. This item was therefore excluded from the reliability statistics. The α for the remaining three items was 0.756, which was an acceptable value. The mean of these three items was used to form the scale for breadth of self-disclosure.

Table 4 Factor analysis for breadth of self-disclosure

Questions	Component 1
I felt I talked about a lot of things	.900
I felt we had wide discussion	.807
I felt we talked beyond the topic	.792
I disclosed information without feeling pressured to do so	.262

Finally, in order to measure the effectiveness of a medium for self-disclosure, the researcher conducted principal component analysis on five items from the post-test survey data. The response rate for the post-test survey was 23. The five items used for analysis were 'I encouraged my partner to talk', 'I tried to make my partner comfortable during the conversation', 'I was able to talk freely about the topic', 'I felt pressured to reveal information', which was reverse coded; and 'I felt I could have a better interaction with my partner in some other medium of communication', which was again reverse coded. Two components were extracted and the cumulative variance was 71.554% of all the preceding factors. Out of five items, two items were 'I encouraged my partner to talk' and 'I tried to make my partner comfortable during the conversation' were least loaded between the two components and therefore excluded from the reliability statistics. The α for the remaining three items was 0.575, which was low. After excluding another item, 'I felt I could have a better interaction with my partner in some other medium of communication' which had the least loading of the three, α was again calculated. This time the α-value was 0.705 and hence the mean of the remaining two items was calculated to form a scale for effectiveness of medium for self-disclosure.

Table 5 Factor analysis for media effectiveness for self-disclosure

Questions	Component 1	Component 2
I encouraged my partner to talk	.107	.899
I tried to make my partner comfortable during conversation	.223	.892
I was able to talk freely about the topic	.788	.393
I felt pressured to reveal information(reverse coded)	.887	-.009
I felt I could have better interaction in some other medium (reverse coded)	.572	.150

The researcher also conducted some additional tests to further explore media effects on Millennials. A correlation analysis was conducted on the Millennials' various personality traits with the depth and breadth of self-disclosure. The scales used for personality traits consisted of several personality-related Likert-scaled questions that were asked in the pre-test survey. Correlation analyses between these personality traits and the scales for the depth and breadth of self-disclosure were conducted. The researcher also conducted thematic analysis on post-test data in order to find possible themes that had evolved, with the intention of getting a better insight into the Millennials' thoughts regarding the suitability of a particular medium. The thematic analysis was based on Owen's (1984) three criteria of relational discourse: recurrence, repetition and forcefulness (p. 275). Recurrence is observed when the same idea or meaning is articulated more than once irrespective of the wording used. Repetition occurs when the same idea or meaning is articulated with the use of explicit similar wording. Forcefulness is observed when there is a distinct stress on certain aspects or utterances, or underlining of words or phrases in written document, which denotes the importance of a particular idea (Owen, 1984).

Table 6 Correlation between personality traits and depth of self-disclosure

Source		Depth of self-disclosure	Enthusiastic	Anxious	Open	Reserved	Fearful	Calm
Depth of self-disclosure	Pearson correlation	1	.368	-.209	.288	-.359	.254	-.110
	p		.084	.338	.182	.093	.243	.617

N=23

Table 7 Correlation between personality traits and breadth of self-disclosure

		Breadth of self-disclosure	Enthusiastic	Anxious	Open	Reserved	Fearful	Calm
Breadth of self-disclosure	Pearson correlation	1	.386	-.297	.140	-.464	.142	-.100
	p		.069	.168	.523	.026	.518	.649

N=23

3.2.4. Results

3.2.4.1. Message Clarity and Perceived Uncertainty

To answer the first research question, *Does clarity of message influence perceived uncertainty while self-disclosing information in face-to-face interactions as opposed to computer mediated communication interactions?*, the researcher conducted Pearson's correlation test and also conducted descriptive statistics to find mean and standard deviation for message clarity and perceived uncertainty in both CMC and FtFC.

In FtFC medium, the descriptive statistics for message clarity (M=6.2778, SD=0.58315) and for perceived uncertainty (M=2.0417, SD=1.25151). It was found that in the FtFC mode of communication, there exists a positive correlation between the two variables. The correlation coefficient is not significant at 0.05 or 0.1 level (r=0.087, p=0.789). This means that although the message clarity changes, there is a very little change in the perceived uncertainty in the FtFC mode of communication. In the CMC group, the correlation coefficient between message clarity and perceived uncertainty is noticeable at with a probability value of 0.106, which is close to the 0.1 threshold to be characterized as moderately significant. Considering the exploratory nature of this study, it is worthwhile to look further into these figures. A negative correlation coefficient between message clarity and perceived uncertainty indicates that as message clarity increases, perceived uncertainly reduces. While the numbers in CMC group may suggest such a trend, it is not the case in the FtFC group. Descriptive analysis may provide a clue to the differences between these two groups.

The descriptive statistics are reported in Table 8.The mean scores of perceived message clarity reported by both the FtFC and CMC groups are in a similar range, while the CMC group recorded a wider variation. However, regarding perceived uncertainty, CMC group scored much higher than the FtFC group did. Further analyses confirmed these observations and are reported in Table 9. The results show that the difference of perceived message clarity between these two groups is not statistically significant. However, there is a significant difference between these two groups in terms of perceived uncertainty. Combining with the correlation analyses, these results may suggest that message clarity has different effects on uncertainty reduction when different medium is used.

Table 8 Descriptive statistics for message clarity and perceived uncertainty

Source	Experiment group	N	Mean	Std. Deviation
Message clarity	FtFC	12	6.2778	0.58315
	CMC	11	5.8485	1.31963
Perceived uncertainty	FtFC	12	2.0417	1.25151
	CMC	11	3.6364	1.41582

Table 9 Independent samples t-test for message clarity and perceived uncertainty

Source		F	df	p
Perceived uncertainty	Equal variances assumed	.702	21	.009
	Equal variances not assumed		20.087	.010
Message clarity	Equal variances assumed	12.185	21	.317
	Equal variances not assumed		13.507	.338

Table 10 Correlation between message clarity and perceived uncertainty in FtFC experiment group

Source		Message clarity	Perceived uncertainty
Message clarity	r	1	.087
	p		.789
Perceived uncertainty	r	.087	1
	p	.789	

N=12

Table 11 Correlation between message clarity and perceived uncertainty in CMC experiment group

Source		Message clarity	Perceived uncertainty
Message clarity	r	1	-.514
	p		.106
Perceived uncertainty	r	-.514	1
	p	.106	

N=11

3.2.4.2. Media Richness and Perceived Effectiveness of Media

To answer RQ2, *Does media richness influence perceived effectiveness of media for self-disclosure?*, a one-way ANOVA was used to test for the difference of perceived effectiveness on self-disclosure between the FtFC and CMC groups. The effectiveness differed significantly across the two groups at 0.1 level. $F_{(2, 21)} = 3.155$, p=0.090.

Table 12 Descriptive statistics for perceived effectiveness of media for self-disclosure

Experiment group	N	Mean	Std.deviation	Std. error	95% confidence level for mean		Minimum	Maximum
					Lower bound	Upper bound		
FtFC	12	6.3750	.85613	.24714	5.8310	6.9190	4.50	7.00
CMC	11	5.5455	1.35008	.40707	4.6385	6.4525	3.50	7.00
Total	23	5.9783	1.17239	.24446	5.4713	6.4852	3.50	7.00

Table 13 Analysis of variance of perceived effectiveness between FtFC and CMC groups

Perceived effectiveness of media	df	F	Sum of squares	Mean square	p
Between groups	1	3.155	3.949	3.949	0.090
Within groups	21		26.290	1.252	
Total	22		30.239		

3.2.4.3. Media Usage and Depth of Self-Disclosure

For RQ3a, *Does media usage affect Millennials' depth of self-disclosure while communicating with strangers?*, the researcher conducted Pearson's correlation test between the total numbers of hours that the subjects spent every day on social networking sites, a question asked in the pre-test survey, with the depth of self-disclosure. A positive correlation between the hours spent on social networking sites and the depth of self-disclosure would indicate that the more time a person spent on these sites, the more information they disclosed about themselves. While the correlation coefficient is positive between the time spent on social networking sites and the depth of self-disclosure, the result is not statistically significant at 0.05 level ($r=0.245$, $p=0.261$). In this sample, no significant relationship was found between the usage of social networking site and the depth of self-disclosure.

3.2.4.4. Media Usage and Breadth of Self-Disclosure

For RQ3b, *Does media usage affect Millennials' breadth of self-disclosure while communicating with strangers?*, the researcher conducted the Pearson's correlation test between the total numbers of hours that the subjects spent every day on social networking sites, a question asked in the pre-test survey, with the breadth of self-disclosure. A positive correlation between the hours spent on social networking sites and the breadth of self-disclosure would indicate that the more time a person spent on these sites, the wider discussion they had on a particular topic. While the correlation coefficient is positive between the time spent on social networking sites and the breadth of self-disclosure, the result is not statistically significant at the

0.05 level (r=0.102, p=0.644). In this sample, no significant relationship was found between the usage of social networking sites and the breadth of self-disclosure.

Table 14 Correlation between self-disclosure and media usage

Source		Hrs/day spent on social network	Depth of self-disclosure	Breadth of self-disclosure
Hrs/day spent on social network	r	1	.245	.102
	p		.261	.644

3.2.4.5. Media Dependence and Depth of Self-Disclosure

To answer RQ4a, *Does the dependence on a particular medium chosen for various purposes affect Millennials' depth of self-disclosure?*, the researcher conducted Pearson's correlation test to find the relationship between the media dependence of the subjects for various reasons with the depth of self-disclosure. The media dependence data was collected from the pre-test survey and the depth of self-disclosure scale was formed from the questions of the post-test survey. The results are reported in Table 15. None of the correlations is statistically significant. In other words, in this sample, there is no relationship found between subjects' dependence on electronic media and the depth of self-disclosure. For exploratory purposes, a few noticeable coefficients were identified including the negative coefficient between the depth of self-disclosure and CMC used for work, and positive coefficients between the depth of self-disclosure and CMC dependence for study and information seeking.

Table 15 CMC dependence and depth of self-disclosure

CMC use		Depth of self-disclosure
Work	r	-.089
	p	.687
Study	r	.140
	p	.523
Entertainment	r	.020
	p	.929
Info. seeking	r	.125
	p	.571

Table 15 - *Continued*

Friends	r	-.232
	p	.288

For FtFC, the results are reported in Table 16. None of the correlations is statistically significant. Again, for exploratory purposes, a few noticeable coefficients were identified including the negative ones between the depth of self-disclosure and FtFC used for work and information seeking.

Table 16 FtFC dependence and depth of self-disclosure

FTFC use		Depth of self-disclosure
Work	r	-.254
	p	.243
Study	r	.045
	p	.839
Entertainment	r	-.042
	p	.850
Info. seeking	r	-.208
	p	.342
Friends	r	-.066
	p	.764

3.2.4.6. Media Dependence and Breadth of Self-Disclosure

To answer RQ4b, *Does the dependence on a particular medium chosen to for various purposes affect Millennials' breadth of self-disclosure?*, the researcher conducted Pearson's correlation test to find the relationship between the media dependence of the subjects for various reasons with the breadth of self-disclosure. The results are reported in Table 16. None of the correlations is statistically significant. In other words, in this sample, there is no relationship found between subjects' dependence on the electronic media and the breadth of self-disclosure. For exploratory purposes, a few noticeable coefficients were identified including the negative coefficients between the breadth of self-disclosure and CMC used for work and communicating with friends.

Table 17 CMC dependence and breadth of self-disclosure

CMC use		Breadth of self-disclosure
Work	r	-.234
	p	.282
Study	r	.048
	p	.829
Entertainment	r	-.002
	p	.993
Info. seeking	r	-.057
	p	.797
Friends	r	-.280
	p	.195

For FtFC, the results are reported in Table 18. None of the correlations is statistically significant. Again, for exploratory purposes, the negative coefficient between the depth of self-disclosure and FtFC used for communicating with friends was identified.

Table 18 FtFC dependence and breadth of self-disclosure

FtFC use		Breadth of self-disclosure
Work	r	-.085
	p	.698
Study	r	-.093
	p	.672
Entertainment	r	-.052
	p	.812
Info. seeking	r	-.080
	p	.716
Friends	r	-.221
	p	.311

Chapter 4

Discussion

<u>4.1. Introduction</u>

The study yielded some very interesting results. The data collected from the pre-test survey as well as the post-test survey, brought to the fore the fact that the type of medium used for a planned interaction does indeed affect the Millennials' communication behaviors in different ways.

Message Clarity and Perceived Uncertainty

The first research question was answered by conducting Pearson's correlation and comparing the means between the two communications media used in order to gauge the uncertainty as experienced by the participants. Correlation results show that there existed a positive relationship between the message clarity and the perceived uncertainty in the FtFC medium. Although the results are not significant at 0.05 level, they show that for face-to-face scenario, even though the message clarity increases, the perceived uncertainty of the Millennials did not decrease. There is an indication that there existed a positive correlation between the clarity of message and perceived uncertainty. A possible reason for this result could be the fact that in FtFC scenario, the subjects had to converse on a sensitive topic related to themselves with a stranger. In such circumstances, even though the clarity of message increased with the flow of conversation, the subjects were still uncertain with regards to discussing their personal life details with a complete stranger.

For the CMC interaction using the Instant Messenger, the study showed that as the message clarity increased in the online medium, the perceived uncertainty decreased. In other words, there was an indication of a negative correlation between the message clarity and the

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perceived uncertainty variable. One reason for this could be the fact that the subjects were interacting with a complete stranger using IM to converse on a personal topic. Since the subjects did not see the person they were interacting with, they were also less uncertain.

The clarity of message seemed to lessen their perceived uncertainty. This is interesting, since according to the literature CMC is a leaner medium than FtFC with regards to the richness of medium. Yet uncertainty was reduced with increased message clarity in CMC.

The researcher also conducted a comparison of the means and the study shows that for face-to-face scenarios, the message clarity is already very high and as a result the perceived uncertainty of the Millennials is negligible. A possible reason for this result could be the fact that in FtFC scenario, the subjects were able to converse freely and without any inhibitions with their communication partner. Their communication partner, the confederate, was a stranger and the topic of conversation was also sensitive. As a result, the subjects may have felt it easier to converse face-to-face with the confederate, so that they could clearly understand and articulate the conversation in a meaningful manner. The fact that they were able to see the facial expressions and therefore had the opportunity to read the non-verbal cues may have added to the clarity factor in the FtFC medium.

Considering the two opposite results, it appears that for Millennials there may be some interfering variable that may be responsible for such contradiction in the level of uncertainty between the two media. A possible factor of the Millennials' personality or just their ease and preference of using one form of medium over other could be responsible for this unevenness in the results.

The researcher also conducted some post hoc correlation analysis on the measures of *perceived uncertainty* variables. It was found that there existed a positive correlation between the measures of 'I felt tensed' and 'I started interaction with some ice-breaker questions'. The correlation coefficient was significant at 0.05 level (r=0.524, p=0.01). This indicated that as the

subjects grew uncertain or awkward during the conversation, they tried to converse with more ice-breaker questions.

Table 19 Post-hoc analysis

Source		Less awkward	Ice breaker questions	Tensed	Nervous
Less awkward	r	1	.245	.235	.136
	p		.260	.281	.547
Ice breaker questions	r	.245	1	.524*	.098
	p	.260		.010	.665
Tensed	r	.235	.524*	1	.595**
	p	.281	.010		.004
Nervous	r	.136	.098	.595**	1
	p	.547	.665	.004	

*Significant at 0.05 level **Significant at 0.1 level

For the CMC interaction using the Instant Messenger, the study showed that the message clarity was already low and hence there was a level of considerable uncertainty that may have been experienced by the subjects. One reason for this could have been the fact that the subjects were conversing via IM, a synchronous CMC medium, where the two communicating partners were typing simultaneously. Therefore, as Cornelius & Boos (2003) have stated, synchronous CMC leads to lesser mutual understanding and leads to cognitive load. Hence, in CMC context, the subjects were probably more ill at ease while conversing than in the FtFC context. FtFC is considered as a rich medium and CMC as a leaner medium. It seems that with regard to the message clarity and understanding, FtFC does afford a better communication environment than CMC.

Media Richness and Perceived Effectiveness of Media

The one-way ANOVA analysis shows that there is a significant difference between the CMC and FtFC groups with regards to their perception of effectiveness of medium for self-disclosure. The analysis shows that FtFC mode of communication was considered richer and, hence, more effective for self-disclosing information than the CMC mode of communication. This

analysis supported the previous literature that talked about more self-disclosure in the FtFC mode with regards to the nonverbal cues which are more easily visible than in the CMC.

Thus, it can be said that FtFC offers the Millennials more opportunities at self-disclosing information than in the CMC scenario. As a result, the Millennials consider FtFC as a rich and effective medium, compared to CMC when sharing personal or sensitive information. This finding does not corroborate with previous literature (Joinson, 2001) which suggests the dependence on CMC for disclosing intimate information due to the fact that the medium offers anonymity to the individuals communicating via CMC.

A possible reason for this could be the personal focus that the media richness theory talks about, which is apparent in the FtFC medium than in the CMC mode of communication.

Media Usage and Depth of Self-Disclosure

The correlation between media usage and depth of self-disclosure did not reach a statistically significant level. However, the analysis indicates that there may exist a positive correlation between the hours that the subjects spent on social networking sites and the depth of self-disclosure. The more interaction they had via social networks, the more information they disclosed about themselves. Previous studies have shown Millennials to be active digital media consumers rather than just being passive observers. Millennials are born into the age where technology is omnipresent. As a result, for them to become comfortable and disclose in-depth information about themselves is not surprising.

Media Usage and Breadth of Self-Disclosure

Correlation analysis suggested that as the number of hours that the Millennials spent on social networking sites increased, the breadth of information that the Millennials' disclosed on the social networks also increased. In other words, there is a positive correlation between the number of hours spent on the social networking sites and the breadth of self-disclosure. This means that

for the Millennials, just like disclosing in-depth information about themselves on the social networking is acceptable, so is the range of information or the variety of topics that they share via CMC is a common and comfortable occurrence.

Once again, a possible reason for this behavior could be the fact that Millennials find themselves more comfortable in the CMC scenario while revealing information about themselves. Of course, one factor to consider is that Millennials disclose information on the social networks to their friends and peers. Moreover, the data used for analysis consisted of the data gathered from the pre-test survey which asked the students about their general internet habits as compared to the mode of communication that they were assigned to in the experiment. Their self-disclosure session with a stranger may have a different effect on their levels of self-disclosure.

Media Dependence and Depth of Self-Disclosure

Media dependency, when correlated with the different uses for which the given medium was used, revealed very interesting results. This question broke the two media CMC and FtFC into various sub-categories and attempted to bring to the fore the depth and breadth of self-disclosure for each of the sub-category.

Results showed that for depth of self-disclosure the correlation analysis for CMC showed that Millennials disclosed in-depth information on CMC when they used it for study purposes, for gathering information or for seeking entertainment. There was no statistically significant relationship, but the correlation for the use of CMC for study purposes did show a positive correlation value of r= 0.140. There also seemed to be a positive correlation between CMC dependence and information seeking with r=0.125. However, there appeared to be a negative correlation between the use of CMC for work related use and for communicating with friends. Again, the relationship was not significant but the negative correlation between CMC use for friends and depth of self-disclosure was r=-0.232. This means that as dependence on CMC increases, the depth of self-disclosure while communicating with friends may decrease. Results

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also showed a probability of decrease in self-disclosure via CMC in work related scenario. Not all Millennials depend heavily on CMC for disclosing information about certain aspects of their lives. It is found that dependence on CMC is heavy for disclosing in-depth information while seeking entertainment, or gathering information, or for just general entertainment purposes. But this dependence may not be necessarily heavy for disclosing in-depth information for work purposes or to communicate with friends.

In the case of FtFC, positive correlation was found between the dependence on FtFC for self-disclosure and the use of FtFC for study purposes. Negative correlation is found for the dependence on FtFC for depth of self-disclosure and the functions like information seeking, communicating with friends, seeking information, entertainment and finally work purposes.

Therefore, it can be seen that the depth of self-disclosure is positive in CMC and FtFC for only study purposes. It seems that Millennials are ready to reveal information about themselves in both the CMC and FtFC media if their academics demand that of them.

It is interesting to note the negative correlation for both CMC and FtFC media with using the two media for work purpose or communicating with friends. This shows that the use of either or both media in order to self-disclose information for either work purposes or just to communicate with friends may lead to decreased self-disclosure. Time could be major factor in deciding the dependence on a particular medium for self-disclosure. Also, comparing correlations values of the dependence on CMC with FtFC for communication with friends, the researcher found that though negative in both cases, $p=-0.232$ in CMC and $p=-0.066$ in FtFC. This may mean that there is a possibility that Millennials definitely disclose less information to their friends than compared to face-to-face interactions. This could mean that Millennials do not actually depend on the FtFC medium to communicate with friends and self-disclose. It could mean that compared to FtFC, Millennials do feel more comfortable to have online conversations with their friends.

The nature of a person's work, whether it requires more interaction via CMC or FtFC or both will certainly play an important role in deciding that person's dependence either media. Moreover, for study purposes, both CMC and FtFC are equally important for education. Lectures are held in both FtFC and CMC (online) media. Therefore, there is definitely a greater opportunity of self-disclosure.

Media Dependence and Breadth of Self-Disclosure

Correlation analysis suggests that in CMC there might exist a positive correlation between breadth of self-disclosure and its use for academics. CMC dependence for work, entertainment, information seeking and communicating with friends has a negative correlation with the breadth of self-disclosure. Therefore, it can be said that in the case of Millennials' breadth of self-disclosure, academics plays a major role for them to decide a wider discussion on a given topic.

For FtFC, there exists only a negative correlation between breadth of self-disclosure and dependency on FtFC for work, study purposes, entertainment, information seeking and communicating with friends. Although the results are not statistically significant, it seems that Millennials do not necessarily depend on FtFC mode to have wider discussions for any purpose. Except for studies, Millennials did not really seem to exclusively depend on any medium to have discussions. Their choices with regards to dependence on a particular medium for self-disclosing do not seem to be exclusive of either FtFC or CMC, but is rather a co-dependence on both media.

4.2. Post-Hoc Analysis

For the depth of self-disclosure, the present research found that there exists a positive correlation between the depth of self-disclosure and the personality traits of being enthusiastic, open and fearful. For enthusiastic, the correlation was marginally significant with positive

correlation (r=0.368, p=0.084). Negative correlation was observed between the depth of self-disclosure and the personality traits of being anxious, reserved and calm. For reserved, the relationship was again marginally significant (r= 0.359, p=0.093).

From the results it can be concluded that the more extroverted and open a person is, the more easily they will share in-depth information about themselves. Conversely, a reserved and anxious person will divulge less information about themselves. It is also interesting to note that a fearful person discloses more information and an emotionally calm person discloses less information. This could mean that a fearful person may require another's support and therefore discloses information so that there is trust and mutual understanding between the two. A calm person may be self-reliant and does not feel the need to discuss their affairs with others.

A correlation analysis test for the breadth of self-disclosure with the personality traits also produced some very interesting findings. As for the depth of self-disclosure, the personality traits for the breadth of self-disclosure also consisted of similar results.

For the breadth of self-disclosure, the research found a positive correlation exists between breadth of self-disclosure and the personality traits of being enthusiastic, open and fearful. For enthusiastic, the correlation was marginally significant (r=0.386, p=0.069) Negative correlation is observed between the breadth of self-disclosure and the personality traits of being anxious, reserved and calm. The correlation was significant for reserved trait (r=-0.464, p=0.026).

The explanation can again reflect on the fact that open and enthusiastic individuals tend to easily disclose more information about themselves with regard to wider discussions on topics. Reserved and anxious individuals are more likely to remain quiet. As was the case with the depth of self-disclosure, calm people tend to disclose less information as opposed to the fearful people, who disclose more so as to connect with others.

The results of some of the open-ended questions that the researcher asked the subjects in the post-test survey also garnered some interesting findings. Based on Owen's (1984) thematic analysis, one theme that kept recurring among the students' responses was that of finding it hard to disclose information in FtFC medium as opposed to CMC. They felt that talking on a personal topic was much better in CMC medium than in FtFC. The reason was the fact that subjects claimed to feel pressured and uncertain if they talked in an FtFC environment with a complete stranger. Anonymity was the key factor that led them to disclose information in CMC.

One student, Katie, sums up this idea by quoting, "I would have preferred to answer those questions online, unless I knew the person a little better." She also mentioned that an online conversation would not have made her shy in speaking freely.

Another student, Holly, reiterates this idea when talking about her experience in the experiment. Polly writes, "When asking personal questions, it is less nerve wrecking when the person is not in front of you." However, she also worried about what the other person might feel about her.

A third student, Polly, states, "It is scarier to discuss emotions/personal dating experiences when you see the facial expressions and nonverbal cues."

However, there were some who felt that although CMC was alright to talk, it was always better to discuss a topic with certain amount of self-disclosure involved in an FtFC scenario, since that helped individuals note the others' expressions and read the nonverbal cues. The idea of being able to see nonverbal cues was recurring as well as repeated by the students as they spoke about their experience. Especially with a stranger, it was important for them to know the person they were disclosing information to.

Valerie confirms this idea when she talks about her experience. She states, "A face-to-face conversation would allow me to see my partner's reaction and respond from that. During a

face-to-face, if a thought came up, I would be able to say it without a delay like online communication would have." However, she also claimed that online conversations helped alleviate nervousness.

Another student, Tina states, "I was comfortable with the interaction that took place. However, being face-to-face with someone can do a better job at seeing emotions." She also mentioned that she is a reserved person, and so does not desire to have all her interactions face-to-face. At such times, she prefers IM chat.

Finally, Sally reiterates the idea when she states, "I prefer face-to-face interactions over any other way of communicating especially with people I can relate to on different topics. I'm very aware of facial expressions, they tell me more about a person even when they're not saying much or anything at all." She also explains that she prefers chatting via IM with people she knows since even though they do not have face-to-face interactions, their familiarity with one another helps them understand each other clearly.

CHAPTER 5

CONCLUSION

5.1. Introduction

This study gave an insight into the Millennial generation's communication behaviors with regards to CMC and FtFC media. It is interesting to note that Millennials, though born into the ubiquitous digital world, and using the technology to the hilt, are not completely swamped by it with regards to their self-disclosive behaviors. They considered both FtFC and CMC as rich media to share information. For them, more than the medium itself, the suitability of that medium for an interaction matters the most. It seems as though Millennials' dependence on a particular medium is reflective of their perception of the suitability of that medium. It seems that Channel Expansion theory best suits the Millennials' dependence on a particular medium and it would be interesting to see more research done on this theory to better understand and apply it to the communication behaviors of Millennials.

5.2. Limitations and Future Studies

The greatest limitation of the study is the fact that the sample size of 23 was too low to obtain statistically significant results. Quantitative data demands that the researcher work with large amounts of data in order to obtain more reliable results. Even though the researcher worked with the data gathered and conducted the analyses, the reliability of the results is debatable. To truly understand the effects of media of self-disclosure, future studies could replicate this study with a large subject pool and see whether the findings match the ones that this study has unearthed, or whether there is a difference between the findings.

Moreover, the subjects who actually participated in the experiment consisted of 22 females and only one male subject. This led to a gender imbalance; hence, the results reflect only

the female subjects' communication behaviors. It is possible that the male subjects would demonstrate a varied communication patterns and preferences than the females. Their answers on the post-test survey could lead to a new insight into the possible media effects on the Millennials. Future studies could definitely explore this facet of media effect to ascertain whether there exists a difference between genders with regards to CMC and FtFC media use.

Another limitation of the study is that fact that all the participants recruited were communication majors. As a result they would have bound to be well-versed speaking face-to-face as much as they might enjoy communicating online. Their communication major itself could have been a hindering factor of this study. A more varied population with different educational background could lead to a more assorted group of individuals and may give much reliable results if future studies are to be conducted.

Future studies should also look individually at the dependence on CMC and FtFC for various functions such as work and study purposes, as well as for other purposes. The Millennial generation's comparison with other older generations with respect to media consumption habits might add a strong empirical base to the existing body of research, a large part of which is anecdotal in nature.

APPENDIX A

PRE-TEST SURVEY QUESTIONNAIRE

Consent

You are being invited to participate in a research study about Millennials' communication preferences. This survey should only take you about 5 minutes to complete. Please be assured that your identity will be protected, in that the responses are coded for anonymity and no personal names will be used in our research. Participation is voluntary, and by completing the survey you give your consent to participate. Refusal to participate or discontinuing your participation at any time will involve no penalty or loss of benefits to which you are otherwise entitled.

There is no perceived risk or discomfort for participating in this research study. Should you experience any discomfort please inform the researcher, you have the right to quit any study procedures at any time at no consequence.

If you have any questions about the study or the questionnaire, please feel free to contact me or my faculty advisor at your convenience.

To proceed to the survey, please first confirm that you are an UTA student and at least 18 years old by checking the box blow:

☐ Yes, I am a student at the University of Texas at Arlington, at least 18 years old, and I would like to participate in the survey.

Thank you
Researcher:
Vidisha V Bhopatkar
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Faculty Advisor:
Chyng-Yang Jang
Associate Professor, Department of Communication
cyjang@uta.edu

1. Name: Click here to enter text.
2. Email: Click here to enter text.
3. Age: Choose an item.
4. Gender ☐M ☐F
5. Do you own a laptop/desktop computer? ☐Y☐N

6. How frequently do you access the Internet from your cellphone?

Never   Always
☐1   ☐2   ☐3   ☐4   ☐5   ☐6   ☐7

7. Do you own a tablet computer, e.g. an ipad? ☐Y☐N
8. On average, how many hrs/day do you use the Internet via your computers, cellphones or any other devices that allow Internet access? Click here to enter text.hours/day

9. Check all the sites that you have an active account with:
☐ Facebook ☐ Google+ ☐ Myspace ☐Twitter ☐Other (Click here to enter text.)

10. What is the total number of hours per day that you spend on Facebook, Twitter or any other online social networking activities? Click here to enter text.hours.

11. How frequently do you use instant messaging (IM) and/or text chatting in your online communications?

Never   Always
☐1   ☐2   ☐3   ☐4   ☐5   ☐6   ☐7

12. Please rate the degree to which you agree with the following characterization of yourself:

I see myself as: (Please check one)

	Strongly disagree						Strongly agree
Extraverted, enthusiastic	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Anxious, easily upset.	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Open to new experiences, complex	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Reserved, quiet	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Fearful, tense	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Calm, emotionally stable	☐1	☐2	☐3	☐4	☐5	☐6	☐7

13. How would you rate your dependence on the Internet for the following purposes? (Please check one)

Purpose	Dependency						
	Not at all	least	less	neutral	somewhat	more	most
Work	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Study	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Entertainment	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Information seeking	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Communicating with friends	☐1	☐2	☐3	☐4	☐5	☐6	☐7

14. How would you rate your dependence on face-to-face interactions for the following purposes? (Please check one)

Purpose	Dependency						
	Not at all	least	less	neutral	somewhat	more	most
Work	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Study	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Entertainment	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Information in general	☐1	☐2	☐3	☐4	☐5	☐6	☐7
Communicating with friends	☐1	☐2	☐3	☐4	☐5	☐6	☐7

APPENDIX B

POST-TEST SURVEY QUESTIONNAIRE

Name: **Gender: __M __F**

1. How would you rate your experience of holding an online/face-to-face conversation with your partner? Please elaborate.

2. Were you satisfied with the mode of communication that was chosen for the interaction? Please elaborate.

3. How would you rate your level of comfort while communicating?

4. Please rate the degree to which you would prefer to conduct a similar interaction in the future through a face-to-face conversation (1-7).

   Least   Neutral   Most
   preferable   preferable
   ☐1   ☐2   ☐3   ☐4   ☐5   ☐6   ☐7

   Please elaborate about your answer above.

5. Please rate the degree to which you would prefer to conduct a similar interaction in the future using IM? (1-7)

   Least   Neutral   Most
   preferable   preferable
   ☐1   ☐2   ☐3   ☐4   ☐5   ☐6   ☐7

   Please elaborate about your answer above.

Based on the conversation you just had, please rate the following statements on a scale of 1-7. (Check one)
(Strongly disagree-1   Disagree-2   Disagree somewhat-3   Neutral-4   Agree somewhat-5 Agree-6   Strongly agree-7)

1. I tried to make the interaction less awkward.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

2. I started the interaction with some ice-breaker questions.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

3. I was tense.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

4. I was nervous.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

5. I felt that the online communication was the most suitable way to communicate for this interaction.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

6. I felt at ease with the medium of communication chosen (online/face-to-face) to hold the conversation with my partner.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

7. I encouraged my partner to talk.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

8. I tried to make my partner comfortable during the conversation.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

9. I was able to talk freely about the topic.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

10. I felt pressured to reveal information.

Strongly   Neutral   Strongly
disagree   agree

☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

11. I was able to better understand my partner in the given communication condition.

Strongly　　　　　　　　　Neutral　　　　　　　　Strongly
disagree　　　　　　　　　　　　　　　　　　　　agree
☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

12. I felt that the communication environment created problems in understanding each other.

Strongly　　　　　　　　　Neutral　　　　　　　　Strongly
disagree　　　　　　　　　　　　　　　　　　　　agree
☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

13. I was easily able to follow the conversation with my partner.

Strongly　　　　　　　　　Neutral　　　　　　　　Strongly
disagree　　　　　　　　　　　　　　　　　　　　agree
☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

14. I felt that sometimes I was unable to properly convey the message to my partner.

Strongly　　　　　　　　　Neutral　　　　　　　　Strongly
disagree　　　　　　　　　　　　　　　　　　　　agree
☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

15. I was sometimes unclear about the message that my partner wished to convey.

Strongly　　　　　　　　　Neutral　　　　　　　　Strongly
disagree　　　　　　　　　　　　　　　　　　　　agree
☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

16. I made an effort to convey the message as clearly as possible.

Strongly　　　　　　　　　Neutral　　　　　　　　Strongly
disagree　　　　　　　　　　　　　　　　　　　　agree
☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

17. I felt that I was able to connect well with my partner because we understood one another clearly.

Strongly　　　　　　　　　Neutral　　　　　　　　Strongly
disagree　　　　　　　　　　　　　　　　　　　　agree
☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

18. There were minimal or no misunderstandings in the conversation that I shared with my partner.

Strongly　　　　　　　　　Neutral　　　　　　　　Strongly
disagree　　　　　　　　　　　　　　　　　　　　agree
☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

19. I tried to engage my partner in the conversation.

Strongly　　　　　　　　　Neutral　　　　　　　　Strongly
disagree　　　　　　　　　　　　　　　　　　　　agree
☐1　　　☐2　　　☐3　　　☐4　　　☐5　　　☐6　　　☐7

20. I felt that I had in-depth conversation.

Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

21. I felt that my partner revealed more information about himself/herself (than I did about
myself?).
Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

22. I felt that I revealed more information about myself (than my partner did?).
 Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

23. I felt uncomfortable revealing information about myself.
Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

24. I felt close to my partner.
Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

25. I felt that I talked about a lot of things.
Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

26. I felt that we had a wide discussion on the topic.
Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

27. I felt that we talked beyond the given topic.
Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

28. I disclosed the information without feeling pressured to do so.
Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

29. I felt I could have a better interaction with my partner in some other medium of
communication.
Strongly   Neutral   Strongly
disagree   agree
□1   □2   □3   □4   □5   □6   □7

APPENDIX C

CONFEDERATE SCRIPT

Ice-breaker: Hi, I'm _____. How are you doing? I'm helping with this study about communication preferences of the youth. I am a Communication major and therefore interested in understanding our generation's view of technology for communication.

Ice-breaker: So what is your name? Okay, So_____ tell me something about yourself.

(If dated before)

PROMPT: Okay, tell me something about your first date. I remember I had my first date when I was 16. How about you?

PROMPT: Was it as you expected it to be? Elaborate

PROMPT: Where did you go? How was the place? Will you recommend it to others? Why?

PROMPT: Did you two date again? (If not, why?)

PROMPT: Can you elaborate/tell me more? (Why/How)

PROMPT: According to you, what are the things that should be done for a successful first date?

PROMPT: What are the things that should be avoided for a successful first date?

PROMPT: What if your first date was disastrous? How do you think you would cope? (If the date was successful)

PROMPT: What according to you are the important things for a successful relationship?

PROMPT: Any word of advice to first-time daters?

(If never dated)

PROMPT: That's not unusual. Some of my friends haven't dated either. Do you feel any pressure though?

PROMPT: If you were to analyze yourself, what would you say are the reasons for you having not dated so far?

PROMPT: How would you want your ideal date to be like?

PROMPT: Everyone has some expectations from their first date. I know I did. What about you?

PROMPT: Where would you take your date? Why there?

PROMPT: What are the things that should be done for a successful first date?

PROMPT: What are the things that should be avoided for a successful first date?

PROMPT: What if the first date is disastrous? (laughingly)That would be a truly sticky situation.

PROMPT: What according to you are the important things for a successful relationship?

APPENDIX D

FLYER

RECRUITING VOLUNTEERS!

VOLUNTEERS NEEDED FOR PARTICIPATING IN A RESEARCH STUDYING THE COMMUNICATION PREFERENCES OF TODAY'S YOUTH.

IF INTERESTED PLEASE CONTACT vidisha.bhopatkar@mavs.uta.edu FOR FURTHER DETAILS

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The researcher is a graduate student at The University of Texas at Arlington. Her research interests primarily focus on studying the changes that the evolving technology has brought on the society as a whole, and how this phenomenon is changing and in the process, shaping the social arena. The researcher wishes to further explore the media world in order to find out the evolving norms of the media industry, and its subsequent impact on media consumers.