The Effect of Text Messaging Preferences and Behavior on Romantic Relationship Satisfaction

by

Lindsay Okonowsky

A Thesis Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Counseling

Approved August 2016 by the
Graduate Supervisory Committee:

Terence Tracey, Chair
Sharon Robinson-Kurpius
Giac-Thao Tran

ARIZONA STATE UNIVERSITY

December 2016

ABSTRACT

Proponents of cues-filtered-out approaches to communication suggest that the quality of person-to-person interaction is diminished when that interaction is mediated by technology. This postulation has implications for communication given the surging popularity of text messaging in the United States. It is important to examine the degree to which text messaging may inhibit successful communication due to the detriments of technologically mediated communication. The relation between text messaging and romantic relationship satisfaction in individuals ages 18-45 was investigated because successful communication is widely known by researchers and lay individuals to be an integral aspect of healthy intimate relationships. The Relationship Assessment Scale (RAS) (Hendricks, 1988) and an inventory of text messaging behavior was administered to graduate students (n = 22), undergraduate students (n = 24), and people not affiliated with universities (n = 104). Using responses on these inventories, whether or not (1) frequency of text messaging and (2) preference for a particular method of communication are related to romantic relationship satisfaction were evaluated. It was hypothesized that (1) a higher frequency of text messaging will be inversely related with romantic relationship satisfaction and (2) that a participant indicating a preference for verbal phone communication over text messaging communication will be positively correlated with romantic relationship satisfaction. The lack of statistically significant results prevented the drawing of conclusions about relationships between text messaging frequency or preference for voice communication over texting and romantic relationship satisfaction.

TABLE OF CONTENTS

Page

LIST OF TABLES iv

CHAPTER

1 INTRODUCTION 1

2 LITERATURE REVIEW 4

Romantic Relationship Satisfaction 4

Cues-Filtered-Out Approaches 4

Texting, Mobile Phone Use and Relationship Satisfaction 7

Hypotheses 12

3 METHOD 14

Participants 14

Procedure 15

Measures 16

4 RESULTS 21

5 DISCUSSION 26

Limitations 29

Conclusion 31

REFERENCES 32

APPENDIX

A DEMOGRAPHIC DATA SHEET 36

B CELL PHONE USAGE QUESTIONNAIRE 38

APPENDIX Page

C RELATIONSHIP ASSESSMENT SCALE ……... 43

D IRB APPROVAL …….……..... 45

LIST OF TABLES

Table Page

1. Descriptive Statistics for Frequency Subscales 23

2. Descriptive Statistics for Preference Subscales 24

3. Spearman's Correlation Matrix..... 28

CHAPTER 1

Introduction

Rapid advancements in technology have led interpersonal communication to become mediated by technology at an expeditiously increasing rate. Data indicate that 285 million Americans were using cell phones during the second half of 2009 and 5 billion text messages are reportedly sent each day (Foresman, 2010). Texting, also called short messaging service (SMS) or multimedia message service (MMS), has developed rapidly since its mainstream introduction in 1995 (Kasesniemi & Rautiainen, 2002). Text messages are short type-written messages or photographs sent via mobile phones. Approximately 83% of American adults own cell phones and 73% of those who own cell phones report that they send and receive messages (Smith, 2011). Additionally, 31% of text-messaging users indicate they prefer texting over voice calling (Luo, 2014). The ways in which the explosion of cell phone usage in United States society may impact the social lives of Americans requires continued scholarly attention. As a corollary, how the widespread and commonplace use of cell phone text messaging has added complexity to the ways in which individuals initiate and maintain relationships also requires specific focus.

Using cell phones as a method of communication has become one of the most common ways to connect with others. The availability of mobile phones and new media to ever-younger age groups continues to raise new questions on the sociocultural effects and meanings of communication (Oksman & Turtiainen, 2004). People born from 1990 to 1999 have informally and commonly been referred to as “Generation Text” in the media. Young adults (people aged 18-24) are the most avid text message users,

exchanging an average of 109.5 test messages in a typical day (Smith, 2011). In a study of text messaging behaviors among teenagers, 54% of all teens reported communicating with their friends daily through text messaging, while 38% of them made verbal phone calls, and 33% talked with their friends face-to-face (Lenhart et al., 2010). The dramatic increase in cell phone mediated communication has led, and will continue to facilitate, a shift in how Americans regularly communicate. Everyday observations, in combination with interpretation of the statistics presented above, would lead one to believe that text messaging must be used in intimate relationships, especially among teenagers and young adults who grew up in a social context characterized by the use of cell phones to communicate. The widespread use of texting demonstrates that the communication medium offers a number of functional benefits, but the potential drawbacks of text messaging have not been thoroughly examined.

Individuals belonging to "Generation Text" are now 17-25 years old and have begun to enter into intimate relationships. Text messaging is a widely accepted medium for courtship; young adults use text messaging to flirt, make plans, get to know each other, gossip, etc. Teenagers report texting with their partners frequently; 20 percent of teens in relationships reported texting their partners 30 times per hour or more (Teenage Research Unlimited, 2007). The trends adopted by "Generation Text" will continue; technology continues to advance and will subsequently play an increasingly present role in the lives of Americans. For this reason, it is important to examine the impacts of text messaging on relationships. In this study, how text messaging is related to individuals' relationship satisfaction was examined. Relationship satisfaction is defined as individuals' *subjective* valuing of their meaning contexts within personal relationships

(Hendrick, 1988). The dynamics of couples involved in intimate relationships are undoubtedly impacted by the changing methods of communication, which include both the communication benefits and pitfalls of text messaging. These effects on couple dynamics may directly influence an individuals' level of relationship satisfaction. However, little to no research currently exists that directly examines how cell phone text messaging may be related to romantic relationship satisfaction. Furthermore, most of the existing literature on text messaging centers on teenagers and undergraduate students. In the current study, a sample of individuals aged 18-45 will be used to facilitate an evaluation of participants old enough to have and maintain mature, intimate relationships.

Romantic relationship satisfaction research provides a context for examining individuals' subjective valuing of their relationships. Relationship satisfaction as a construct lends itself to measurement and can be used as an outcome variable to help predict the effects of a variety of relationship phenomena. In this study, relationship satisfaction is used as a measurement outcome to make inferences about the effect of text mediated communication on individuals' subjective valuing of their relationships.

Many theorists propose that the quality of person-to-person interaction is diminished when that interaction utilizes technology as a medium (Daft & Lengel, 1986; Kock, 2005; Short et al., 1976; Sproull & Kiesler, 1986, 1991). In the current study, I use communication principles suggested by cues-filtered-out approach theorists such as media richness theory (Daft & Lengel, 1986), social presence theory (Short et al., 1976), social context cues theory (Sproull & Kiesler, 1986, 1991), and media naturalness theory (Kock, 2005) as frameworks for examining the effects of text messaging on self-perceived romantic relationship satisfaction in individuals ages 18-45.

CHAPTER 2

Literature Review

Romantic Relationship Satisfaction

In this study, I examined the relationships between romantic relationship satisfaction, self-reported preferred mode of phone communication (texting vs. voice calling), and self-reported frequency of text messaging. Meeks, Hendrick, and Hendrick (1998) emphasized that relationship satisfaction is a useful construct because it has implications for relationship longevity, success, and stability. Meeks et al. postulated communication skills such as empathy, perceived self-disclosure of one's partner, and perceived relational competence of one's partner should be linked to romantic relationship satisfaction by affecting perceptions of the partner and by subtly shaping ongoing interactions. In addition to the potential for miscommunication due to cues-filtered-out approaches, I posit that the subtle nature of the communication processes highlighted by Meeks et al. cannot be adequately conveyed through text messaging, which subsequently influences levels of romantic relationship satisfaction.

Cues-Filtered-Out Approaches

Proponents of Cues-filtered-out approaches maintain that technology mediated communication inhibits interactors' abilities to communicate as successfully as they would if they were communicating face-to-face. Cues-filtered-out approach principles would lead one to surmise that text messaging, a technology mediated form of communication, may interfere with successful communication. Because text messaging is so widely used, it is imperative that its effects on communication are evaluated through a cues-filtered-out lens. Media richness theory (Daft & Lengel, 1984), social presence

theory (Short, Williams, & Christie, 1976), social context cues theory (Kiesler, Siegel & McGuire, 1984; Dubrovsky, Kiesler & Sethna, 1991), and media naturalness theory (Koch, 2005) researchers describe the ways in which communication is influenced when it is facilitated by a technological medium.

Media richness theory. Using their theory of media richness, Daft and Lengel (1986) suggested that computer mediated communication (CMC) has a narrower bandwidth and less information richness than face-to-face communication. Daft and Lengel posited that different communication channels vary in their capabilities to process information. 'Rich' media is more suitable than 'lean' media for socially sensitive or intellectually difficult information, and for persuading, bargaining, or getting to know someone (Hu et al., 2004). Communication functions like bargaining are often involved in the creation and maintenance of relational boundaries and intimate relationships.

Differences between rich and lean media are based on feedback capability, the communication channels utilized, language variety, and personal focus (Suh, 1999). Champions of media richness theory have proposed that face-to-face communication is considered the richest communication medium because it allows rapid mutual feedback, permits the simultaneous communication of multiple cues (e.g. body language, facial expression, tone of voice), uses high-variety natural language, and conveys emotion (Suh, 1999). According to the media richness theory framework, CMC and text messaging are considered lean media and therefore do not accommodate interactional complexity or promote high levels of understanding. Because of this deduction, I posited that text messaging may lead to potential decreases in understanding and in accommodation for

complexity, which may contribute to unsuccessful and unfulfilling communication, and ultimately decrease romantic relationship satisfaction.

Social presence theory. Proponents of social presence theory suggest that on a continuum of different methods of communication, face-to-face communication allows for the most social presence and text based communication involves the least amount of social presence (Short et al., 1976). Short et al. defined social presence as the "degree of salience of the other person in a mediated communication and the consequent salience of their interpersonal interactions" (p. 65). Additionally, social presence refers to the extent to which a medium is perceived as conveying the actual physical presence of the communicators. According to social presence theorists, different types of media vary in their capacities to transmit information about visual cues such as facial expression, gaze direction, body posture, and dress as well as nonverbal, vocal cues (Short et al., 1976). Short et al. (1976) also incorporated immediacy (Weiner & Mehrabian, 1968) and intimacy (Argyle & Dean, 1965) into their conceptualization of social presence. Weiner and Mehrabian (1968) defined immediacy as, "the relationship between the speaker and the objects he communicates about, the addressee of his communication, or the communication itself" (p. 3). Immediacy can also be conceptualized as a measure of psychological distance between participants in an interaction. Immediacy oriented behavioral cues such as frowning or shaking one's head are thought to enhance closeness and the effectiveness of nonverbal interaction (Weiner & Mehrabian, 1968). These types of visual cues convey understanding, agreement/disagreement, cognitive presence, etc. and serve to minimize ambiguity or uncertainty between parties during face-to-face communication.

Additionally, Short et al. (1976) asserted that social presence contributes to intimacy, which is expressed by verbal and nonverbal behavior and is subconsciously maintained in equilibrium at an appropriate level by interactors (Rettie, 2003). Intimacy is further described as close familiarity, friendship, or closeness. Hatsfield (1982) defined intimacy as a "process by which a dyad—in the expression of thought, affect, and behavior—attempts to move toward complete communication on all levels" (p. 271). Intimacy is typically thought of as being a component of healthy, loving relationships (Alperin, 2006). Because texting reduces social presence, and by association immediacy and intimacy, which are both tied to relationship satisfaction, I hypothesized that a high frequency of texting and a preference for texting over voice phone communication should be related to poorer romantic relationship satisfaction.

Social context cues theory. In their work on social context cues theory, Kiesler et al. (1984), Sproull & Kiesler (1986), and Dubrovsky et al. (1991) examined the degree to which a communication medium is perceived as providing social context cues to the communicators. Examples of social cues are frowning, smiling, nodding, and other physical or verbal behaviors that convey meaning, but are not words themselves. According to social context cues theorists, CMC provides the least opportunity for the successful delivery of social context cues, and face-to-face communication facilitates the incorporation of the largest amount of social context cues.

Text messaging is a text based medium, and therefore, based on the principles of both social presence theory and social context cues theory, lacks the capability to transmit certain social presence and context cues necessary for quality communication, as defined by cues-filtered-out approaches. For this reason, it was important to examine how the use

of a text mediated method of communication that lacks social presence and/or the ability to convey social cues may be related to communication in intimate relationships and, subsequently, levels of romantic relationship satisfaction.

Media naturalness theory. In his (2005) theory of media naturalness, Koch reported that a decrease in the naturalness of a communication medium contributes to increased cognitive effort, increased communication ambiguity, and decreased physiological arousal within the communicators. On the spectrum of media naturalness, face-to-face communication is deemed the most natural form of communication and as the communication becomes more and more mediated by technology, it becomes less and less natural. Furthermore, Lewandowski et al. (2011) suggested that because humans' natural form of communication is face-to-face, less natural forms of communication (e.g. telephone, texting, or email) will have a negative impact on message interpretation. Inhibited message interpretation, brought about by less natural forms of communication like text messaging, may lead to increased instances of misunderstanding and associated frustrations. I hypothesized that this may negatively impact individuals' levels of satisfaction in their relationships given that successful communication is an integral part of intimate romantic relationship satisfaction.

Consensus of cues-filtered-out approaches. When consumed collectively, the general conclusion of the cues-filtered-out approach literature is that face-to-face interaction, when compared to CMC, leads to better interaction outcomes. Cues-filtered-out approach proponents place the success of interpersonal communication on social cues, presence, and naturalness, which are not available when employing text messaging as a method of communication. Because of this line of reasoning, I hypothesized that

interaction outcomes fostered by text messaging would lead to a lower level of self-perceived romantic relationship satisfaction.

Texting, Mobile Phone Use, and Relationship Satisfaction

Most of the research findings concerning mobile phone communication and relationship constructs assert that mobile phone communication enhances or maintains relationships rather than hinders them. Little research exists, outside of cues-filtered-out research, presenting the challenges associated with frequent use of mobile phone communication in relationships. Katz and Aakhus (2002) posited that as technology advances, individuals use communication tools in ways that meet their needs and accommodate their comforts, which often results in the development of new interaction patterns. This postulation alludes to the idea that as technology is modified, so too are the ways in which humans seek to meet their communication needs. Through the current study I planned to evaluate how the potential development of new communication patterns may or may not impact relationship satisfaction.

Pettigrew (2009) interviewed a number of college educated close dyads (n = 38; 19 interviews) in a Midwestern city and found that individuals believed texting allowed them to stay connected to their partners while maintaining autonomy, allowed for a level of privacy talking on the phone did not, allowed them to connect with their partners in spaces they could not prior to the use of texting, and generally made their relationships more enjoyable. Furthermore, Pettigrew (2009) found that romantic dyads had a strong tendency to use texting to enhance emotional connection with their partner. This may be, in part, because the physical distance texting provides allows anxious or avoidant relationship members to share their feelings in a controlled and distant manner that feels

more comfortable than highly intimate face-to-face disclosure. In a similar study on young adults' use of text messaging and attachment style, Morey, Gentzler, and Creasy et al. (2013) found that texting was linked to more positive relationship outcomes for highly avoidant participants.

Similarly, Jin and Peña (2010) found that avoidantly attached individuals less frequently used voice calls and also found an interaction effect between avoidance and anxiety on voice call usage. This finding may suggest that individuals who are anxiously or avoidantly attached may prefer texting as a more comfortable way to maintain connection with their partners. Additionally, research exists indicating that individuals can enhance family bonds (Wei & Lo, 2006), foster friendships (Ishii, 2006), and build mutual support (Campbell & Kelley, 2006) using mobile phone communication. These lines of research suggest that any communication, even when mediated by technology, can be more useful than no communication in facilitating interpersonal connection.

While the majority of the literature describes the positive outcomes of text messaging in relationships, there is some limited research identifying negative outcomes associated with text messaging in relationships. Pettigrew (2009) cautioned text messaging users and researchers to think about ways in which individuals can cope with relational tension stemming from text messaging's interference with immediate environments. Additionally, he encouraged text messaging users to develop strategies for coping with "near perpetual accessibility" and mentioned that stress induced by the "reply norm" must be evaluated (Pettigrew, 2009, p. 706). In a study of 247 college students, Hall and Baym (2012) found increased mobile phone use among members of close friendships fostered increased expectations of relationship maintenance, which

subsequently increased dependence on the relationship and in some cases, overdependence on the relationships, increasing relationship dissatisfaction (Luo, 2014).

Jin and Peña (2010) studied the relationship between mobile phone use and relationship outcomes in a college sample (n = 197). Jin and Peña specifically examined the constructs of relational uncertainty, love and commitment, and attachment styles in relation to mobile phone use. Their results indicated that greater use of mobile voice calls with a romantic partner was related to lower relational uncertainty and more love and commitment (Jin & Peña, 2010). In light of the current study and cues-filtered-out approaches, this finding is understandable; voice calling allows for the transmission of more cues than does texting, therefore enhancing communication. Jin and Peña also found a lack of a relationship between texting frequency and time spent on texting with relationship outcomes on attachment dimensions. It seems as though text messaging frequency did not help or hinder aspects of intimate partner relationships in Jin and Peña's sample. In the current study, I examined how frequency of text messaging is specifically related to relationship satisfaction, an outcome variable Jin and Peña did not include in their study.

Now that American teenagers are growing up with an unprecedented level of accessibility to mobile communication, it is important to examine the potential relationship between mobile communication and romantic relationship satisfaction. Writings in popular culture and conversations among older generations describe members of generation text as not being adequately prepared for the job market, not being socially connected, having difficulty responding with immediacy, or not being engaged with the environment. When adopting this line of thinking, one may wonder what negative

impacts text messaging may have within romantic relationships. Through conducting this study, I aimed to test the viability of these more negative lay notions of the widespread use of text messaging as a means of frequent communication within the context of intimate relationships. My intention was to identify the degree of relationship between text messaging frequency, self-identified preference for texting or voice calling, and self-perceived romantic relationship satisfaction.

Hypotheses

Cues-filtered-out approaches suggest that the quality of interpersonal communication is oftentimes diminished when the communication is mediated by technology. Deprivation of social cues, contextual cues, and feedback are said to increase levels of cognitive effort and communication ambiguity, while decreasing levels of physiological arousal, which may have an impact on overall romantic relationship satisfaction. Because text messaging lacks the ability to convey important social cues, contextual cues, and diminishes opportunity for immediate feedback, I expected to find that participants who were high frequency text messaging users would have lower levels of romantic relationship satisfaction.

In addition to evaluating text messaging frequency, it was important to examine how a participant's preferred mode of communication related to romantic relationship satisfaction. Whether individuals' preferred methods of communication aligned with their actual methods of communication is important. If individuals indicate they prefer text messaging over voice phone communication and also indicate they utilize text messaging to a high degree, I would expect those individuals to feel satisfied in their relationships. As a corollary, if individuals indicate they prefer voice phone calling over

text messaging but report text messaging more frequently than voice calling, I would expect those individuals to be less satisfied with their relationships.

While voice phone communication is mediated by technology, and therefore suffers from many of the pitfalls suggested by the cues-filtered-out approaches, it allows for more verbal feedback, emotional expression through one's voice, social cues (tone of voice, sighing, laughing), social presence (a higher degree immediacy and intimacy than texting), and other auditory stimulation. On the continuum of communication methods, voice phone communication falls closer to face-to-face communication than does text messaging communication. For that reason, I proposed that there would be a positive correlation between preference for phone communication over text messaging communication and romantic relationship satisfaction.

H01: There will be no relationship between individuals' text messaging frequency subscale scores and their romantic relationship satisfaction scale scores.

H1: There will be a negative relationship between individuals' text messaging frequency scores and their romantic relationship satisfaction scale scores.

H02: There will be no relationship between individuals' romantic relationship satisfaction scale scores and individuals' reported preference for text messaging communication over verbal phone communication.

H2: There will be a negative relationship between individuals' romantic relationship satisfaction scale scores and individuals' reported preference for text messaging communication over verbal phone communication.

CHAPTER 3

Method

Participants

Participants were 150 individuals living across the United States. Two different methods were used to collect data in two phases occurring four years apart. In the fall of 2013, a paper and pencil survey was used to collect data from 48 participants. In February of 2016, an online survey was used to collect data from 102 additional participants. The average age of the participants was 28.77 (*SD* = 5.61); participant ages ranged between 18-45 years old. There were 107 women and 43 men in the sample. Participants were asked to complete the instruments only if they were currently involved in a romantic relationship and between the ages of 18 and 45. Participants were asked to describe their marital status as single; married; in a committed relationship, but not married; divorced; or widowed. The most common relationship type was "in a committed relationship, but not married" (47.3%, *n* = 73), followed by "married" (44.7%, *n* = 67), and "single" (6.7%, *n* = 10). Participants who reported they were "single" were not removed from the dataset if they responded to all items pertaining to being in a current relationship.

The average relationship duration in the sample was 5.71 years (*SD* = 5.26). Participants were also asked if they were living with their partner; most participants indicated that they were living with their partner (74.7%, *n* = 112) and some indicated they were not (24%, *n* = 36). The average time spent living with a partner was 3.98 years (*SD* = 4.98). The sample was made up of Caucasians (76%, *n* = 114), African Americans (1.3%, *n* = 2), American Indians (1.3%, *n* = 2), Mexican Americans (6.0%, *n* = 9),

Asian/Pacific Islanders (12.0%, *n* = 18), and participants indicating their ethnicity as Other (3.3%, *n* = 5). Participants classified themselves as undergraduate students (16%, *n* = 24), graduate students (14.7%, *n* = 22), or not students (69.3%, *n* = 104). The average number of text messages sent per day by the participants was 41.20 (*SD* = 43.42). The mean score on the Relationship Assessment Scale (Hendrick, 1988) for participants was 4.16 (*SD* = .72). A power analysis using G*Power software yielded power of .93 with parameters set at one-tailed test, 0.3 effect size, $\alpha = 0.01$, and a sample size of 150.

Procedure

Institutional Review Board (IRB) approval was sought and secured prior to data collection (Appendix D). Participants were recruited and surveyed in two ways. Around 100 participants were recruited by word of mouth at bars, libraries, restaurants, a university campus, a cafeteria, and in study lounges in Arizona, Colorado, Michigan, and Wisconsin. Individuals who agreed to participate during this first phase of data collection were asked to voluntarily complete a paper and pencil survey packet of instruments, which took 5-10 minutes to complete. Participant names were not collected and each packet was labeled with a letter and number code to ensure anonymity. In total, fifty-one participants agreed to fill out paper and pencil the survey, but three participants left items blank and their data were omitted prior to data analysis. Missing data was addressed by the use of listwise deletion; if participants left any items blank on the survey, their entire record was removed. This yielded an *n* of 48 for the first phase of data collection.

After participants were recruited in person by word of mouth, it was determined that the sample size of 48 was inadequate. The paper and pencil survey was transformed into an online survey to more effectively reach a larger sample pool in a short amount of time. An additional 137 participants were recruited via Facebook, word of mouth, and a snowball technique. These participants were asked to voluntarily complete an online survey via Surveymonkey.com, which took 5-10 minutes to complete. Participant names or other identifying information was not collected. Thirty-five participants left items blank or were over the age of 45 and their data were omitted prior to data analysis. Listwise deletion was again used to address missing data. In total, 102 online participants' data were included in the final analysis.

Measures

Participants completed a three-part self-report paper and pencil survey or an online survey. Part 1 consisted of the demographic questions about themselves (age, sex, ethnicity), their marital statuses, and their time spent being in a relationship or living with their partners (Appendix A). Part 2 consisted of a measure, using a Likert-type response format, assessing frequency of text messaging and preference for text messaging over voice phone communication (Appendix B). Part 3 of the survey was a measure of romantic relationship satisfaction, the Relationship Assessment Scale (RAS, Hendrick, Dicke, & Hendrick, 1988) (Appendix C). Details of parts 2 and 3 are described more thoroughly in the following subsections.

Cell Phone Usage Questionnaire (CPUQ). The CPUQ is a measure using a 5-point Likert-type scale with potential item responses ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). I designed the CPUQ to assess participants' self-reported frequency

of text messaging and participants' preference for text messaging or voice phone communication in their relationships, with others, and overall. On the paper and pencil version of the survey, this section contained two "fill in the blank" items, one "circle your answer" item, and 14 statement evaluations that utilize a Likert-type scale response format. On the online version of the survey, this section contained two "type in your answer" items, one "yes" or "no" selection item, and 14 statement evaluation items using a Likert-type scale response format. A sample Likert-type response format completion item on the frequency subscale is "Most often, I communicate with my partner through text messaging." A sample Likert-type response format completion item on the preference subscale is, "I prefer speaking with my partner through text messaging rather than talking with him/her on the phone." Statement completion choices for these items are 1 (*strongly disagree*), 2 (*disagree*), 3 (*neutral*), 4 (*agree*), and 5 (*strongly agree*). Items were constructed so answers of "Strongly Agree" indicated a higher frequency of text messaging than voice phone communication on frequency related items and a preference for text messaging over voice phone communication on preference related items.

Participants received four different scores on the CPUQ; (1) a mean frequency partner subscale score (composed of the mean score of items 2, 3, and 4) (α = .89), (2) a mean frequency other subscale score (composed of the mean score of items 8, 11, 13) (α = .82), (3) a mean preference partner subscale score (composed of the mean score of items 5, 6, and 7) (α = .80), and (4) a mean preference other subscale score (composed of the mean score of items 9, 10, and 12) (α = .82). On all subscales, possible scores ranged

from 1-5. Mean preference and frequency overall subscale scores were not found to be meaningful and were excluded from the study.

Relationship Assessment Scale (RAS; Hendrick, Dicke, & Hendrick, 1988). The RAS was also administered to all participants. The RAS was chosen for use in the current study primarily because other respected and statistically substantiated romantic relationship satisfaction assessments, such as the Locke-Wallace Marital Adjustment Test (Locke and Wallace, 1959), the Spouse Observation Checklist (Patterson, 1976), the Marital Satisfaction Inventory (Snyder, 1979), and the Dyadic Adjustment Scale (Spanier, 1976) are lengthy and/or are strictly focused on marital relationships (Hendrick, 1988). The method used for the current study did not necessitate that individuals be married. Furthermore, I did not examine romantic relationship satisfaction in depth in this study. Rather the relationship between romantic relationship satisfaction and method of communication was explored, therefore allowing for a briefer measure to be administered.

Hendrick et al. (1998) defined romantic relationship satisfaction as, "the partners' *subjective* valuing of their meaning context [within a personal relationship]" and specified that assessing for romantic relationship satisfaction tells a researcher, "How does this person feel about her or his relationship at this moment in time?" (p. 137). The RAS is a unidimensional measure consisting of seven items on a 5-point Likert-type response format scale. The RAS assesses general romantic relationship satisfaction, how well one's partner meets one's needs, how well the relationship compares to others, regrets about the relationship, how well one's expectations have been met, love for partner, and problems in the relationship (Hendrick et al., 1998). Sample items on the

RAS are, “In general, how satisfied are you with your relationship?” with response options ranging from 1 (*unsatisfied*) to 5 (*extremely satisfied*); and “How often do you wish you hadn’t gotten in this relationship?” with response options ranging from 1 (*never*) to 5 (*very often*). Scores on the RAS are calculated by averaging all item responses, including two that are reverse-scored. High scores are positively related to higher levels of relationship satisfaction, with scores above 4 signifying non-distressed individuals. Scores closer to 3.5 for men and between 3.0 and 3.5 for women indicate greater relationship distress and possibly substantial relationship dissatisfaction (Renshaw et al., 2011). The mean RAS score for the sample was 4.16 (SD = .72), indicating that the sample consisted of mostly non-distressed relationship partners.

In a 1986 study involving a sample of 57 dating couples recruited at a large southwestern university, it was determined that the RAS has a reported mean inter-item correlation of .49 and an alpha coefficient of .86. Within this sample, Cronbach’s Alpha for the 7 items on the RAS is .81. Scores on the RAS correlate predictably with measures of other relationship phenomena such as personal constructs (Hall et al., 1991) and love and sex attitudes (Hendrick & Hendrick, 1995). Scores on the measure also have a reported correlation of .80 with the Dyadic Adjustment Scale (Spanier, 1976), another widely used relationship assessment scale. In a discriminant analysis of a small sample of couples, both the RAS and DAS were effective in discriminating couples still dating from couples who had separated (Hendrick, 1988), representing evidence for construct validity.

Data Analysis

To address Hypothesis 1, that there will be a negative relationship between individuals' text messaging frequency subscale scores and their romantic relationship satisfaction scale scores, two Spearman's Correlation analyses will be conducted between frequency subscale scores (mean frequency partner subscale score and mean frequency other subscale score) and scores on the RAS. Spearman's Correlation will used because of the inclusion of non-continuous variables. To address Hypothesis 2, that there will be a relationship between an individual's romantic relationship satisfaction scale score and an individual's reported preference for text messaging communication over verbal phone communication, two additional Spearman's Correlation analyses will be conducted between preference subscale scores (mean preference partner subscale scores and mean preference other subscale scores) and scores on the RAS. Again, Spearman's Correlation will be used due to the inclusion of non-continuous variables.

CHAPTER 4

Results

For the frequency subscales, a mean score of over 2.5 indicated participants more frequently used text messaging communication than voice phone communication with their partners or others. On the mean frequency partner subscale, the average score for participants was 1.90 (*SD* = .70), indicating that the sample as a whole more frequently communicated with their partners through voice phone communication than through texting. On the mean frequency other subscale, the average score for participants was 2.39 (*SD* = .50), indicating that the sample as a whole more frequently communicated with others through voice phone communication than through texting. These findings are summarized in the table below.

Table 1

Descriptive Statistics for Frequency Subscales

	Subscale	
	Partner	Other
Mean	1.90	2.39
Standard Deviation	.70	.50

For the mean preference subscales, a mean score of over 2.5 indicated that a participant preferred text-messaging communication rather than voice phone communication. On the mean preference partner subscale, the average score for participants was 1.36 (SD = .57), indicating that the sample preferred voice phone communication with their partners rather than text messaging communication. On the

mean preference other subscale, the average score for participants was 2.00 (SD = .57), indicating that the sample preferred to communicate with others through voice phone communication rather than through text messaging. These findings are summarized in the table below.

Table 2

Descriptive Statistics for Preference Subscales

	Subscale	
	Partner	Other
Mean	1.36	2.00
Standard Deviation	.57	.57

One item on the CPUQ (item 16 on the paper survey version and item 25 on the online survey version) asked the participants to disclose how many text messages they thought a "heavy text messaging user" would send, on average, per day. The average number of text messages that participants reported they thought a heavy text-messaging user would send per day was 195.22 (SD = 203.15). Only four participants in the sample indicated that they send more than 195 text messages per day. Therefore, question 16 was not useful in operationalizing the term "heavy text-messaging user" and was subsequently not utilized to classify participants into heavy text messaging users or not heavy text messaging users.

Hypothesis 1

To address Hypothesis 1, that there would be a negative relationship between individuals' text messaging frequency subscale scores and their romantic relationship

satisfaction scale scores, Spearman's Correlation analysis were conducted between frequency subscale scores and scores on the RAS. The first Spearman's Correlation for Hypothesis 1 was constructed to examine the relationship between the mean frequency partner subscale scores and RAS scores. There was no correlation found to suggest that a higher frequency of text messaging over verbal phone communication with one's partner is significantly correlated with romantic relationship satisfaction scores (r_s = -.142, p > .01). The second Spearman's Correlation for Hypothesis 1 was constructed to examine the relationship between the mean frequency other subscale scores and RAS scores. No significant correlation was found between romantic relationship satisfaction scores and mean frequency other subscale scores (r_s = .124, p > .01). I was unable to reject the null hypothesis stating there is no correlation between individuals' frequency scale scores and their romantic relationship satisfaction scale scores. These results are summarized in Table 3.

Hypothesis 2

To address Hypothesis 2, that there would be a relationship between an individual's romantic relationship satisfaction scale score and an individual's reported preference for text messaging communication over verbal phone communication, two additional Spearman's Correlation analyses were conducted. The first Spearman's Correlation for Hypothesis 2 was constructed to examine the relationship between the mean preference partner subscale scores and RAS scores. There was no correlation found to suggest that a higher preference for text messaging over verbal phone communication with one's partner is significantly negatively correlated with romantic relationship satisfaction scores (r_s = -.117, p > .01). The second Spearman's Correlation

for Hypothesis 2 was constructed to examine the relationship between the mean preference other subscale scores and RAS scores. No correlation was found between romantic relationship satisfaction scores and mean preference other subscale scores (r_s = .135, p > .01). I was unable to reject the null hypothesis stating there is no correlation between a preference for verbal phone talk over text messaging communication and scores on the romantic relationship satisfaction scale. The results of this Spearman Correlation analysis are summarized in Table 3.

Descriptive Analysis

In addition to evaluating the hypotheses, a descriptive analysis of demographic characteristics and outcome measures was also conducted. A significant correlation was found between mean RAS scores and individuals' living with partner status, $r(148) = -.248$, $p < .01$. While the correlation appears to be negative, it is actually positive given that an answer of "yes" was coded as 1 and "no" was coded as 2. Therefore, individuals who indicated they were living with their partners demonstrated higher RAS scores. Additionally, a significant positive correlation was found between sex and mean frequency other subscale scores, $r(148) = .262$, $p < .01$. Males were coded as 1 and females were coded as 2, indicating females reported more frequently texting others than did men. This finding should be interpreted cautiously, however, because the sample consisted of more women than men. Correlations between all of the CPUQ subscales provide some evidence for internal consistency within the measure using the current sample. Additional Spearman's Correlations between mean RAS scores, mean frequency subscale scores, mean preference subscale scores, and demographic characteristics are summarized in Table 3.

Table 3

Spearman's Correlations between Demographic Variables, Mean RAS Scores, Mean Frequency Subscale Scores, and Mean Preference Subscale Scores

	Demographic Characteristic							Mean Outcome Measure Scores				
	Age	Student Status	Living with Partner	Partner Living Duration	Relationship Duration	Own Cell Phone	Sex	Frequency Partner	Frequency Other	Preference Partner	Preference Other	RAS
Age	1											
Student Status	.153	1										
Living with Partner	-.405*	-.152	1									
Partner Living Duration	.564*	.076	-.707*	1								
Relationship Duration	.505*	.075	-.468*	.844*	1							
Own Cell Phone	-.037	-.048	.199*	.042	-.080	1						
Sex	-.150	-.134	-.037	.061	.043	.074	1					
Frequency Partner	-.026	-.137	-.016	-.025	-.063	.089	.041	1				
Frequency Other	-.124	-.102	.057	-.029	.026	.014	.262*	.305*	1			
Preference Partner	.029	-.144	-.153	.172	.095	.024	.068	.617*	.320*	1		
Preference Other	.011	-.089	-.097	.083	.070	-.003	.153	.219*	.708*	.327*	1	
RAS	.063	.073	-.248*	.173	.195	.021	.041	-.142	.124	-.117	.135	1

*Correlation is significant at the .01 level (2-tailed)

Note. Student status was coded as 1 (student) or 2 (not a student). Living with partner was coded as 1 (yes) or 2 (no). Own cell phone was coded as 1 (yes) or 2 (no). Sex was coded as 1 (male) or 2 (female).

CHAPTER 5

Discussion

In this study, I sought to obtain a more comprehensive understanding of the relationship between text messaging and romantic relationship satisfaction. Specifically, I evaluated the relationships between texting frequency and romantic relationship satisfaction and preference for voice phone communication over text messaging and romantic relationship satisfaction. Results demonstrated no significant relationships between the variables evaluated. The lack of significant findings can be explained in a number of ways.

With regard to the lack of a link between texting frequency and romantic relationship satisfaction, my null finding was consistent with Hall and Baym's (2012) and Luo's (2014) findings. In her study examining the relationships between text messaging volume/share, attachment styles, and relationship satisfaction, Luo found small, non-significant correlations between relationship satisfaction and texting frequency (correlations ranged from -.02 to -.04). However, Luo did find a significant negative relationship between texting "share" and relationship satisfaction. Luo defined text share as the percentage of interactions that occur via texting as opposed to other methods of communicating. Luo stated, "…the higher the percentage of interactions that occur via texting, the less happy [participants] are in their relationships (p. 151). Furthermore, Luo explained that a high frequency of text messaging is not a predictor of relationship satisfaction, but texting share was a predictor of relationship satisfaction. This means that texting only negatively impacts the relationship when it is given more weight as a mode of communication than other forms of communication.

In her study, Luo (2014) found that the higher the percentage of interactions occurring via texting, the less happy subjects were in their relationships. Luo also stated, "Very likely [text messaging] reduces feelings of love, connectedness, and closeness while increases [sic.] miscommunication and misunderstanding" (p. 151). Luo's line of thinking aligns with the foundational principles of this study, particularly her point relative to frequent texting contributing to increased opportunities for miscommunication and misunderstanding. Luo's findings may have been replicated in this study if similar measurements were used and if the construct of "texting share" was used rather than preference for voice phone communication over text messaging communication.

In their study evaluating mobile communication maintenance expectations, friendship satisfaction, and dependence, Hall and Baym (2012) obtained results illuminating that texting can have both positive and negative effects on a relationship. Because texting can have both positive and negative effects on a relationship, it makes sense that neither a significant positive or negative relationship between text messaging frequency and relationship satisfaction were obtained in this study.

Furthermore, Luo (2014) posited that non-significant results in this area may be explained by a "ceiling effect" (p. 151) in texting frequency or volume because of how commonplace texting is today. Luo also emphasized that the volume or frequency of texting does not adequately translate into relationship outcomes. More specifically, Luo stated, "…given how ubiquitous texting is nowadays, attachment variables fail to differentiate who text and who do not" (p. 151). In the context of the results of the studies cited above, the non-significant results in the current sample are more understandable and provide further evidence that texting frequency does not have a

direct, significant impact on romantic relationship satisfaction. Rather, the relationship between texting frequency and relationship satisfaction may be moderated by a number of other variables.

An alternate explanation for the results in this study may be that the communication medium most frequently used by members of a couple may be a condition of the relationship; if both members of the couple enjoy text messaging, they will be matched in terms of their preferred modes of communication, which would foster relationship satisfaction. Because individuals rather than couples were used in the current sample, I was unable to examine the effect of matched preferences for voice phone or texting communication. Additionally, with respect to long distance relationships, text messaging may aid in the maintenance of frequent communication within the relationship when face-face-communication is not possible, again facilitating heightened levels of relationship satisfaction.

A final consideration about the lack of significant results concerns the directional nature of the current study; the hypotheses were constructed to evaluate the potential drawbacks of texting with little regard for the potential benefits. A more bidirectional approach, modeled after Pettigrew's (2009) study may have yielded more informative findings. In a sample of college educated individuals, Pettigrew (2009) found that texting afforded individuals autonomy while facilitating connection, fostered privacy talking on the phone did not, allowed individuals to connect with their partners in a wider range of environments, and generally increased individuals' enjoyment of relationships. Pettigrew also found, however, that texting can cause relational tension by interfering with the user's immediate environment, imposing norms about timely replying, and by fostering

"near perpetual accessibility" (2009, p. 206). In Pettigrew's study, he examined both the costs and benefits of texting. In the current study, I only examined the potentially limiting effects of texting, therefore narrowing the scope of the evaluation, the potential findings, and the ways in which findings could be generalized.

Limitations

The current research was limited by the use of a measure with no evidence for validity or reliability, sample homogeneity, the use of individuals rather than couples as participants, not accounting for geographical distance in relationships, the concept of relationship satisfaction's subjectivity, and by utilizing a narrow definition of text messaging frequency. Importantly, the measure of texting usage, the CPUQ, was not empirically validated before its use in this study, which impacted successful utilization and response interpretation. Furthermore, the CPUQ is a subjective measure, which leaves room for participants to conceptualize and respond to items differently. Luo (2014) has since created a measure (with available scores of validity and reliability) of texting usage that more thoroughly allows researchers to examine the "share of texting" against other means of communication, which may prove to be a more meaningful construct than texting frequency.

Other limitations of this study relate to the sample. First, I chose to use the construct of relationship satisfaction, which exists between two people, but only gathered responses from one member of the relationship. Future studies in this area should survey both members of a couple and utilize a paired sample research design. In Luo's (2014) study, she controlled for the geographic distance between romantic partners. She found that distance was strongly associated with texting volume and texting share, which

provided evidence that distance also needs to be taken into account when examining text messaging in relationships. Furthermore, the sample in the current study was homogenous, limiting the ability to draw strong conclusions. Importantly, the procedure used did not yield a representative sample of individuals. Most of the participants had access to computers, were recruited due to their proximities to the researcher, and tended to have access to Facebook. These factors may have led to much of the discrepancy between findings in this study and findings in other studies while also limiting the conclusions that could be made.

A major limitation of this study was the use of the construct of relationship satisfaction, which is subjective in nature. Meeks et al. (1998) and Erbert & Duck (1997) raised a crucial point regarding research on the construct of relationship satisfaction. They emphasized that using 'satisfaction' as an outcome variable, when it is really a subjective evaluation of one's feelings, is to overvalue satisfaction while devaluing the fluidity of relationships. Furthermore, they indicated that some tension in relationships may contribute to relational richness after a couple overcomes short term relational dissatisfaction. Erbert, Duck, and Meeks et al.'s insight sheds light on the complexity of relational experiences, which should be taken into account when conducting research on relationship satisfaction. Because of the complex, subjective nature of relationship satisfaction and the relative newness of texting as a common form of communication, future researchers could examine text messaging's relation to relationship satisfaction through using qualitative research methods. Through thematic coding of narratives, more informed and appropriate constructs associated with texting and relationship satisfaction could emerge.

Finally, in this study I examined texting frequency, broadly. Results may have been different had the length and content of text messages been assessed (Luo, 2014) and had the function of the text messaging behavior been evaluated. For example, some couples may use text messaging to coordinate with each other and other couples may use text messaging to convey love and emotional presence. Future studies should examine text messages more comprehensively, including examining text length, content, and function of the text messages.

Conclusion

In this study, I sought to explore the relationship between text messaging frequency, preference for voice phone communication over texting, and relationship satisfaction through a framework of understanding text messaging communication as potentially limiting. The results did not suggest the presence of significant relationships between relationship satisfaction and text messaging frequency or preference for voice phone communication over text messaging communication. Future research should take into account the complex natures of relationship satisfaction as a construct and text messaging usage in relationships while using measurements that are more statistically supported.

REFERENCES

Alperin, R. M. (2006). Impediments to intimacy. *Clinical Social Work Journal, 34,* 559-572. doi: 10.1007/s10615-005-0032-2

Argyle, M., & Dean, J. (1965). Eye-contact, distance and affiliation. *Sociometry*, 289-304. doi: 10.2307/2786027

Campbell, S. W., & Kelley, M. J. (2006). Mobile phone use in AA networks: An exploratory study. *Journal of Applied Communication Research, 34(4),* 191-208. doi: 10.1080/00909880600574104

Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science, 32*, 554-571. Retrieved from: http://www.jstor.org/stable/2631846

Erbert, L. A., & Duck, S. W. (1997). Rethinking satisfaction in personal relationships from a dialectical perspective. In Sternberg, R. & Hojjat, M. (Eds.), *Satisfaction in Close Relationships,* 190-216. New York, NY: Guilford Press.

Funk, J. L., & Rogge, R. D. (2007). Testing the ruler with item response theory: increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. *Journal of Family Psychology, 21*, 572-583. doi: 10.1037/0893-3200.21.4.572

Hall, A.G., Hendrick, S.S. & Hendrick, C. (1991). Personal construct systems and love styles. *International Journal of Personal Construct Psychology, 4, 137-155.* doi: 10.1080/08936039108404769

Hatfield, E. (1982). Passionate love, companionate love, and intimacy. In Fischer, M. & Stricker, G. (Eds.), *Intimacy*, 267-292. New York: Plenum Press. doi: 10.1007/978-1-4684-4160-4_17

Hendrick, S.S. (1981). Self-disclosure and marital satisfaction. *Journal of Personality and Social Psychology, 40,* 93-98. doi: 10.1037/0022-3514.40.6.1150

Hendrick, S. S. (1988). A generic measure of romantic relationship satisfaction. *Journal of Marriage and Family*, *50*(1), 93-98. doi: 10.2307/352430

Hendrick, S.S. & Hendrick, C. (1995). Gender differences and similarities in sex and love. *Personal Relationships, 2,* 55-65. doi: 10.1111/j.1475-6811.1995.tb00077.x

Hendrick, S. S., Dicke, A., & Hendrick, C. (1998). The relationship assessment scale. *Journal of Social and Personal Relationships, 15*, 137-142. doi: 10.1177/0265407598151009

Hu, Y., Fowler Wood, J., Smith, V., & Westbrook, N. (2004). Friendships through im: Examining the relationship between instant messaging and intimacy. *Journal of Computer-Mediated Communication, 10*, 00-00. doi: 10.1111/j.1083-6101.2004.tb00231.x

Ishii, K. (2006). Implications of mobility: The uses of personal communication media in everyday life. *Journal of Communication, 56*(2), 346-365. doi: 10.1111/j.1460-2466.2006.00023.x

Jin, B., & Peña, J. F. (2010). Mobile communication in romantic relationships: Mobile phone use, relational uncertainty, love, commitment, and attachment styles. *Communication Reports, 23(1)*, 39–51. http://dx.doi.org/10.1080/08934211003598742.

Kasesniemi, E. L., & Rautiainen, P. (2002). Mobile culture of children and teenagers in Finland. In Katz, J. & Aakhus, M. (Eds.), *Perpetual Contact*, 170-192. Cambridge, United Kingdom: University Press.

Katz, J. E., & Aakhus, M. (2002). *Perpetual contact: Mobile communication, private talk, public performance*. Cambridge, United Kingdom: University Press.

Kiesler, S., Siegel, J. A., & McGuire, T. W. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist, 39*, 1123-1134. doi: 10.1037/0003-066X.39.10.1123

Kock, N. (2005). Media richness or media naturalness? The evolution of our biological communication apparatus and its influence on our behavior toward e-communication tools. *IEEE Transactions on Professional Communication, 48*(2), 117-130. doi: 10.1109/TPC.2005.849649

Lenhart, A., Purcell, K., Smith, A., & Zickur, K. (2010). Social media and young adults. Pew Internet & American Life Project. Retrieved from: http://eric.ed.gov/?id=ED525056

Lewandowski, J., Rosenberg, B. D., Jordan Parks, M., & Siegel, J. T. (2011). The effect of informal social support: Face-to-face versus computer-mediated communication. *Computers in Human Behavior, 27*, 1806-1814. doi: 10.1016/j.chb.2011.03.008

Luo , S. (2014). Effects of texting on satisfaction in romantic relationships: The role of attachment. *Computers in Human Behavior*, *33*, 145-152. doi: 10.1016/j.chb.2014.01.014

Luo, S., & Tuney, S. (2015). Can texting be used to improve romantic relationships?—The effects of sending positive text messages on romantic relationship satisfaction. *Computers in Human Behavior*, *49*, 670-678. doi: 10.1016/j.chb.2014.11.035

Meeks, B. S., Hendrick, S. S., & Hendrick, C. (1998). Communication, love and relationship satisfaction. *Journal of Social and Personal Relationships, 15,* 755-773. doi: 10.1177/0265407598156003

Morey, J. N., Gentzler, A. L., Creasy, B., Oberhauser, A. M., & Westerman, D. (2013). Young adults' use of communication technology within their romantic relationships and associations with attachment style. *Computers in Human Behavior*, *29*, 1771–1778. doi: 10.1016/j.chb.2013.02.019

Oksman, V., & Rautiainen, P. (2003). "Perhaps it is a body part": How the mobile phone became an organic part of the everyday lives of Finnish children and teenagers. In Katz, J. E. (Ed), *Machines that Become Us: The Social Context of Communication Technology*, 293-308.

Oksman, V., & Turtiainen, J. (2004). Mobile communication as a social stage: Meanings of mobile communication in everyday life among teenagers in Finland. *New Media & Society*, *6*, 319-339. doi: 10.1177/1461444804042518

Renshaw, K. D., McKnight, P., Caska, C. M., & Blais, R. K. (2011). The utility of the relationship assessment scale in multiple types of relationships. *Journal of Social and Personal Relationships, 28,* 435-447. doi: 10.1177/0265407510377850

Rettie, R. (2003). Connectedness, awareness and social presence. Retrieved from: http://eprints.kingston.ac.uk/2106/1/Rettie.pdf

Short, J., Williams, E., Christie, B. (1976). *The Social Psychology of Telecommunications.* London: John Wiley & Sons.

Siegel, J., Dubrovsky, V., Kiesler, S., & McGuire, T. W. (1986). Group processes in computer-mediated communication. *Organizational Behavior and Human Decision Processes*, *37*(2), 157-187. Doi: 10.1016/0749-5978(86)90050-6

Smith, A. (2011). Why Americans use social media: Pew Internet & American Life Project.

Spanier, G. B., & Thompson, L. (1982). A confirmatory analysis of the Dyadic Adjustment Scale. *Journal of Marriage and the Family*, 731-738. doi: 10.2307/351593

Sproull, L., & Kiesler, S. (1986). Reducing social context cues: Electronic main in organizational communication. *Management Science*, 32, 1492-1512. doi: 10.1287/mnsc.32.11.1492

Suh, K. S. (1999). Impact of communication medium on task performance and satisfaction: an examination of media-richness theory. *Information and Management*, *35*, 295-312. doi: 10.1016/S0378-7206(98)00097-4

Wei, R., & Lo, V. H. (2006). Staying connected while on the move Cell phone use and social connectedness. *New Media & Society*, *8*(1), 53-72. doi: 10.1177/1461444806059870

Wiener, M., & Mehrabian, A. (1968). *Language within Language: Immediacy, a Channel in Verbal Communication*. New York, NY: Appleton-Century-Crofts.

APPENDIX A

DEMOGRAPHIC DATA SHEET

Today's Date: _____

1. Age: _____

2. Sex:

    1 Male

    2 Female

3. Ethnicity:

    1 Caucasian

    2 African American

    3 American Indian

    4 Hispanic

    5 Asian/Pacific Islander

    6 Other _____

4. What is your affiliation with ASU?

    1 Undergraduate Student

    2 Graduate Student

    3 Not a Student

5. Marital Status:

    1 Single

    2 Married

    3 In a committed relationship, but not married

    4 Divorced

    5 Widowed

6. If you are in a committed relationship or married are you living with your partner?

    1 Yes

    2 No

7. If you are in a committed relationship or married and living with your partner, how long have you been living with your partner?

_____

8. If you are in a committed relationship or are married, how long have you been in your current relationship?

APPENDIX B

CELL PHONE USAGE QUESTIONNAIRE

Please circle the answer that best fits each statement.

1. Do you have a cell phone?

    1 Yes

    2 No

2. I communicate with my partner through text messaging more than I communicate with my partner by talking on the phone.

    1 Strongly disagree

    2 Disagree

    3 Neutral

    4 Agree

    5 Strongly Agree

3. Most often, texting is my main mode of communication with my partner.

    1 Strongly disagree

    2 Disagree

    3 Neutral

    4 Agree

    5 Strongly Agree

4. My partner and I send and receive more text messages than phone calls between each other.

    1 Strongly disagree

    2 Disagree

    3 Neutral

    4 Agree

    5 Strongly Agree

5. Text messaging my partner is better than talking on the phone with my partner.

    1 Strongly disagree

    2 Disagree

    3 Neutral

    4 Agree

    5 Strongly Agree

6. I prefer speaking with my partner through text messaging rather than talking with him/her on the phone.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

7. I find that I get more accomplished when I text my partner rather than talking with him/her on the phone.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

8. Most often, texting is my main mode of communication with people other than my partner.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

9. I find that I get more accomplished with people other than my partner using text messaging rather than talking on the phone.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

10. I prefer speaking with others through text messaging rather than talking with them on the phone.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

11. I communicate with others through text messaging more often than by talking on the phone.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

12. Texting with others is better than talking on the phone with others.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

13. I send and receive more text messages than phone calls with others.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

14. I see my phone as more of a texting device than a calling device.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

15. I send and receive more text messages than phone calls.

1 Strongly disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

Please answer the following questions by writing a number on the line provided.

16. On average, how many individual text messages do you think you send per day?

_____

17. How many individual text messages do you think a "heavy" text-messaging user would send per day? _____

APPENDIX C

RELATIONSHIP ASSESSMENT SCALE

Please mark on the answer sheet the letter for each item which best answers that item for you.

1. How well does your partner meet your needs?

A	B	C	D	E
Poorly		Average		Extremely well

2. In general, how satisfied are you with your relationship?

A	B	C	D	E
Unsatisfied		Average		Extremely satisfied

3. How good is your relationship compared to most?

A	B	C	D	E
Poor		Average		Excellent

4. How often do you wish you hadn't gotten in this relationship?

A	B	C	D	E
Never		Average		Very often

5. To what extent has your relationship met your original expectations:

A	B	C	D	E
Hardly at all		Average		Completely

6. How much do you love your partner?

A	B	C	D	E
Not much		Average		Very much

7. How many problems are there in your relationship?

A	B	C	D	E
Very few		Average		Very many

APPENDIX D

IRB APPROVAL

ASU Knowledge Enterprise Development

Office of Research Integrity and Assurance

To:	Sharon Kurpius EDB
From:	Mark Roosa, Chair Soc Beh IRB
Date:	07/22/2013
Committee Action:	**Exemption Granted**
IRB Action Date:	07/22/2013
IRB Protocol #:	1307009383
Study Title:	The Silent Treatment: The Relationship between texting and Relationship Satisfaction

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(2) .

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.