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Disconnected Connections: Do communication technologies vary in their intimacy among college students?

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Abstract

As the use of e-mail and cell phones becomes more frequent, one must consider if these devices create intimacy, or an illusion of intimacy. American youth use technology as a daily means of communication, therefore, it is important to understand how these technologies aid or impede the development of intimate relationships. This study investigated how communication technologies vary in their intimacy among college students. We predicted that students will disclose more information via their preferred communication technology, and that students will feel more comfortable disclosing information in face- to-face interactions as opposed to over a communication device. Inspired by previous self disclosure scales The Intimacy through Mediated Technology scale (IMT) was created to measure the willingness of self disclosure through particular communication mediums in the early to middle stages of relationships. Subjects rated their willingness to disclose information over each communication device. We expected to find a correlation between ranking of given technology (and frequency) and disclosure over said technology. Also, we expected to see a difference between communication technologies based on intimacy ratings. The results demonstrated that high self disclosure over communication technologies correlated with high self disclosure in face-to-face interactions. There were also racial differences in willingness to disclose over particular communication mediums.

Introduction

This study aims to explore how computer mediated discourse and textual mediums such as text messages and email, shape the nature of conversation between American college students. In particular, I employ quantitative methods to investigate the extent to which non-face-to-face communication enables students to self disclose in ways that nurture emotional intimacy. This

question arises from the ubiquitous nature of texting and other non face-to-face forms of dialogue and curiosity concerning whether opportunities for intimacy are diminished in their wake. Such questions beckon consideration of the emergence of such mediums in the United States

Communication technologies are becoming increasingly integrated into the lives of Americans. People use these technologies for personal, work related and intimate reasons everyday. According to Los Angeles Times writer Marilyn Anderson, "The world has changed and so has dating. Today, it's no longer just the two of you. It's always a threesome -- you, him and that all-intrusive Technology. It's what I call "Menage a Tech" (Anderson, 2007). Recent social commentary on communication technologies like this leads to a question that many people are wondering in this technological age which is, is technology ruining relationships? Is it possible that a technology that is meant to bring people together actually disconnects people in terms of intimacy? This led to the research question of "Does intimacy very across communication technologies." If people use communication technologies as their primary means of connecting to a person of interest, it is important to examine if they are willing to disclose intimate details about their lives over that communication technology, as they would in a face to face interaction. If people are not willing to disclose information over communication technologies, we must eliminate technological devices as a means to develop intimate relationships. We must return to face-to-face interactions that have been historically known to be the best facilitators of intimate conversation.

As technological strides are made all over the world, engineers have tried to find different ways to emulate signals of intimacy, through communication technologies, that has historically only been available through face-to-face interaction. Youth all over the country use email, text

messages and phone calls in place of face to face interaction to build relationships; thus, we must consider if intimacy levels among college students varies based on the communication medium. The research will also examine if there are racial differences between how certain ethnic groups use communication technologies during the early stages of a budding relationship. The research will also discover if people disclose more intimate details about their lives over their preferred communication technology when initiating a relationship. These trends will reveal the role that computer mediated discourse plays in the development of relationships in this new technological age.

Literature Review

How did a device that was once used as a defense system of the United States, become a staple in the everyday lives of people all over the world? Computer mediated discourse was developed in the 1960s to aid the transfer of computer programs between distant computers in the interest of national defense. Now, computer mediated discourse or (CMD) is text based and comes in a variety of forms such as e-mail, real time chat, and text messages (Herring, 2001). The use of these technologies does change the nature of communication because they are significantly slower than speaking exchanges. Also CMD's allow for a person to participate in multiple conversations at once, which is difficult to do in a spoken exchange due to a participant's inability to engage in multiple voice conversations at one time. In addition, mediated communications transforms the nature of conversations because information is transmitted to an audience that is unseen. At the same time, despite invisibility, these exchanges are still considered private and create a direct impression (King, 1996).

Herring explains how mediated technology differs from face to face communication in terms of the potency of the medium. Face to face communication is considered a "rich" medium

because it includes other communicative signals that can be sensed through audio, visual, and through body language (Daft and Lengel, 1984). Communication technologies are considered a "lean medium," in contrast, because the only information available for the audience to receive is text as opposed to non verbal symptoms. There are conflicting views because some critics believe that because computer mediated technology is limited to text, it is considered "impoverished and unsuitable for social interaction" (Baron, 1984). However, there is evidence that technology users compensate textually for what they can't communicate non-verbally.

As the use of communication technologies continues to increase, more and more people across America utilize certain mediums such as text messaging, phone calls, email, and instant messaging to connect to people that they are unable to have face to face contact with. Students who are in college now, came of age in a time of rapid technological growth. At some point, one must consider how the use of these technologies can transform the way in which relationships are built and sustained. The goal of this research project is to examine how college students use communication technologies in the early stages of their relationships. Self disclosure, which is the reciprocal exchange of personal details about ones life, is a necessary component in order to gain intimacy in a relationship. Since technological devices are used often in the early stages of relationships, it is important co consider if the same information that is disclosed in face to face conversation, is just as easily presented in a conversation mediated through technology.

A number of assumptions guide my inquiry. "Direct communicative behaviors and the disclosure of personal information are the main vehicles for increasing intimacy" Reis and Shaver (1988) .Thus, if communication behavior and self disclosure are maintained through an electronic source, how does this affect the intimacy in the relationship? Examining the early stages of a relationship is imperative because the first steps in the relationship often sets a

precedent for what the entirety of the relationship will achieve in terms of depth. Berscheid and Graziano (1979) argued that the study of relationship initiation is important because "we often cannot understand the nature and the course of a developing relationship without knowing the circumstances under which two people originally became acquainted with each other." Therefore, if the relationship was initiated using a particular communication medium, and self disclosure took place in a technology mediated environment, the dynamics of the relationship differ from those whose relationships developed through more face-to-face interactions.

In order to understand how communication technologies lead to the creation or maintenance of intimate relationships, one must understand why and how relationships are initiated. A study conducted by Catherine L. Clark, Phillip R. Shaver, Matthew F. Abrahams: Strategic Behaviors in Romantic Relationship Imitation (1999), serves as a way in which to fill a gap in knowledge in how relationships are created and to explore subjects' reactions to a variety of romantic relationship initiation methods. The study addresses relationship initiation in general, where I will delve into how these potential mates become acquainted through communication technologies. The literature review of this study describes that the classical explanation as to why people initiate relationships is only for sex—according to Buss and Schmitt (1993). But there is research that suggests that "emotional as well as sexual intimacy plays an important role in relationship stability (Aron and Aron, 1994). The results of the questionnaire, which asked participants to imagine themselves in a hypothetical relationship, showed that emotional disclosure was the most proficient strategy and was perceived as the least phony. Technology can encourage those who are more inhibited to express themselves, to reveal more because they are detached from the person. But the physical distance between the two mates could potentially

create emotional distance as well if self disclosure doesn't occur over the use of communication devices.

There are other components the play in role in the successful bonding of two partners. Heidi M. Levitt's study of women and how they found fulfillment in their relationships and the details of their commitment process. The literature review of her study focused on the "Triangle of Love" composed of three elements of intimacy, passion and commitment." Each of these are important components of building a successful relationship. Ergo, it is important to consider how the triangle is affected by technology—whether is built with more facility or difficulty.

According to Aronson (1999) "Intimacy refers to feelings of being close to and bonded with a partner. Passion refers to the arousal you experience toward your apartment, including sexual arousal. Commitment is short term and long term." Since the 'triangle' is so essential to the longevity of a relationship, it is important to consider if passion, intimacy, and commitment can be expressed through communication technologies successfully.

In her study, she examined how each woman came together with her romantic partner. Her research was conducted through interviews. The interviewees reported that the relationship developed through a specific process that included initial assessment of their partner's attributes of trust devotion, care, and exceptionality. Although the study was conducted only three years ago, her demographic was above the college level age. This study examines a younger demographic who are more immersed in the technological age. So the questions becomes if communication technologies affect the natural progression of relationship development.

Science has tried to find ways to emulate intimacy cues that have only been able to be expressed, historically in a face-to-face interaction. One design developed in Scotland's College

of Art, Science, and Engineering school designed phones intended to promote intimacy. Developed by the Phone/Phone not company, the cell phones are to "boost intimacy and sensuality" (Kazan, 2007). One of the cell phones literally sends a tingle down your back if a friend is nearby; the other allows phone users to create music together. According to Kazan, "The goal of the new phones is to get away from the unsocial mobile phones and facilitate communicating and interacting on a new level" (Kazan, 2007). Technologies like this are not rare, as people constantly try to find new ways to integrate communication devices into the realm of intimacy. Devices like these aim to transform the nature of intimacy. Is it possible that technology can substitute for traditional intimacy? We must study how the integration of technology into relationships aids or impedes the development of intimate relationships.

Some analysts believe that the development of technology was the first stride towards eliminating intimacy. According to George Bataille's theories, "technology embodies the first act of a consciousness that split the world into subjects and objects" (Bataille 1992,). Thus, there is a separation between person to person and that fragmentation is created through the use of technology. He implies that the destruction of these objects can increase the opportunities for intimacy. Technological devices attempt to imitate human existence. In Alessandro Tomassi's essay, *The Role of Intimacy in the Evolution of Technology*, he suggests that in the future, "a certain technological device may have characteristics that allow it to be intimately experienced as we intimately experience our bodies and minds" (Tomassi, 2007). This is a fearful concept that the world of intimacy that human beings are accustomed to,may be completely replaced by technological devices. One theorist claims that by the year 2099 "there is no longer a distinction between humans and computers...machines claim to be conscious" (Kurzweil 1999, 280).

Maybe it is the technological emulation of a physical presence that makes people use

technological devices with facility when communicating with others. But a man made device cannot replicate the sense of satisfaction that comes with creating intimacy without computer mediation. Regardless of this fact, people use technology as a main means of communication in their daily lives, so it is important to discover how these technologies integrate themselves into the development of relationships.

In order to study how communication technologies play a role in relationships, it is also important to acknowledge why people use these devices in general. A study conducted by Rebecca E. Grinter and Leysia Palen examined 16 teenage IM users and its support on interpersonal communication. The study sought to explore the major features of IM use. "Instant Messaging is the newest and most popular incarnation of near synchronous text chat technologies," the study reports (Palen, Grinter, 2002). Reasons that were found to IM included a desire to conform to increase socializing opportunities with their peers. Also, convenience tends to play a major factor in why this medium is used. Subjects in the study reported that they were frustrated when people did not have an instant messenger account, and were annoyed by the additional work that was required to contact them. Non-use of IM rendered students "invisible." Study participants explained that they used IM because they did not have an opportunity outside of school hours in order to converse with their peers. Participants explained that the use of IM was primarily for informal conversation. The report found differences in high school and college students—since high school students have shared schedules their conversation tended to be more "rapid fire, gossipy" while college students use of IM was comparable to news updates.

While communication technology use is just as rampant as it is in other places around the world, there is a lack in literature about how the use of these technologies affects the growth and

sustainability of relationships. There is, however, quite a few studies that have been conducted in other parts of the world that examine this topic.

As mentioned with instant messenger, the importance of convenience reoccurs in a study conducted by Jo Barraket and Lissom S. Henry-Waring, entitled, *Getting it on(line):*Sociological perspective on e-dating. The research was conducted in Melbourne, Australia. The study served the purpose to understand the popular use of online dating. The study included many interviews with people who were admitted online daters. From the interview data they collected, one thirty-three year old single woman remarked that "I wonder if [online dating] makes everything too easy, so it cam lend itself to becoming even more impermanent, relationships even more fragile. It's just too easy to meet people, too easy to cycle through people, so it kind of accelerates the disintegration of long-term relationships." Although this quotation came from a particular study on online dating, the same idea of disintegration can also be possible through the use of other mediated communications.

Research completed by Christian Licoppe in France also speaks of the negative affects of convenience. His investigation was carried out to study how the transformation of technology allows for the development of social bonds. The researcher explains that 'mediated' relationships are beginning to substitute rare face-to-face interactions. Phone calls were seen to be spread out in time, long, and "taking one's time to converse is a sign of a bond, of the strength of each person's commitment to the relationship." He also described that SMS allows for availability and the idea of "everywhere and at any time." Convenience can imply a lack of commitment, because people don't have to set aside time to converse with people. Thus, there is no sacrifice of time to show dedication.

In terms of romantic relationship initiation, another study completed in Australia by Ruthe Byrne and Bruce Findlay, examined sex differences in the possibility of initiating moves toward an intimate relationship through SMS or text messages. The sample was comprised of 159 females and 107 males (mean age 28). Study was conducted through an online self report. The study found that females were more likely to initiate "first moves" through text messaging, while males had no preference toward either communication channel. To initiate a first date, males were seen to use telephone calls more frequently than text messages. Females were seen to be reluctant to initiate regardless of the communication medium.

A study designed in the UK by Donna Reid and Fraser Reid entitled, *Insights into the* Social and Psychological Effects of SMS Text Messaging, used an online questionnaire to examine the difference between those who use their cellular phones for texting as opposed to talking. The terms "Texters" and "Talkers" were used to differentiate between people who use their mobile phones for voice calls as opposed to text messages. A sample of 395 males and 676 females yielded results that showed that the preference of texting to calling was almost split in half. "Texters" were found to be lonelier and significantly exhibit more socially anxious behavior. "Texters" reported that the medium added something extra to their existing relationship with their friends and family." Also, the texters reported that they developed a closer relationship with the person they texted, as opposed to the talkers. Texters also reported that they were able to express in text messages, things that they would not be able to say in a face to face conversation. Benefits of text messaging is that is can be conveniently received at anytime, and messages can be exchanged discretely without interruption of activity. McKenna et al (2002) found with regards to the internet, many people may turn to texting to form and maintain relationships in an environment that is considered safe and comfortable. This study shows that

there is a possibility that greater intimacy can arise from the use of communication technologies because it removes the component of confrontation.

But there are also other reasons why the use of instant messaging would be more desirable other than apprehension and shyness. A study conducted in Denmark by Louise Barkhuuss reported that their use of SMS was to avoid talking in a public setting. The subjects considered voice calls "intruding on the surrounding people" (Barkhuuss, 2005).

Methods

Introduction

Since the amount of self disclosure is typically linked to intimacy, the aim is to create a scale that measures the possibility of creating intimacy through a mediated technology (IMT). In our research on communication technologies, we weren't able to find a scale that measures the amount of intimacy that can be achieved through the use of specific communication technologies. Another goal is to discover if the subject is more willing to disclose via their preferred communication medium. The first hypothesis is that an individual's willingness to disclose intimate details about their lives will vary across communication technologies. The second hypothesis is that there will differences between races in their willingness to disclose over specific communication devices.

Sampling

My sample will include college level students aged 18-24. We chose this demographic because this particular population of students is most immersed in the technological age then

older generations. Thus, technology has played a larger role in their communication processes. The participants of the study will be recruited randomly through the social networking site *Facebook*.

Data Collection

The scale will be distributed through *Qualtrics*, a site devoted to the creation of surveys. The participants will receive a link to the site, and will voluntarily answer each of the questions. Since this research is based around scale construction, the twenty questions were selected out of an original list of forty. The questions were chosen based on clarity and relevance. This scale will be run alongside the attachment and fear of intimacy scales. The Brennan, Clark, and Shaver's (1998) Experiences in Close Relationships (ECR) questionnaire was created to examine individual differences with respect to attachment-related anxiety (i.e., the extent to which people are insecure vs. secure about the extent to which their partner's availability and responsiveness) and attachment-related avoidance (i.e., the extent to which people are uncomfortable being close to others vs. secure depending on others). The subjects were asked to what extent did they agree with the following 18 items (Refer to Appendix A) The ECR has an internal reliability of .90 or higher. Another scale that will be tested simultaneously is the Fear of Intimacy Scale (FIS). This scale, developed by Descutner & Thelen in 1991, tests a participant's fear of sharing intimate information about their lives. Item-total analyses yielded a 35-item (Refer to Apendix B) scale with high internal consistency and test-retest reliability. Construct validity was established by factor analysis and significant correlations. The scale asks the subject to consider a hypothetical relationship, and to reveal if they think the following items are characteristic of them. The FIS scale is similar to the IMT scale that is being created because they both ask the subject to imagine intimate relationships, and rate their expected behavior accordingly. The ECR and FIS

scales were chosen to run with the intimacy through communications scale, in order to explore if people's unwillingness to communicate through a technological device, was caused by their own insecurity or fear, as opposed to the unwillingness to disclose over the device itself.

To create the IMT, we used as an inspiration a scale to test *Self-Disclosure in Dating Couples: Sex Roles and the Ethic of Openness Author* which was created by Zick Rubin, Charles T. Hill, Letitia Anne Peplau, Christine Dunkel-Schetter. The study used 17 items to ask how much one is willing to disclose per topic. Some of the items of the original scale included: My thoughts about the future of our relationship, My political views, My feelings toward my parents etc.

Since my scale is concerned with how college students use communication technologies to build relationships, my questions will cater towards the single student in the early stages of the relationship. The directions will ask the participant to rate their willingness to disclose each item of information to their partner over a particular medium of communication. For each medium (Phone Calls, Text Messages, and Email), each of the 20 items will be presented (Refer to Appendix C). The subject will than rank from 1-5 (1 being definitely will not disclose the information using this medium, 5 being definitely will disclose) if they would reveal that particular piece of information using the listed technology. The last option will not be a communication technology, but an option of face to face encounter. As they did with the communication technology, the taker will rank how likely they are to reveal that information in a face to face interaction. Thus, the scale will measure if people are more likely to disclose information in a face to face interaction as opposed through a mediated technology. Their answers will be recorded on a behaviorally orientated Likert scale.

In order to test for the validity of the scale, many tests must be run. The goal is to create a scale that is reliable, consistent and accurate. The scale will contain multiple items in order to insure reliability. Once the scale is created, a pilot test will be run on a small sample of people. The sample will then rate each item from 1-5 if they think the item is favorable to the scale. The items that are low in favorability will be discarded. After the preliminary scale is tested, it will then be administered to a larger sample. The large sample includes 100 to 200 participants and there must be 30 to 50 items in the scale. The scale will be tested for external and internal reliability. Because this is a pilot study, the twenty items of the scale were selected out of a list of forty for their relevance and quality. Also, the scale was only tested on an initial sample size of 66, thus, the scale must be run with a larger sample in order to proceed towards validation as a scale.

Results

The final sample size consisted of 66 participants. The gender composition was 72% female and 28% male. The racial demographic was: Asian 8%, Black 45%, Latino 5%, Caucasian 15%, Mixed 20%, 3% other. Although the participants were primarily from the University of Southern California there were a variety of responses that came from all over the nation including University of California, Los Angeles, University of Arkansas, Boston University, Emory, University of California, Davis, University of Trinity (Texas), University of Hawaii, and Columbia University.

Since this is a pilot study, factory analysis, which is a statistical method that is used to describe variance among variable, was run with each of the scale questions for each communication device. Upon examination of the factor analysis, it was observed that the

questions of the scale divided into different components of intimacy depending on the communication technology. For each communication technology, terms were developed to encompass each component of intimacy. Face-to Face interactions broke up into four components of intimacy: Casual Personal, Concepts of Self, and Drug Use/Sexual Experience/Politics. Phone calls divided into five components of intimacy that include: Conversational, Casual Personal, In-depth Personal, and Intimate Relationship. Text messages divided into two components of intimacy, Casual and Intimate. E-mail divided into three components of intimacy: Casual, Personal, and Intimate.

For the first hypothesis, which asked if students disclosed more via their preferred technology, a T-test was run between two sums of the intimacy item responses that measured students' willingness to disclose over two communication mediums. A T-test measures if means are statistically different from each other, and upon examination we discovered that each communication device was statistically different from disclosure over a face-to-face interaction. Students were more willing to disclose intimate details about their lives in person, than over any communication device.

Figure 1.

Face-to-Face	Phone Call	Text Messages	E-mail
42.885	39.68	34.772	30.697

Figure 1 (above) shows the means for each communication medium in terms of total willingness to disclose. As shown, students were less willing to disclose over e-mail than over any communication technology. A telephone conversation was shown to be the most intimate communication technology of the three. Since face-to-face conversations proved to be the forum that encourages the most intimate self disclosure, we ran a t-test to compare each communication technology to face-to-face interactions (Figure 2).

Figure 2.

	SumIMT-Phone Calls SumIMT- Text Msg		SumIMT- E-mail	
Face-to-Face	t(65)= 3.707 p=.000	t(68)= 3.707 p= .000	t(70)=8.513 p= .000	

Each of the communication technologies showed a statistical difference from willingness to disclose over face-to-face interactions with a p-value of .000.

To test for the second hypothesis, a One-way ANOVA (analysis of variance) was run for the sum of intimacy for each communication technology, factored by race. In terms of racial difference amongst ethnic groups and their willingness to disclose over certain communication devices, the only statistical significance that was observed was between Asians and Latinos willingness to disclose over e-mail. Asians were significantly more willing to disclose over email (38.00=Asians) than Latinos (24.00=Latinos) (p=.050). In terms of intimacy over phone and face-to-face, there were no significant differences between groups in terms of willingness to disclose over those particular mediums. Figure 3 shows a list of means for willingness to disclose over particular communication technologies, factored by race.

Figure 3.

	Blacks	Whites	Latinos	Asians
Face-to-Face	44.11	45.37	42.00	46.00
Phone Calls	41.14	39.35	39.75	39.83
Text Messages	38.00	32.846	30.500	34.66
E-mail	30.91	34.68	24.00	34.68

Discussion

In terms of the factor analysis, in my opinion, different questions loaded onto different factors depending on how lucrative the communication medium is in building social capital. For example, questions of sexual experience, past intimate relationships and family are considered more intimate so they loaded onto factor one. Questions that included, who is your favorite author, political affiliation, favorite restaurant, load onto factor two. Thus, factors load differently depending on the communication technology, intimacy works differently across different communication contexts.

In my opinion, factors load differently depending on the communication technology, because intimacy works differently across different communication contexts. Going back to Daft and Lengel "rich and lean mediums" more rich mediums loaded questions onto multiple components because there are verbal and non verbal cues that may be available to help interpret and create intimacy. Face and phone had the most components (4 or 5) because they are richer

communications in terms of intimacy or social capital. Technologies that broke up into fewer components like e-mail and text are simpler forms of communication because information is only available textually, while with phone there are vocal cues that add to the conversation. In face-to-face interactions there are visual and vocal cues that one can interpret in order to create an intimate bond between the two. Also, face-to-face conversation and phone conversation are more intimate because they require more of an immediate response, and a complete sacrifice of time to communicate over these mediums, while other communication technologies don't require quick response, and one can text and e-mail while they are participating in other activities.

The racial differences between groups must be studied closer to find explanations as to why certain cultures are more comfortable disclosing over certain communication contexts.

Blacks were more comfortable disclosing over text, whites were more likely disclosing over email. In terms of mean comparison, we also saw that Asians were more willing to disclose in a face-to-face interaction than any other race. None of these were statistically significant, but hopefully with further research and a larger we can study if these trends are significant. If a larger sample size revealed that there are statistical differences between racial groups in terms of willingness to disclose, it would be interesting to discover why certain races are more comfortable disclosing intimate details of their lives through the use of lean or rich mediums of communication.

Limitations to Research

The sample size of sixty-six people made the results incomplete. The gender and racial difference were also skewed towards Blacks and females. A more randomized, normal distribution of races and genders are necessary to make this research more valid. The use of the

social networking site *Facebook*, is not an adequate recruitment method for a random sample. In future studies, students will be recruited through a more reliable method. The IMT scale that was created is not a reliable scale. In future studies the IMT scale will be run with the ECR scale and the FIS scale to examine if the frequent use of communication technologies to develop relationships is linked to anxiety or fear of creating intimacy in a face-to-face context. It is also necessary to consider other communication devices that are used to facilitate intimate conversation. Instant messaging and social networking sites must be included in this research to encompass the variety of different communication forums that exist to create intimate relationships. Thus, for future research, these communication mediums will be added in order to see if intimacy varies across those communication technologies as well. Since this is a pilot study, the information obtained through this prototype will be very useful in further studies on the use of communication technologies and its role in relationships.

Appendices

Appendix A

ECR-Experiences in Close Relationships Scale Items

I'm afraid that I will lose my partner's love.

I often worry that my partner will not want to stay with me.

I often worry that my partner doesn't really love me.

I worry that romantic partners won't care about me as much as I care about them.

I often wish that my partner's feelings for me were as strong as my feelings for him or her.

I worry a lot about my relationships.

When my partner is out of sight, I worry that he or she might become interested in someone else.

When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.

I rarely worry about my partner leaving me.

My romantic partner makes me doubt myself.

I do not often worry about being abandoned.

I find that my partner(s) don't want to get as close as I would like.

Sometimes romantic partners change their feelings about me for no apparent reason.

My desire to be very close sometimes scares people away.

I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.

It makes me mad that I don't get the affection and support I need from my partner.

I worry that I won't measure up to other people.

My partner only seems to notice me when I'm angry.

I prefer not to show a partner how I feel deep down.

I feel comfortable sharing my private thoughts and feelings with my partner.

I find it difficult to allow myself to depend on romantic partners.

I am very comfortable being close to romantic partners.

I don't feel comfortable opening up to romantic partners.

I prefer not to be too close to romantic partners.

I get uncomfortable when a romantic partner wants to be very close.

I find it relatively easy to get close to my partner.

It's not difficult for me to get close to my partner.

I usually discuss my problems and concerns with my partner.

It helps to turn to my romantic partner in times of need.

I tell my partner just about everything.

I talk things over with my partner.

I am nervous when partners get too close to me.

I feel comfortable depending on romantic partners.

I find it easy to depend on romantic partners.

It's easy for me to be affectionate with my partner.

My partner really understands me and my needs.

Appendix B

FIS- Fear of Intimacy in relationships Scale Items

I would feel uncomfortable telling O about things in the past that I have felt ashamed of

I would feel uneasy talking with O about something that has hurt me deeply.

I would feel comfortable expressing my true feelings to O.

If O were upset I would sometimes be afraid of showing that I care.

I might be afraid to confide my innermost feelings to O.

I would feel at ease telling O that I care about him/her.

I would have a feeling of complete togetherness with O.

I would be comfortable discussing significant problems with O.

A part of me would be afraid to make a long-term commitment to O.

I would feel comfortable telling my experiences, even sad ones, to O.

I would probably feel nervous showing O strong feelings of affection.

I would find it difficult being open with O about my personal thoughts.

I would feel uneasy with O depending on me for emotional support.

I would not be afraid to share with O what I dislike about myself.

I would be afraid to take the risk of being hurt in order to establish a closer relationship with O.

I would feel comfortable keeping very personal information to myself.

I would not be nervous about being spontaneous with O.

I would feel comfortable telling O things that I do not tell other people.

I would feel comfortable trusting O with my deepest thoughts and feelings.

I would sometimes feel uneasy if O told me about very personal matters.

I would be comfortable revealing to O what I feel are my shortcomings and handicaps

I would be comfortable with having a close emotional tie between us.

I would be afraid of sharing my private thoughts with O.

I would be afraid that I might not always feel close to O.

I would be comfortable telling O what my needs are.

I would be afraid that O would be more invested in the relationship than I would be

I would feel uncomfortable about having open and honest communication with O.

I would sometimes feel uncomfortable listening to O's personal problems.

I would feel at ease to completely be myself around O.

I would feel relaxed being together and talking about our personal goals.

Appendix C

IMT-Intimacy through Mediated Technology Scale Items

What is your favorite movie? Who is your role model? What was the most recent dispute in your family? What was your overall happiness in past intimate relationships? What is your first childhood memory? What is your greatest fear? What do you want to be when you are older? How do you spend your free time? Describe your first sexual experience Describe your upbringing Are you a spiritual person? Who is your favorite author? Who performed at your first concert? How long will you wait to be intimate with a potential partner? What is your favorite restaurant? Describe the last time you got drunk Have you ever experimented with drugs? What in life are you most proud of? What qualities do you seek in your partner?

What is your political affiliation?

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