

Going the Distance: A Quantitative Study of College Students, Communication Media and Strategic Maintenance Behaviors Used within Geographically Close Romantic Relationships and Long Distance Romantic Relationships

Dr. Rhonda Sprague

Dr. Timothy Halkowski

Dr. Tamás Bodor

Ashley A. Martens

May 2012

A Thesis submitted in partial fulfillment of the

requirements for the degree

Master of Arts in Communication

Division of Communication

University of Wisconsin-Stevens Point

Stevens Point, Wisconsin

### Acknowledgements

I would like to acknowledge and extend my appreciation to the following individuals, who have made the completion of this thesis possible.

To my colleagues...

My committee chair, Dr. Rhonda Sprague, for your many hours of time, continuous support, and constructive feedback.

My committee member, Dr. Timothy Halkowski, for your knowledge and insight within the field of interpersonal communication.

My committee member, Dr. Tamás Bodor, for your substantial suggestions and keen eye for quantitative analysis.

To my family...

My grandmother, Audrey (“Grams”). You are one of the strongest women I know. Thank you for all of the phone calls, the cards, and the wonderful words of wisdom you always provide the Martens family members, whether we want to hear them or not.

My father, Steve (“Daddy-O”). Ever since I was a little girl, you have always told me I can be anything I want to be if I just put my mind to it. Without your continuous love, support, and life lesson sessions I would not be where I am today. I would not be the “Ernest Hemingway” writer we so fondly speak of.

My mother, Donna. Although we can be complete opposites at times, you always remind me that there is a fun part to life. Everyday cannot be devoted entirely to work. Balance is an essential element to life and without your constant reminder of that I would not have made it through this experience so successfully.

My love and best friend, Kevin. When I was weak, you were strong. When I was crazy, you were calm. When I was uncertain, you were confident. Thank you for your continuous care, support, and commitment. Your love has given me the strength to manage our own long distance relationship.

To all others...

My family, friends, and fellow colleagues. Thank you for your time, energy, and thoughts during these past two years.

### Abstract

This thesis involved the study of communication media used within long distance and geographically close romantic relationships. A literature review provides a thorough review of the variables including relationship type (long distance and geographically close), communication media (phone, text message, e-mail, social networks, instant messaging, and video chat), satisfaction with the media, overall relational satisfaction, and strategic maintenance behaviors (advice, assurances, conflict management, openness, positivity, sharing tasks, and social networks) used within relationships via communication media. Although this study is comprised of multiple research questions, the main goals of this study were to discover which communication medium individuals in LDRs and GCRs primarily used to stay in contact with their significant other and how these communication choices impacted the relationship.

The findings of the current study support previous research in the field of interpersonal communication with regard to communication technology and strategic maintenance, but challenge some areas as well. First, individuals in long distance relationships and geographically close relationships had slightly different preferences when selecting a primary communication media. Second, individuals in long distance relationships thought their primary communication medium (text messaging) offered more satisfaction than individuals in geographically close relationships. Last, individuals in long distance relationships and geographically close relationships used different forms of communication media to strategically maintain their relationships with their significant others.

## Table of Contents

<b>Chapter One: Literature Review</b>	<b>6</b>
Introduction	6
Review of Literature	11
<i>Media Richness Theory</i>	11
<i>Synchronous Communication</i>	11
<i>Asynchronous Communication</i>	12
<i>Long Distance and Geographically Close Relationships</i>	14
<i>Communication Media</i>	17
<i>Cellular Phones</i>	17
<i>Text Messaging</i>	19
<i>Computer Mediated Communication</i>	20
<i>E-mail</i>	21
<i>Social Networks</i>	21
<i>Instant Messaging</i>	22
<i>Video Chat</i>	23
<i>Relational Satisfaction</i>	25
<i>Communication Media Satisfaction</i>	26
<i>Strategic Maintenance Behaviors</i>	27
<b>Chapter Two: Method</b>	<b>29</b>
Data Collection and Participants	29
Procedure	30
Instruments	30
<i>Demographics</i>	30
<i>Media Selection</i>	30
<i>Media Satisfaction</i>	31
<i>Strategic Maintenance Behaviors</i>	31
<i>Relational Satisfaction</i>	32
Preliminary Analysis	32
<b>Chapter Three: Results</b>	<b>33</b>
<b>Chapter Four: Discussion</b>	<b>40</b>
<b>Chapter Five: Limitations and Future Research</b>	<b>49</b>
Limitations	49
Future Research	50
Conclusion	51
<b>References</b>	<b>53</b>

## Table of Figures

Figure 1: Model of Media Richness	14
Table 1: Communication Media Used Most in LDRs and GCRs	34
Table 2: Seven Strategic Maintenance Behaviors Used in LDRs and GCRs	37
Table 3: Seven Strategic Maintenance Behaviors Used through the Phone & Text	38

## Appendices

A: Consent Form	63
B: Demographic Information	64
C: Measure of Media Selection	65
D: Measure of Media Satisfaction and Impact	66
E: Measure of Strategic Maintenance Behaviors	67
F: Measure of Relational Satisfaction	72
G: Thank You/Extra Credit	73

## Chapter One: Literature Review

Individuals have been going the distance in order to communicate with one another since the beginning of time. Long distance communication is not a recent phenomenon, but has been conducted since humans have been able to devise a way to communicate.

Tribes in Africa and Asia first began to communicate across long distances using smoke signals and the sound of tribal drumbeats. After the Phoenician alphabet was invented, early mail systems came into existence among many civilizations. One instance of these systems was found in the culture of ancient Greece where homing pigeons were utilized to send messages to individuals across vast expanses (Ensmeger, 2006).

As tools and technology evolved, so did long distance communication. Roadways soon began to form across continents further progressing long distance communication. For example, the Romans developed modern postal systems permitting the delivery of written messages via foot or horseback. Later, letters could be delivered by the railroad system. Until this point in history, written messages had to physically travel from one location to another. Communication was inextricably linked to transportation and even the most efficient options for transportation were slow and expensive. Only by eradicating the dependence on physical movement could communication truly surpass the limits of time and space.

One solution to the problem was telegraphy, quite literally meaning ‘writing at a distance’ (Ensmeger, 2006). In the late 18<sup>th</sup> century, the telegraph system was put into practice. When using this system, messages could travel one hundred miles in just under three minutes. Although this was not instantaneous, it was a remarkable improvement over past communication options.

Around 1844, the United States successfully constructed the first long distance electric telegraph line between Baltimore, Maryland and Washington, D.C. Less than thirty years later, in

1880, “more than 32 million long distance messages were being sent using 12,000 telegraph offices connected by 291,000 miles of wire” (Ensmenger, 2006, p 5). Soon afterwards, Alexander Bell and Elisha Grey developed the telephone by transforming speech into an electrical signal. A few years later, electrical signals were altered into electromagnetic radiation, ultimately laying the foundation for wireless telegraphy, radio, and television.

With the close of the 20<sup>th</sup> century and the dawning of the 21<sup>st</sup> century, individuals witnessed a digital revolution in which almost all information, whether text, sound, or image, could be altered electronically, allowing for a broader range of long distance communication options among individuals. Throughout human history, improved means of communication have enabled the existence of long distance relationships among family members, friends, and colleagues making long distance relationships not only possible, but also prevalent (Ensmenger, 2006).

Long distance relationships (LDRs) are visible in the entertainment industry, are featured in telephone and airline advertisements, and are predominant on college campuses. In short, many facets of American life are often experienced through personal relationships and the relational satisfaction individuals receive from other individuals. For example, college students maintain relationships with their high school friends and sweethearts when they travel away to school. Couples sometimes live in separate locations for their careers, while deployed military personnel must try and maintain relationships with loved ones back home (Sahlstein, 2010).

LDRs are an atypical relational form in that they challenge Western relational ideals that hold frequent face-to-face communication and shared activities to be critical for relational quality and endurance. Compared to geographically close relationships (GCRs), LDR partners have decidedly less face-to-face interaction with one another (Stafford & Merolla, 2007). According

to researchers, LDR partners should not feel as close to one another as compared to GCR individuals. Ultimately, entering into a LDR should be unappealing to individuals.

Even though as many as three million Americans reside in different locations than their significant other (Bergen, Kirby, & McBride, 2007), research in the area of interpersonal communication focusing on LDRs remains rare (Stafford, 2005). Researchers have reported that LDRs tend to have more stress within their relationships due to the amount of distance separating partners. It has also been found that partners are prone to higher levels of uncertainty. Relationships are difficult to maintain under the best conditions, which makes LDRs more susceptible to various challenges. Although LDRs have become more common, little is known about how LDR partners maintain their relationships or whether maintenance activities used in LDRs differ from GCRs (Rohlfing, 1995). If differences do exist between the two, new communication technologies are likely contributors.

New communication technologies, such as the cell phone and the Internet, have made long distance communication between individuals easier than in the past. Larsen, Urry, and Axhausen (2006) attribute the rise in LDRs to the continual advancement of travel and various communication technologies, which facilitate geographical dispersion and highly social mobile networks. With a greater number of communication channels available to individuals today, the impact of geographic distance is growing smaller, allowing individuals to form and maintain relationships with individuals too far away for frequent face-to-face interaction (Blieszner & Adams, 1992; Wood, 1995).

Although several studies have been conducted to examine the use of newer forms of technology in parent/child relationships, little research has focused specifically on couple relationships, arguably one of the core components of most families (Coyne, Stockdale, Busby,

Iverson, & Grant, 2011). Accordingly, this study will examine which communication media individuals utilize to maintain relationships with their romantic partners when separated by distance.

Not all communication media are the same. Since LDR partners cannot see each other face-to-face most days, partners may be forced to rely upon communication media they may not particularly like in order to communicate with one another. Feelings and opinions about the media being used may involuntarily influence feelings about the romantic relationship. Researchers have also failed to address this association. However, one may presume individuals in LDRs must constantly rely on various forms of communication media in order to convey messages to their significant other on a daily basis. Satisfaction with an individual's chosen form of media could possibly affect their overall relational satisfaction within their LDR or GCR. One of the primary aims within this study will be to assess not only communication media used within LDRs, but individuals' satisfaction with that medium and their overall relational satisfaction in their LDR or GCR.

It is not only communication media that influence an individuals' satisfaction, but also the ways in which partners maintain their romantic relationships. When romantic partners are separated by distance and face-to-face interactions are not possible, strategic maintenance behaviors must be incorporated into relationships in different ways, most likely through the use of communication media. Previous research has failed to address which media are utilized the most in order to maintain romantic relationships along with how much individuals like or dislike using their primary means of communication within their relationships. The secondary aim of this study will be to address the most commonly used maintenance strategies within LDRs and GCRs and the degree to which various communication media are preferred.

This study will be important to the field of communication and communication scholars, particularly those studying interpersonal communication and LDRs. There are other individuals who may benefit from this study as well. First, psychologists, particularly those specializing in romantic relationships, may find this information beneficial when working with patients who are separated from their loved ones. Second, designers of new communication technologies may find this research helpful in creating new communication devices for the masses. Lastly, men and women in LDRs, especially college students, may find this study useful since many find themselves separated from loved ones when away at school. By learning which communication media are utilized the most within LDRs and GCRs, which ones contain the highest level of satisfaction, and which maintenance strategies are used most frequently among couples through communication media, individuals may be able to learn which media are most effective for achieving high relational satisfaction within their own romantic relationships.

An examination of the literature is important to provide a foundation for why communication media, satisfaction with communication media, overall relational satisfaction, and strategic maintenance behaviors should be studied within LDRs. This literature review will first focus on media richness theory (Daft & Lengel, 1984, 1986) and its foundation in order to better comprehend the relationship between human behaviors involving electronic communication media in regards to personal relationships with other individuals (Allen & Griffeth, 1997; Carlson & Zmud, 1999; Kahai & Cooper, 2003; Kock, 2004). Next, LDRs and GCRs will be compared. Then, communication media used within LDRs and GCRs will be discussed. Communication media will include cellular phones, text messaging, and computer-mediated communication consisting of e-mail, online social networks, instant messaging (IM),

and video chat. Relational satisfaction within LDRs and GCRs will then be explained followed by communication media satisfaction. Finally, strategic maintenance behaviors will be explored.

## **Review of Literature**

### **Media Richness Theory**

Developed by Daft and Lengel (1984, 1986), media richness theory is used to explain a communication medium by its capability to replicate the information sent over it. Green, et al. give an excellent summarization of the components that encompass the theory.

Communication media fall along a continuum of richness. The richness of a medium comprises four aspects: (1) the availability of instant feedback, which allows questions to be asked and answered, (2) the use of multiple cues, such as physical presence, vocal inflection, body gestures, words, numbers, and graphic symbols, (3) the use of natural language, which can be used to convey an understanding of a broad set of concepts and ideas, and (4) the personal focus of the medium. The more a medium displays these attributes, the richer the medium is considered to be (2011, p. 83).

With only a few to none of these characteristics present, a medium is considered 'lean.' For example, face-to-face communication is considered the richest medium because it embodies all four elements, while written documents are considered to be the leanest form of communication since they lack all four elements (Sheer, 2011). Newer communication technologies used within many LDRs can be evaluated using the same criteria. For instance, a text message is identical in richness to other written documents, while a video chat session is equivalent in many ways to a face-to-face conversation.

***Synchronous communication.*** When choosing which medium to use for communication, an important dimension to consider is synchronicity. Synchronous media call for both partners to

communicate with one another at the same time; an example would be a face-to-face interaction or phone call. Synchronous communication permit the giving and receiving of instantaneous feedback, which can be an advantage in interpersonal relationships. However, synchronous communication requires the coordination of participants' schedules, which can be disadvantageous at times (Utz, 2007).

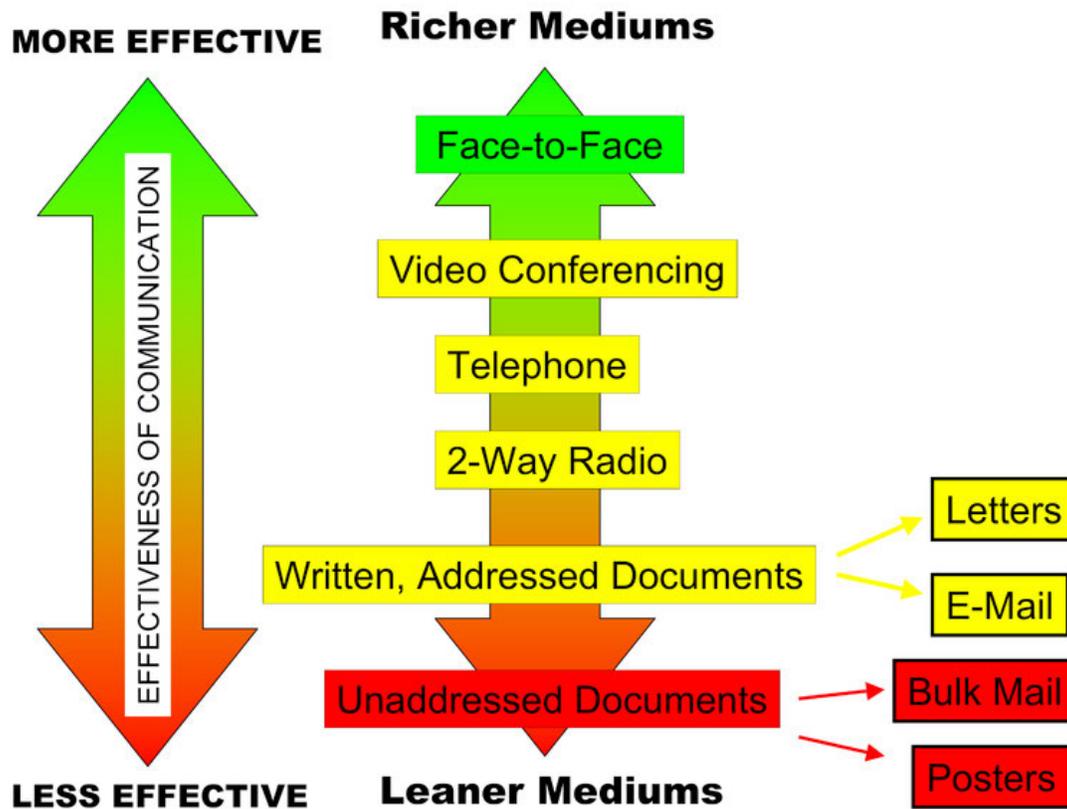
Kock (2004) pointed out humans are habituated to 'natural' characteristics inherent within face-to-face communication and interactions. This implies face-to-face communication should be the most advantageous channel for relationship building. Green, et al. (2005) suggested face-to-face interactions are advantageous in social interactions over mediated social interactions. Thus, communication media that offer rich features resembling face-to-face communication could ultimately offer individuals more conducive circumstances for interpersonal communication and relational development, and these media devices should be preferred by LDR partners.

***Asynchronous communication.*** Asynchronous communication is independent from time and space. It gives individuals the opportunity to carefully compose messages sent to others. Text messages or e-mails can be read immediately, but also minutes, hours, days, weeks, and even months later. To individuals in LDRs, this aspect may be important because if individuals within an LDR cannot see one another or engage in communication frequently, these past messages become a positive reminder to them of their relationships with their loved ones. However, asynchronous media lack the opportunity of giving instantaneous feedback, which may be a disadvantage for many individuals (Utz, 2007). Boase and Wellman (2006) suggest e-mail should be favored over phone calls within LDRs, particularly if the distance is sizeable and partner's schedules differ greatly. Several studies found that e-mail predominates in LDRs

(Boase & Wellman, 2006; Hampton & Wellman, 2001; Quan-Hasse, Wellman, Witte, Hampton, 2002;). However, Whitty and Gavin (2001) note that swapping online communication with phone calls is perceived as a more personal and esteemed step within relational development. Therefore, the choice to use phone calls within interpersonal relationships should be more appropriate for intimate dialogue than e-mail. A recent study on American teenagers and their use of media discovered that phone calls were considered the main mode of communication teens used throughout the day (Lenhart, Madden, Hitlin, 2005). Due to the vast variety of available communication options, it is important to fully understand the effect of synchronous and asynchronous media encapsulated within Daft and Lengel's media richness theory.

Figure 1 will assist in explaining the difference between the two even further. The forms of communication appearing towards the top of the chart are richer forms of media, (e.g. face-to-face communication). The forms of media appearing towards the middle of the chart are less rich. These include video conferencing, telephone, two-way radio, and written/addressed documents. Text messaging would fall into this category as well. The media appearing towards the bottom of the chart (e.g. unaddressed documents) are the lesser rich forms of communication media. In order to successfully convey a message, individuals are encouraged to choose rich forms of media (Tntdj, 2011).

Figure 1: Model of Media Richness



With the vast array of communication devices available to individuals, along with the increase of LDRs, it is crucial LDR partners choose a communication media that is considered rich in order to better communicate with their partner. Although many relationships are usually considered to be GCRs, LDRs are quite ubiquitous.

### Long Distance and Geographically Close Relationships

Research has done a satisfactory job at documenting statistics about LDRs. For example, as many as half of college students are currently in LDRs, approximately 70% have been in the past, and up to 75% will be at some point in time (Aylor, 2003; Dellmann-Jenkins, Bernard-Paolucci, & Rushing, 1994; Guldner, 1996;). Furthermore, recent estimates indicate that “as

many as three million Americans reside in a location different than their significant other” (Bergen, Kirby, & McBride, 2007, p. 170). Despite the number of individuals who find themselves to be involved in a LDR, LDRs have been found to be the most predominant on college and university campuses, with 90% of individuals having at least one close, long distance friend (Rohfling, 1995).

A comparison of LDRs and GCRs underscores important differences between these two entities. Many partners in an assortment of relationships spend substantial time apart from one another for various reasons such as education, career, or traveling commitments (Merolla, 2010). Partners in LDRs live in geographically separate locations and periodically reunite (e.g., for a weekend), before separating again (Pistole, Roberts, & Chapman, 2010). The biggest distinction between LDRs and GCRs is the regularity and effortlessness with which partners can see one another and interact face-to-face. Research indicates partners in LDRs have less overall communication than GCR partners (Stafford, 2010). In particular, as noted by Stafford and Merolla (2007), LDR partners have far less face-to-face interactions than GCR partners. A critical feature within LDRs, then, is their restricted opportunity for communication, specifically face-to-face communication (Stafford, 2010).

By definition, an increase in distance decreases the chance for face-to-face interaction between individuals (Johnson, 2001). Some researchers say this means LDRs cannot work due to the fact LDR partners cannot get as close as GCR partners. For example, Berscheid, Snyder, and Omoto (1989) claim, “People who do not see each other frequently - for whatever reason, even involuntary ‘good’ reasons - simply cannot be as close, other things being equal, as people who *do* spend a lot of time together” (p. 794). This implies individuals who experience more face-to-face interactions will be closer to their relational partners than individuals who do not experience

frequent face-to-face interaction. That lack of closeness will lead to an inevitable dissolution of the relationship. Other researchers have narrowed down assumptions about why LDRs erode.

Stafford (2005) observed LDRs violate two beliefs about interpersonal relationships. The first belief is that regular face-to-face encounters are essential for close relationships. The second is that geographic proximity is necessary for personal relationships. Stafford (2005) continues by pointing out LDR individuals must devote more time and energy into their relationship, cannot as easily engage in talk on a regular face-to-face basis, and cannot as promptly provide emotional support to one another (Fehr, 1999). None of these is particularly desirable. Therefore, LDRs are set up to almost guarantee complications or even complete failure.

Researchers state that without frequent face-to-face interactions, relationships cannot be intimate. However, not all relationships are geographically close; some relationships are long distance. Therefore, maintenance strategies other than face-to-face interactions must be incorporated into daily communication between partners. One-way LDR partners remain in communication with one another throughout the course of the day is by introducing communication media into their relationships.

Much of the research on relationship maintenance is based on the assumption that more maintenance activities lead to better and stronger relationships. At face value, this belief about maintenance immediately disadvantages the LDR (Johnson, 2001). However, relationship maintenance is not exclusively a face-to-face activity. Stafford reinforces the utility of new communication technologies for relational maintenance, stating, "Such views and assumptions about the primacy of face-to-face communication within interpersonal relationships are irrespective to the increasingly diverse means of communication available to individuals involved in a LDR" (p. 397). Some LDR partners compensate for physical distance by improving

and increasing their communication between one another (Mietzner, 2005), and with more possibilities for communication, the limiting effects of geographic distance on the formation and maintenance of relationships with people who live too far away for frequent face-to-face contact are significantly decreasing (Blieszner & Adams, 1992). Today, greater opportunities for communication present individuals with greater options for maintenance, even in LDRs. The following section explores the possibilities for more communication with LDR partners through the use of communication media.

### **Communication Media**

Social relationships are enacted through communication and interpersonal communication is a central factor in romantic relationships (Doring & Dietmar, 2003). Research has demonstrated that maintaining relationships with other individuals requires significant investments of time and energy, mostly through direct, face-to-face interactions (Allan, 1989; Canary & Stafford, 1994). Recent advances in communication technologies have made long distance communication easier and more affordable for a large percentage of the population (Hoffman, Novak, & Venkatesh, 2004)

In the more technically advanced regions of the world, mediated communication is taking place through tools such as cell phone conversations, voicemails, text messaging, or e-mails (Doring & Dietmar, 2003). The cost and convenience of these devices are independent of the distance between separated individuals (Shklovski, Kraut, & Cummings, 2008). With the availability of various communication media, LDR partners have the potential to create interpersonal relationships regardless of the amount of distance separating them.

***Cellular phones.*** In recent years, the use of cell phones has become one of the most common and easiest ways to connect with other individuals (Green, 2003; Ling, 2004).

According to the International Telecommunication Union (ITU), in 2010, the amount of mobile subscribers passed five billion individuals. In 2010, a National Consumer Study reported that 70% of the world's population owns a mobile phone. Both actual cell phone conversations and text messaging are extremely popular, especially between the adolescent and emerging adult populations (Kamibeppu & Sugiura, 2005). Prior research has argued face-to-face interaction is the gold standard of relational maintenance; today, cell phones arguably occupy that spot.

Phone communication appears to be more important for maintaining personal relationships because phone calls are considered a rich form of media, similar (but not equal to) face-to-face communication. Prior research on relational communication suggests when relationships mature, much of the relational maintenance shifts from face-to-face interactions to other means of communication such as phone calls, especially when individuals are separated by geographic distance (Nussbaum, 1994; Smoreda & Thomas, 2001). According to media richness theory, when individuals cannot experience frequent face-to-face communication, the richest form of media, they attempt to utilize other forms of rich media, such as the telephone.

Shklovski and Mainwaring (2005) discovered that when geographically close friends moved away from one another, ultimately becoming long distance friends, face-to-face communication became limited due in part to the geographic distance separating the two individuals. Interactions changed from face-to-face communication to other communication options such as the phone, e-mail, or instant messaging. Communication using the phone became far less frequent, but conversations became much lengthier, changing in content as well as character. The purpose of the phone calls shifted from coordinating face-to-face plans and interactions to sharing details of daily life and everyday events, while also providing support for one another.

Although a phone conversation requires a simultaneous time commitment from both parties involved, Shklovski, et al, (2008) report “the phone allows both individuals to rely on audible non-verbal cues to interpret the context of the conversation. The phone is better suited for intimate conversation consisting of self-disclosure and relationship growth” (p. 814).

Ultimately, if individuals cannot have a face-to-face conversation a phone call is a rich form of media in that it provides individuals with audible nonverbal signs to better understand the current conversation. However, the phone not only offers LDR partners the opportunity to speak with one another, but it also provides partners the ability to convey succinct pieces of information in the form of text messages.

***Text messaging.*** According to Bargh and McKenna (2004), every day around the world, over one billion text messages are sent through mobile phones. That means 41,666,666,667 text messages are sent every hour, 694,444,445 text messages are sent every minute, and 11,574,074 text messages are sent every second.

Coyne, Stockdale, Busby, Iverson, & Grant (2011), addressed which communication media individuals utilized within their personal relationships, the frequency of use, and the positive/negative communication that occurs between individuals through the use of communication media. They found that text messaging was the most preferred medium within their sample. When the researchers asked participants why they liked text messaging over other forms of communication, they explained that non-face-to-face communication gave them the option of conversing with several individuals simultaneously, leaving large time gaps within their conversations, hiding the truth, and addressing or explaining misunderstandings (Madell & Muncer, 2007). Although individuals claimed this form of communication did cause confusion

among partners, they felt text messaging gave them more time to ponder and articulate exactly what it was they were trying to convey within their message (Coyne, et al., 2011).

The potential for a misunderstanding on the part of a receiver may be particularly high for a text message as opposed to face-to-face interactions or even a phone conversation. Tone of voice and facial cues are considered critical features within interpersonal communication because they assist in enhancing the clarity of messages between individuals (Zuckerman, Amidon, Bishop, & Pomerantz, 1982). It is possible that communication technologies, such as text messaging, are prone to more frequent misunderstandings and miscommunications because text messages do not include crucial nonverbal cues (Coyne, et al., 2011). Therefore, some users of text messaging could find themselves frustrated or dissatisfied with the medium on more than one occasion.

Pettigrew (2009) found that the majority of couples studied claimed text messaging had greatly benefited their relationship and allowed them to remain in constant communication with one another throughout the course of the day. It is likely that the use of mobile phones, along with text messaging, represents a suitable way for couples to connect throughout the day, while also enhancing their frequency of communication when apart from one another (Coyne, et al., 2011). The phone has become a powerful technological medium, especially in regards to relational maintenance and relational growth of LDRs. Phones offer users multiple ways to communicate, but there are other forms of communication media that offer similar flexibility.

### ***Computer Mediated Communication***

The majority of American households have access to the Internet, creating the possibility of communication through e-mails, instant messaging, chat rooms, and other electronic sites

(Bachen, 2007). More public libraries, schools, and businesses are providing individuals with access to the Internet, thereby further shrinking the digital divide.

**E-mail.** E-mail, like text messaging, is both a form of communication and an artifact. Just like letters, cards, and postcards e-mail can endure in digital form for a great length of time. E-mails can ultimately remind the sender of the receiver, and vice versa, long after the e-mail was initially sent, received, and responded to. E-mail can serve as an unobtrusive reminder of the sender and receiver's relationship with one another. This type of reminder may keep a relationship central and important to the participants without continuous and repeated acts of communication (Shklovski, et al, 2008).

The investment of an individual's energy and time spent in writing e-mail along with the time delay in responses between individuals may limit its capacity to sustain relational maintenance and growth (Orlikowski & Yates, 1994). As Boden and Molotch (1994) indicate, within interactions, especially intimate interactions, 'timing is everything.' Evaluating genuineness of e-mail can be complicated due to the lack of nonverbal cues and the time delay between responses. Like letters, e-mails can be utilized for cherished and heartfelt conversation, but the worth of e-mail may not be present in its immediacy, but rather in its length and persistence (Shklowski, et al, 2008). In other words, e-mail may provide individuals with the ability to communicate with one another, but due to its lack of media richness, users may be dissatisfied with the time delay between responses. The same holds true for communication conveyed through social networking sites.

**Social networks.** Social networking sites such as 'Facebook' and 'Twitter' are quickly growing in popularity and reach (Sheldon, 2008). Recently, researchers have focused their work on social networks and their effects on close personal friendships and relationships. For instance,

Walker, Krehbeil, and Koyner (2009) found the majority of communication done through My Space was friendly greetings and expressions of affection and support for other individuals. Other research has focused on romantic relationships, particularly on the formation of such relationships, via online technology (e.g., Scott, Mottarella, & Lavooy, 2006; Sprecher, 2009). Manago, Graham, Greenfield, & Salimkhan (2008) have examined how social networks might enhance relationship displays online. Other studies have found that the use of Facebook is associated with increased jealousy within relationships (Muisse, Christofies, & Desmarais, 2009). Just like e-mail, social networks allow for digital remnants of past communication, which embodies memories associated with close relationships, ultimately keeping the promise for future communication alive.

***Instant messaging.*** Instant messaging (IM) has become enormously popular in recent years. The four largest IM providers, combined, boast 270 million users worldwide (Graham, 2003). These 270 million users send an astounding 582 billion messages every day (Radicati Group, 2003). Forrester Research estimates 45% of IM users in North America use IM at least once a week and among those 90%, IM was reportedly used on a daily basis (Mello, 2002).

Today, young people dominate IM. Thirteen million American teenagers use IM, with 20% reporting IM as their main mode for communication with friends and peers (Pew Research, 2001). Additionally, nine of the top fifteen web sites among teenagers provide instant messaging services (Nielsen Net Ratings, 2002). Estimates suggest 30% of IM users are between the ages of 18 and 29, since this age group tends to be considered early adopters of new technologies (Radicati Group, 2003; Whelan, 2001). Therefore, individuals of college-age constitute a large portion of IM users.

College students use IM for a myriad of reasons: keeping in contact with family and friends who live too far away for frequent face-to-face interactions, sharing information with one another, and because it makes communication fast, easy, and convenient (Ramirez, Dimmick, & Lin, 2004). Other reasons include expressing affection, being aware of recent social trends, entertainment purposes, relaxation, inclusion, sociability, and escape (Leung, 2001). In a study conducted by Flanagin (2005), college aged IM users were satisfied using IM because it allowed them to communicate with multiple people simultaneously. However, IM users who engaged in four or more conversations at once reported decreased satisfaction with the medium.

*Video chat.* Through the use of cellular phones and computers, video chat allows users to make video calls to other individuals. Most video calls are relatively inexpensive or free due in part to software applications such as Skype, which is presently the most popular among video chat options. As of September 2011, Skype had 663 million registered users (“Skype,” n.d.). Skype provides multiple communication options such as video calls, voice calls, and instant messaging. Skype allows users to not only speak with their loved ones, but it also provides users the option of seeing their loved ones on their computer screens as well. It is evident that video chat is increasing in regards to both accessibility and popularity.

Today, communication media come in a variety of forms including cellular phones, which provide both voice calls and text messages and computer media communication such as e-mail, social networks, instant messaging, and video chat. With any communication media, satisfactions and dissatisfactions arise with the use of each device.

Cellular phones are now considered the gold standard of communication given their rich characteristics such as the availability of instant feedback, vocal inflections, and the use of natural language. However, a simultaneous time commitment is required of both users. On the

other hand, text messaging allows users to keep in contact with one another throughout the course of an entire day without having to worry about a simultaneous time commitment from both parties. Individuals have the option to contemplate their message to their partner, but due to the lack of verbal cues, misunderstandings and dissatisfaction can quickly surface. E-mail provides users with an unobtrusive form of communication within their relationships, but the time investment required by written communication and the time delay in between responses may limit individual satisfaction with the medium. Like e-mail, social networks encapsulate memories of relationships, but are not conducive to the standards of rich communication. Instant messaging allows individuals to communicate with multiple people simultaneously, but the more conversations individuals engage in, the lower their satisfaction becomes. Video chat applications such as Skype are almost identical to that of face-to-face communication, allowing users to speak and see other individuals. Due to the vast array of communication media available to individuals within LDRs and GCRs today, the first research question arises:

RQ1: Are there differences between communication media used by people in LDRs versus GCRs?

With numerous advancements in communication media, communication between LDR and GCR partners have changed drastically over the years. Some individuals enjoy these new options while others do not. It is therefore important to better understand individuals' overall relational satisfaction to determine whether a couples' choice of a communication medium is more likely to lead to improved communication or increased frustrations between romantic partners.

**Relational Satisfaction**

Within their study, Coyne, et al. (2011) reported individuals who were more satisfied within their relationships reported using communication media more frequently in order to express affection toward their partner. They explained their findings by stating, “It is likely that highly satisfied individuals are more likely to express affection toward their partner in multiple contexts; the media simply provides yet more ways to do so” (Coyne, et al., 2011, p. 160). The study conducted by Coyne, et al. demonstrates that individuals use communication media within their lives to communicate and express affection with their partners. Expressing affection is a common behavior displayed within romantic relationships. Scholars in other fields of study may disagree and say that expressing affection is not a common behavior, but rather an essential part of romantic relationships. However, not all individuals in romantic relationships chose to express affection towards one another. Expressing affection ultimately acts as an additional form of relationship maintenance for various individuals.

Within romantic relationships, greater expression of affection is likely to be associated with higher levels of relational satisfaction among partners. If individuals within LDRs use more media to communicate with their long distance partner, partners may actually experience greater satisfaction in their relationships than individuals in GCRs. This contradicts what researchers such as Stafford argue. Stafford and others believe LDRs cannot work due to lack of intimacy. According to this reasoning, lower levels of intimacy essentially translate into lower levels of satisfaction within relationships. However, Coyne et al. (2011) reveal within their research that intimacy can be developed using a variety of communication media. Since arguments can be made to support both a positive and negative association between media usage and relational

satisfaction, a clear prediction cannot be made. Therefore, the second research question addresses the level of relational satisfaction between individuals in LDRs and GCRs.

RQ2: Do college students in LDRs feel more or less satisfied with their relationships than their GCR counterparts?

### **Communication Media Satisfaction**

Individuals use media within their relationships for multiple reasons. Coyne, et al. (2011) reported the most common reason was to express affection for other individuals (75%), followed by discussing serious matters (25%), apologizing (12%), approaching confrontational issues (6%), and intentionally hurting their partners (3%). Within their study, the researchers discovered text messaging had the strongest influence on individuals' communication and overall relational satisfaction.

Out of all the types of communication media available to individuals today, cell phones have become the most accessible, making contact with others throughout the day both quick and easy. Through text messaging and cellular phones, romantic partners can engage in frequent small talk throughout the course of a day. Research has shown that many individuals report small talk to be more essential for a relationship than long conversations between partners. However, most communication media do not allow for constant small talk to occur.

In another study conducted by Kelly, et al. (2010), IM was found to be the preferred form of communication among college students due to its asynchronous nature. Participants noted they enjoyed the time delay between responses because it allowed them extra time to compose their messages and provided them with more time to think about what they wanted to write.

It is apparent all communication media are not created equal, which leads individuals to develop specific preferences. However, in LDRs people do not necessarily have the option of

using their preferred form of communication. Partners resort to communication options that are readily available, easy to use, convenient, and inexpensive. The communication medium an individual uses the most may not be the device they enjoy the most, which can ultimately cause the user frustration. Clearly, there is an important distinction in the devices individuals use and the devices individuals prefer to use. This leads to the third research question(s):

RQ3a: Do college students in LDRs have more or less satisfaction with their primary communication media used to maintain their relationships than college students in GCRs?

RQ3b: Are there differences in perceptions of the impact the primary means of communication has on LDRs versus GCRs?

### **Strategic Maintenance Behaviors**

Relationships require maintenance behaviors in order to sustain the bond shared between individuals. A foundational principle of romantic love is that maintenance behaviors and strategies are necessary in order to keep relationships from deteriorating or possibly ending (Stafford, 2003). Some individuals may engage in routine behaviors in order to maintain their relationships, while others may practice certain strategic maintenance behaviors. Duck (1986) was one of the first researchers to argue that relationship maintenance involves the utilization of carefully selected strategies. Dainton and Stafford later (1993) defined strategic maintenance as a plan or method for fulfilling a specific goal or result within a relationship. Relational strategies are intentional and consciously enacted by an individual in order to keep a romantic relationship in a desired state or condition (Dindia & Canary, 1993).

Stafford et al. (2000) identified seven strategic maintenance behaviors utilized within relationships: (1) advice, an individual's expression of their ideas and opinions to their partner;

(2) assurances, guarantees provided to an individual's partner about their importance as well as the importance of the relationship; (3) conflict management, utilizing cooperation and apologizing when conflicts arise between partners; (4) openness, explicit and direct discussion of an individual's feelings about the relationship; (5) positivity, keeping communication and interactions upbeat and enjoyable; (6) sharing tasks, fulfilling mutual responsibilities; and (7) social networks, using common friends and other affiliations for the purpose of maintaining the relationship.

In a study conducted by Canary and Stafford (1992), it was found that the more satisfaction individuals experienced within their relationship, the more maintenance strategies were incorporated within their daily life, the most popular being openness, social networks, and sharing tasks. It has also been found that devices such as cards and phone calls are utilized the most in order to maintain relationships with loved ones (Canary, Stafford, Hause, & Wallace, 1993).

However, with the advancement of communication media, individuals have a greater assortment of communication options in which to incorporate strategic maintenance behaviors into their relationships. Individuals may use different communication media for different strategic maintenance methods. This leads to the fourth research question(s):

RQ4a: Which maintenance strategies do individuals use their primary medium to perform in LDRs versus GCRs?

RQ4b: How much do individuals in LDRs and GCRs like using their primary communication medium to perform the seven maintenance strategies within their relationships?

The next section will discuss a method to answer the aforementioned research questions.

## **Chapter Two: Method**

### **Data Collection and Participants**

Upon obtaining IRB approval, the researcher recruited participants. The researcher attempted to gather more than one hundred participants in both LDRs and GCRs. Undergraduate students from a medium-sized Midwestern university were selected because these students were representative of typical college students who would participate in LDRs and GCRs. LDRs offer college students a way to experience relational continuity during a time of great change. Therefore, the likelihood that college students were involved in LDRs was high. Furthermore, the researcher had access to this type of population.

The researcher focused on male and female college students within a university setting because, according to Johnson, Staton, and Jorgensen-Earp (1995), young adults attending college are convenient to study as many make a commitment to keep in touch with their high school friends and sweethearts as many move away to school. Since college students may be limited in their face-to-face interactions with their loved ones, it can be presumed these individuals must resort to alternative forms of communication in order to continue their relationships. However, not all LDR individuals prefer to communicate in the same way. Therefore, it is highly likely individuals within LDRs utilize a variety of communication media to stay in contact with their partners. In short, college students are not merely an acceptable population from which to draw a sample; they are likely the best population to use for a study such as this one.

The researcher found the answers to the aforementioned research questions by conducting a quantitative study. The students selected were generated from a large communication course required of all university students. For the purpose of this study, LDRs

were defined according to Guldner and Swensen's (1995) terms. The terms state that participants' partners must live far enough away that seeing each other on a daily basis is nearly impossible.

**Procedure.** The researcher collected all data using an online survey. Online surveys were utilized because college students have a great competence when dealing with technology. Additionally, online surveys allowed the researcher to access a greater magnitude of participants more quickly and expedite the organization of data. Also, individuals had the option of completing the survey in the privacy of their own homes, where they maybe more willing to give honest answers. Online surveys provided participants with anonymity as well. The researcher asked respondents to answer the survey questions within two weeks so individuals could complete the questionnaire free of pressure.

**Instruments.** Participants completed a survey containing five sets of measures.

**Demographics.** First, general information was collected about participants and their relational partners including sex, age, whether they were currently involved in a romantic relationship, whether the relationship was a LDR or GCR, and the duration of the relationship. These pieces of information provided the researcher with basic types of information regarding participants and their relationships.

**Media selection.** Participants were then asked to report the percentage of time they used the following communication media in an average week in order to communicate with their romantic partner: talking on the phone, text messaging, e-mail, social networks (e.g., Facebook, Twitter, etc.), instant message (IM), video chat (e.g., Skype), blogs, letters, and other. Communication media options came from a study conducted by Coyne, et al. (2011). The percents given added up to one hundred percent. This measurement enabled the researcher to decide which communication media were used the most between LDR and GCR couples.

**Media satisfaction.** Using a single-Likert type item, participants were first asked to reflect on their most frequently used communication medium and how much they liked it. Options included “Love it,” “Like it,” “Don’t like it or dislike it (neutral),” “Dislike it” or “Hate it.” Participants were then asked what type of impact their most frequent type of communication had on their relationship. Options included, “Helps the relationship a lot,” “Helps the relationship a little,” “Doesn’t help or hurt the relationship,” “Hurts the relationship a little” or “Hurts the relationship a lot.” The Likert scale assisted the researcher in collecting participants’ opinions on their chosen communication media and how they could ultimately influence their personal relationships with their partners.

**Strategic maintenance behaviors.** Based on Stafford and Canary’s (1991) strategic maintenance scale, individuals were given a list of the seven strategic maintenance behaviors used within relationships. These items consisted of assurance, openness, conflict management, shared tasks, positivity, advice, and social networks. A brief definition and example followed each item. Using a single-Likert type scale, participants were asked to think of their primary communication medium and report how often they used the given strategic maintenance device. Options included “Not at all,” “Once in a while,” “Fairly often,” “Very often” or “All of the time.” Next participants were asked whether they liked the medium. Options included “Love it,” “Like it,” “Don’t like it or dislike it (neutral),” “Dislike it” or “Hate it.” Finally, participants were asked what medium they preferred to use in order to accomplish the given strategic maintenance behavior. No answer options were provided to participants. Participants were given a blank space to type in their responses. The instrument allowed the researcher to determine which strategic maintenance device individuals used the most within their relationships, how often they used the strategic maintenance device, if they liked the strategic maintenance device, and their

communication preference when using the specific strategic maintenance device within their relationships.

**Relational satisfaction.** Relational satisfaction was measured using an adaptation of Hendrick's (1988) relational satisfaction scale. A seven-item Likert scale (5 = Strongly Agree, 1 = Strongly Disagree) was utilized. Sample statements included "I love my partner," and "I often wish I hadn't gotten into this relationship." The original instrument included seven questions pertaining to relational satisfaction with answer options varying greatly for each question. However, for this study, the instrument was revised by altering the seven questions into seven statements with answer options remaining the same for each statement. This caused less confusion among respondents when agreeing or disagreeing with each given statement. The instrument allowed the researcher to gauge the levels of relational satisfaction of LDR and GCR individuals.

**Preliminary Analysis.** The research questions were explored using a series of *t*-tests to compare scores for respondents in LDRs and GCRs.

The next section will explore the findings from the research.

### Chapter Three: Results

Overall, 525 survey responses were collected. Out of the collected responses, 297 of the surveys were from individuals involved in a friendship, while 228 of the surveys were from individuals involved in a romantic relationship. Since this study primarily focused on romantic relationships, the 228 survey responses collected from individuals involved in a romantic relationship were utilized.

Participants consisted of 80 males and 148 females, ranging from ages 18 to 43 ( $M = 20.01$ ,  $SD = 3.38$ ). Out of the 228 responses, 94 (41%) of individuals reported being in a LDR, while 134 (58%) of individuals reported being in a GCR. The average length of participants' romantic relationships was 23.14 months or roughly two years.

The following results section highlights answers to each of the six research questions.

#### **RQ1: Are there differences between communication media used by people in GCRs versus LDRs?**

Respondents were asked to think about the communication they engage in with their partners and then report the percentage of time they utilize each of the nine specified devices in a normal week. Options included talking on the phone, text messaging, e-mail, social networks (e.g., Facebook, Twitter, etc.), instant messaging (IM), letters, video chat (e.g., Skype, etc.), blogging, and other. The sum of the numbers entered equaled 100.

Descriptive statistics illustrate which of the communication media were utilized most frequently. Across both types of relationships, text messaging was used most ( $M = 55.72\%$ ,  $SD = 26.92$ ), followed by the phone ( $M = 25.85\%$ ,  $SD = 22.28$ ), then video chat ( $M = 17.95\%$ ,  $SD = 15.29$ ) and social networks ( $M = 9.14\%$ ,  $SD = 9.33$ ). The remaining categories of e-mail, instant messaging, letters, blogs, and other were not included in the sample due to their small averages.

A breakdown by relationship type illustrates almost the same pattern of responses. In LDRs, text messaging was used most frequently, followed by the phone, then video chat, and lastly social networks. In GCRs, text messaging was used most frequently, followed by the phone, then social networks, and lastly video chat. Table 1 presents the means and standard deviations for these top four categories across the two relationship types.

An independent-samples *t*-test was conducted to discover any differences in communication media used by individuals in LDRs and GCRs. Individuals in LDRs reported using video chat more than those in GCRs ( $t(77) = .019; p < .05$ ). By contrast, individuals in GCRs reported using text messaging more than those in LDRs ( $t(196.3) = .014; p < .01$ ).

Table 1

*Communication Media Used Most in LDRs and GCRs*

Communication Media	Relationship Type	N	Mean	SD
Text Messaging	LDR	89	50.42	25.67
	GCR	127	59.44*	27.24*
Phone	LDR	86	28.69	23.83
	GCR	108	23.58	20.80
Social Networks	LDR	55	9.43	11.59
	GCR	73	8.92	7.26
Video Chat	LDR	59	20.29*	16.66*
	GCR	20	11.05	6.79

**RQ2: Do college students in LDRs feel more or less satisfied with their relationships than their GCR counterparts?**

An independent-samples *t*-test was conducted to test RQ2. There was no significant difference between the groups with regard to relational satisfaction (LDR  $M = 25.07(2.16)$ ; GCR  $M = 25.34(2.31)$ ), ( $t(172) = -.80, ns$ ).

**RQ3a: Do college students in LDRs have more or less satisfaction with their primary communication medium used to maintain their relationships than college students in GCRs?**

Regardless of the respondents' choice of medium, all individuals reported the degree to which they liked using their primary communication medium. Response options included "Love it," "Like it," "Don't like it or dislike it (neutral)," "Don't like it" or "Hate it."

An independent-samples *t*-test was conducted to answer RQ3a. There were no significant differences between individuals in LDRs and GCRs with regard to how much respondents liked their primary means of communication (LDR  $M = 3.96(.76)$ ; GCR  $M = 3.94(.73)$ ).

**RQ3b: Are there differences in perceptions of the impact the primary means of communication has on LDRs versus GCRs?**

Again, regardless of the primary medium selected, respondents were asked to indicate the type and intensity of impact they felt their primary communication medium had on their relationship. Options included "Helps the relationship a lot" (+2), "Helps the relationship a little" (+1), "Doesn't help or hurt the relationship" (0), "Hurts the relationship a little" (-1) and "Hurts the relationship a lot" (-2).

Results showed both samples felt their primary medium, text messaging, had an overall positive impact on their relationships (LDR  $M = 1.27(.83)$ ; GCR  $M = 1.02(.89)$ ). However, an

independent-samples *t*-test showed individuals in LDRs felt text messaging had a stronger positive impact on their relationship than individuals in GCRs ( $t(202) = 2.22, p < .05$ ).

**RQ4a: Which maintenance strategies do individuals use their primary medium to perform in LDRs versus GCRs?**

Individuals reported using the phone, text messaging, e-mail, and video chat to maintain their relationships. However, the majority of respondents (184 individuals) reported using the phone or text messaging the most to strategically maintain their relationships with their partners. E-mail and video chat had strong average usage; however, only four individuals indicated that e-mail was their primary communication medium, while no individuals selected video chat as their primary communication medium. Since so few respondents used e-mail and video chat as their primary means of communication, they were not included in the remaining analyses.

Individuals were asked to think about each strategic maintenance behavior and identify how often they used their primary medium to incorporate each behavior within their relationships. They were also asked to identify how much they liked using their primary medium to engage in each maintenance strategy. Respondents used their primary medium to perform all seven strategic maintenance behaviors to a greater or lesser degree.

Initially, an independent-samples *t*-test was conducted to discover the primary maintenance strategies used by individuals in LDRs and GCRs. However, no significant differences were found between the two relational types. In order to explain these results further, the results were broken down into two groups based on primary medium choices, the phone and text messaging.

The phone was used the most to share tasks, followed by providing positive statements. Offering assurances, engaging in openness, and suggesting advice were all strategic maintenance

behaviors reported being used the third most, while managing conflict and utilizing social networks were used the least frequently.

Text messaging was used most frequently to provide positive statements, followed by sharing tasks, offering assurances, engaging in openness, suggesting advice, managing conflict, and utilizing social networks. Table 2 displays the means and standard deviations for the maintenance strategies used by individuals in LDRs and GCRs.

Table 2

*Seven Strategic Maintenance Behaviors Used in LDRs and GCRs*

Strategic Maintenance Behavior	Relationship Type	N	Mean	SD
Providing Positive Statements	LDR	16	4.13	.806
	GCR	13	3.69	1.18
Sharing Tasks	LDR	16	4.19	.981
	GCR	13	3.69	1.18
Offering Assurances	LDR	16	4.19	.655
	GCR	13	3.38	1.04
Engaging in Openness	LDR	16	4.31	.704
	GCR	13	3.23	1.30
Suggesting Advice	LDR	16	4.19	.911
	GCR	13	3.38	.768
Managing Conflict	LDR	16	3.69	1.20
	GCR	13	2.77	1.48
Utilizing Social Networks	LDR	15	2.80	1.27
	GCR	13	2.77	1.30

To test RQ4a, two independent-samples *t*-tests were conducted to compare respondents in LDRs and GCRs. Among respondents who used the phone as their primary medium, individuals in LDRs were significantly more likely than their GCR counterparts to use that medium to offer assurances ( $t(19) = 2.41, p < .05$ ), engage in openness ( $t(27) = 2.86, p < .01$ ), and to suggest advice ( $t(27) = 2.58, p < .05$ ). Among respondents who used text messaging as their primary medium, individuals in LDRs were significantly more likely than their GCR counterparts to use that medium to engage in openness ( $t(151) = 2.38, p < .05$ ), provide positive statements ( $t(148) = 2.12, p < .05$ ), and to suggest advice ( $t(148) = 2.90, p < .01$ ). Table 3 presents the means and standard deviations for each strategic maintenance behavior used by individuals in LDRs and GCRs through the use of the phone and text messaging,

Table 3

*Seven Strategic Maintenance Behaviors Used through the Phone and Text Messaging*

Strategic Maintenance Behavior	Phone	Text Messaging
Providing Positive Statements	$M = 3.93$ $SD = .99$	$M = 4.43^*$ $SD = .70^*$
Sharing Tasks	$M = 3.97$ $SD = 1.08$	$M = 3.97$ $SD = .95$
Offering Assurances	$M = 3.83^*$ $SD = .92^*$	$M = 3.86$ $SD = .92$
Engaging in Openness	$M = 3.83^*$ $SD = 1.13^*$	$M = 3.79^*$ $SD = .94^*$
Suggesting Advice	$M = 3.83$ $SD = .92$	$M = 3.77^*$ $SD = .97^*$
Managing Conflict	$M = 3.28$ $SD = 1.38$	$M = 3.12$ $SD = 1.00$
Utilizing Social Networks	$M = 2.79$ $SD = 1.25$	$M = 3.01$ $SD = 1.16$

**RQ4b: How much do individuals in GCRs and LDRs like using their primary communication medium to perform the seven maintenance strategies within their relationships?**

Respondents were asked to indicate the type and intensity of feeling they felt towards their primary communication medium. Options included “Love it” (+2), “Like it” (+1), “Don’t like or dislike, neutral” (0), “Don’t like it” (-1) or “Hates it” (-2). An independent-samples *t*-test showed there was a significant difference between phone users in LDRs and phone users in GCRs. Individuals in LDRs reported liking the phone in order to engage in openness as compared to their GCR counterparts ( $t(26) = 2.57, p < .05$ ). An independent-samples *t*-test also revealed a significant difference between text users in LDRs and text users in GCRs. Individuals in GCRs reported liking text messaging in order to connect with their social networks as compared to their LDR counterparts ( $t(139) = -2.46, p < .05$ ).

Respondents were then prompted to indicate which communication media they would prefer to use in order to perform the seven maintenance strategies within their relationships. Individuals were not given answer options, but instead were asked to type out their response.

Regardless of relationship type, individuals who primarily used the phone to incorporate maintenance strategies into their relationships reported they would prefer to use face-to-face communication or video chat programs such as Skype. Again, regardless of relationship type, individuals who primarily utilized text messaging to strategically maintain their relationships reported they would prefer to use face-to-face communication, the phone, or video chat programs such as Skype.

The next section will further elaborate upon the findings of these research questions.

### **Chapter Four: Discussion**

The findings of the current study support previous research in the field of interpersonal communication. Areas such as communication media selections and strategic maintenance behaviors used within relationships support past research. However, some of the findings contradict previous research. For example, overall relational satisfaction was found to be one of the main inconsistencies with prior research. The following discussion section will examine the results of these variables along with the other research questions proposed in the literature review.

The first research question asked whether there were differences in communication media used by individuals in LDRs versus individuals in GCRs. Research suggests individuals in GCRs will primarily utilize face-to-face communication due to the physical closeness of the relationship, while individuals in LDRs will tend to utilize an array of communication devices to compensate for the physical distance separating them from their romantic partners (Mietzner, 2005; Stafford & Merolla, 2007). In this study, respondents were not given the answer option of face-to-face communication, ultimately forcing LDR and GCR individuals to choose the communication media utilized within their relationships. Although media richness theory (Daft & Lengel 1984, 1986) states that face-to-face communication is the richest form of communication and that face-to-face communication is best suited for successful interactions between individuals, this restriction was important to the current study. Research suggests face-to-face communication is used the most frequently by individuals in GCRs and is used far less by individuals in LDRs. By eliminating face-to-face communication altogether, individuals in GCRs were forced into the same circumstances as individuals in LDRs, having no daily face-to-face communication. Also, both relational types were forced to think about their choice of communication media, which was one of the main focuses of this study.

The analyses to the first research question found two significant differences within the sample. First, individuals in GCRs reported using text messaging more than their LDR counterparts. Previous research suggests individuals in LDRs will devote more of their time to intimate conversations through communication media such as the phone or video chat, both rich forms of media (Shklovski, et al, 2008). Due to this previous research, it was not surprising that individuals in GCRs utilized text messaging more in their relationships than individuals in LDRs. Second, individuals in LDRs reported using video chat to communicate with their romantic partners more than individuals in GCRs. By definition, individuals in GCRs have the ability to see their partners more often than individuals in LDRs. Due to the lack of face-to-face communication, individuals in LDRs tend to resort to other rich forms of communication, such as video chat, which fits the predictions of the media richness theory (Daft & Lengel, 1984, 1986).

A rich medium offers receivers multiple ways to obtain a sender's message. For example, when individuals communicate with one another using face-to-face communication, a receiver can look at the sender's facial expressions or hand gestures to assist them in interpreting the original message. By contrast, a lean medium such as text messaging lacks many characteristics that make a medium rich. Receivers do not have facial expressions or tone of voice to help decipher a message, but rather only verbal symbols. Using lean media to communicate with other individuals ultimately increases the risk of misinterpretations. Therefore, it was not surprising individuals in LDRs used text messaging less than their GCR counterparts. In order to avoid miscommunications and have more intimate conversations, individuals in LDRs utilized rich media such as video chat. This may be why individuals in LDRs used the option more than individuals in GCRs.

An increase in distance increases the use of communication media and decreases the chance for face-to-face communication between individuals (Johnson, 2001). For this very reason, researchers (e.g. Berscheid, Snyder, & Omoto 1989) say LDRs cannot work. These individuals claim that people who do not see each other frequently cannot be as close as individuals who do see one another frequently. This implies that individuals who experience more face-to-face interactions will be closer to their relational partners than individuals who do not experience frequent face-to-face interactions with their romantic partners. Ultimately, the lack of closeness will lead to dissatisfaction within the relationship.

Relational satisfaction was the focus of the second research question. The second research question asked whether individuals in LDRs were more or less satisfied with their relationships than their GCR counterparts. In this study, no significant difference was found between the two relational groups in regards to overall satisfaction. The results of this research question contradict past research conducted by Stafford (2005) who claims that without frequent face-to-face communication, individuals cannot be satisfied with their relationships. Given this research, it would be logical to expect that individuals in GCRs would have more relational satisfaction than individuals in LDRs. These findings raise new possibilities as to why individuals in LDRs and GCRs have no difference in regards to their overall relational satisfaction. Communication technology has enabled individuals to minimize distance, therefore, distance may be becoming irrelevant to individuals separated from one another. Consequently, communication media may ultimately be changing the dynamics of relationships, whether long distance or geographically close.

Although researchers state that a lack of frequent face-to-face communication will cause relational dissatisfaction, not all relationships permit frequent face-to-face communication.

Therefore, maintenance strategies, other than face-to-face interactions, must be incorporated into daily communication between partners.

Two research questions addressed respondents' satisfaction with the communication media they used in their relationships. The first (3a) asked if individuals in LDRs were more or less satisfied than their GCR counterparts with the primary communication medium used to maintain their relationships. The results of research question 3a showed no significant difference between the levels of satisfaction with the primary medium. There are two possible reasons as to why respondents in LDRs and GCRs exhibited almost the same level of satisfaction with their primary communication medium.

First, individuals in LDRs and GCRs reported using the same primary communication media to remain in contact with their romantic partners, exhibiting only slight differences in the order with which they prefer to use them. Individuals in LDRs reported using text messaging, phone, video chat, and social networks, while individuals in GCRs reported using text messaging, phone, social networks, and video chat. A second explanation for not finding significant differences in satisfaction with these media relates to their availability. When communication options are limited, the options that are available appear more desirable to individuals. Since this study limited the option of communicating face-to-face, individuals in GCRs were forced into the same situation as individuals in LDRs. Given the limited options, respondents' perceptions about what was available was more similar. Individuals used the devices they had available to them in order to ensure the current and/or future success of their relationships with their partners. Individuals used their choice of communication media in order to fulfill their need of making their relationship work, despite lacking face-to-face communication.

As an additional measure of satisfaction, research question 3b explored any differences in the impact the primary means of communication had on LDRs versus GCRs. Overall, individuals in LDRs and GCRs reported that their primary communication medium had a positive impact on their relationships. Again, this could be due in part to the fact that individuals in LDRs and GCRs used almost the same communication media within their relationships. However, when considering only text messaging (the most common communication medium) individuals in LDRs reported that it had a stronger positive impact on their relationships than individuals in GCRs.

Pettigrew (2009) found that the majority of couples claimed text messaging had greatly benefited their relationship and allowed them to remain in constant communication with one another throughout the course of the day. In a study of communication devices used by romantic couples, sans face-to-face communication, Coyne, et al. (2011) found that text messaging was the most preferred mean of communication due to its asynchronous form. Although Coyne, et al. (2011) reported that individuals claimed this form of communication caused misunderstandings within their relationships, they felt text messaging gave them more time to think and text exactly what it was they were trying to say to their partners, which may have an overall positive effect on LDRs. However, the possibility of a miscommunication may be the very reason why individuals in GCRs reported text messaging had a slightly less positive effect on their relationships.

The fourth research question further addresses strategic maintenance behaviors used within romantic relationships. As with the satisfaction variable, the larger research question was divided into two parts to address the different dimensions of the maintenance variable: media usage and satisfaction with that medium for performing maintenance activities. Research

question 4a asked which maintenance strategies individuals use their primary medium to perform in LDRs versus GCRs. No significant difference was found between the two relational types so the categories were broken down by media device. Individuals in LDRs and GCRs reported using the phone and text messaging as their primary communication medium to perform all seven maintenance strategies within their relationships so the phone and text messaging were more closely examined. According to media richness theory (Daft & Lengel, 1984, 1986), the phone is a rich form of communication due to its synchronous nature. On the other hand, written documents such as text messaging are considered a lean form of media, lacking in richness and easily causing communication confusion. However, its asynchronous nature allows individuals to engage in conversations at their leisure and with the flexibility of their schedules. Among respondents who used the phone as their primary medium, individuals in LDRs were significantly more likely than their GCR counterparts to use that medium to offer assurances, engage in openness, and to suggest advice. Among respondents who used text messaging as their primary medium, individuals in LDRs were significantly more likely than their GCR counterparts to use that medium to engage in openness, provide positive statements, and to suggest advice.

Offering assurances was a maintenance strategy primarily used by phone users in LDRs. Offering assurances to a romantic partner reinforces the importance of that individual as well as the significance of the relationship (Stafford, et al, 2000). When relationships mature, much of the relational maintenance shifts from face-to-face interaction to other means of communication such as phone calls, especially when individuals are separated by geographic distance (Nussbaum, 1994; Smoreda & Thomas, 2001). Individuals in LDRs lack daily face-to-face interactions, so offering assurances to maintain the relationship must be accomplished in a

different way. Since the phone provides verbal and nonverbal cues, receivers can hear and be reassured of their partners' feelings for them and their relationships, even though they are physically separated from one another by distance.

Providing positive statements was a maintenance strategy primarily utilized by text message users in LDRs. Positivity assists in keeping communication and interactions between partners upbeat and enjoyable (Stafford, et al, 2000). Providing positive statements to romantic partners maintains relationships, but individuals in LDRs lack the ability to provide these messages in person, as opposed to individuals in GCRs who normally have daily face-to-face interactions. Therefore, individuals in LDRs must utilize a different form of communication to relay their positive praises to their partner. Text messaging is an ideal communication media to accomplish positivity as opposed to a phone call because it is an asynchronous form of communication. Individuals do not have to worry about their partner being available for a quick conversation. Instead, a text message can easily be written and read almost anywhere, at any time.

Research question 4b asked how much individuals in LDRs and GCRs liked using their primary communication medium to accomplish strategic maintenance within their relationships. Individuals in GCRs liked their primary communication media the most to connect with their social networks. Social networks use common friends and affiliations for the purpose of maintaining the relationship (Stafford, et al., 2000). Social networks allow individuals to connect with their own family, friends, and other affiliations as well as their partners' social circle. Individuals in GCRs may use their primary communication media the most to utilize their social networks because they may have easier physical access to their social circles as opposed to their LDR counterparts. Individuals in GCRs may have the same affiliations due to their physical proximity to one another, so communication media may be used primarily to make plans with

family members, friends, and other colleagues who are located nearby. Individuals in LDRs may not have that option due to the distance separating them from their loved ones, which may be why they use social networks less frequently than their GCR counterparts.

Although individuals in LDRs and GCRs make do with their communication options, the study used an open-ended question to prompt respondents to report how they would ideally like to strategically maintain their relationships using various forms of communication. A blank space was provided for respondents to type in their answer. No options were provided to discover what means of communication individuals in LDRs and GCRs would prefer to use. Whether individuals primarily used the phone or text messaging to communicate with their partners, respondents overwhelmingly wanted the next richest form of media. For example, if individuals reported using the phone as their primary medium, they reported wanting to use either face-to-face interactions or video messaging. If individuals reported utilizing text messaging as their primary medium of communication, they reported wanting to use face-to-face communication, phone calls, or video messaging. Respondents longed to use richer forms of communication than what they were primarily using within their current romantic relationships. This may be because individuals desire to have what they cannot have. For example, individuals who do not have the opportunity to see their partner every day may yearn to have face-to-face interactions with their loved one as opposed to Skype sessions and long distance phone calls. Individuals who find themselves using their thumbs to text more than their voices to talk may wish to utilize the phone more often in their relationships. Individuals do not only want to use rich communication, but they want to use options that are the next best thing. They always want more or they want what they currently cannot have.

The next section will further explore the limitations of the current study and provide avenues for future research based on the findings.

### **Chapter Five: Limitations and Future Research**

The analysis of the results combined with the limitations lead to several possible directions for future research. This section will first discuss the limitations of the present research, followed by recommendations for future research.

#### **Limitations**

One limitation of the study was the context within which long distance relationships were examined. LDRs are extremely prevalent among college students. However, long distance relationships exist among many other demographics as well, such as individuals separated because of careers and other obligations including military duty and travel. Recent estimates indicate “as many as three million Americans reside in a location different than their significant other” (Bergen, Kirby, & McBride, 2007, p. 170). However, not all of those three million Americans are college students. Therefore, further research may consider examining LDRs existing outside of college campuses. Individuals outside of college campuses may use different communication media and/or maintenance strategies within their relationships. Discovering the existence of differences or similarities would contribute more knowledge to the area of interpersonal communication.

Another limitation of the study was the theoretical framework. Although media richness theory served as an excellent framework in which to examine communication media and the possibilities as to why individuals prefer one device to another, it was not complex enough for this study. While media richness theory offers a foundation for thinking about communication media types, and that foundation allows for the insertion of new communication media into the framework, it is not a perfect connection.

Lastly, there were no measures used within the study to (1) establish the amount of face-to-face time individuals in LDRs and GCRs had with one another, (2) how the relationship started (e.g. through face-to-face communication or through the use of communication media), (3) and the life course of the relationship (e.g. was the relationship considered new or had it been established for some time). By measuring the aforementioned items, the researcher may have been better able to establish reasoning as to why individuals selected their primary communication media and why individuals made that specific selection. These answers may have assisted in finding stronger connections between romantic relationships, communication media, and the levels of relational satisfaction experienced by college students in LDRs and GCRs.

### **Future Research**

First, future researchers may consider exploring other relationship types. For example, the two hundred and ninety-seven surveys that were omitted from this study asked individuals who were not involved in a romantic relationship to think of their friendship with a close friend. Future research may want to explore LDR and GCR friendships further since many individuals find themselves separated from loved ones at one time or another throughout their lives. Romantic relationships and friendships can serve similar purposes in the form of supportive others so it may be worthy of study to see if differences exist in romantic versus platonic relationships.

Future researchers may also want to approach this same study from a qualitative perspective as opposed to a quantitative standpoint. By holding individual interviews or focus groups, future researchers may be able to better establish participants' perspectives on their relationships, their communication media choices, their various levels of satisfaction with

communication, their overall relational satisfaction, and the strategic maintenance behaviors used within their relationships. Gathering qualitative data would enhance the current findings and would assist in explaining why individuals make their reported decisions in regards to communication within their relationships. By using a richer medium such as face-to-face communication, researchers may be able to answer the previously discussed research questions with more detailed answers.

Finally, as opposed to discovering how relationship types influence communication choices among individuals, future studies could attempt to answer the following proposed research questions: Can relationships ultimately affect our communication choices? Are there different stages within relationships that affect our communication choices? Has new communication technology changed how and why we maintain romantic relationships? These proposed research questions could ultimately be answered in future studies.

### **Conclusion**

Long distance relationships remain prevalent within today's society despite the common challenges faced by individuals separated by distance. Although many researchers claim frequent face-to-face interaction with romantic partners is the only way to maintain close relationships, individuals in LDRs have resorted to other means of communication in order to sustain and maintain their relationships with their partners.

Phones, text messaging, video chat, and social networks were reported the most frequently used communication media among individuals in LDRs and GCRs. Although individuals in LDRs use video chat more than individuals in GCRs, individuals in GCRs utilize text messaging more than individuals in LDRs. However, all of these communication media enable romantic partners to communicate with one another.

Although no differences in relational satisfaction were discovered, it is important to understand what each communication option has to offer its users. Overall, individuals in LDRs and GCRs liked their primary means of communication equally. Both relationship groups thought their primary means of communication had an overall positive impact on their relationships, although individuals in LDRs noted that text messaging had a stronger positive impact on their relationships than individuals in GCRs.

In order to maintain romantic relationships, individuals in LDRs and GCRs used the phone and text messaging the most. Individuals primarily offered assurances, engaged in openness, suggested advice, and provided positive statements to strategically maintain their relationships with their partners.

Individuals have been separated from one another by distance since the beginning of time and that is something that will most likely never change. However, communication technologies continue to advance every day, ultimately changing the ways in which people communicate with one another. It is important individuals better understand their communication options and the effects of using various media to communicate with other individuals. This study has challenged past researchers who have claimed LDRs have less relational satisfaction and ultimately cannot work, while simultaneously calling for communication scholars to update past theories such as media richness theory. Although communication media may continue to change, one thing remains certain: whether individuals live one mile from one another or one thousand miles from one another, communication remains essential to go the distance in relationships.

**References**

- Allan, G. (1989). *Friendship: developing a sociological perspective*. Westview Press, Boulder.
- Allen, D.G. & Griffeth, R.W. (1997). Vertical and lateral information processing: The effects of gender, employee classification level, and media richness on communication and work outcomes. *Human Relations, 50*, 1239-1260.
- Aylor, B.A. (2003). Maintaining long-distance relationships. In D.J. Canary & M. Dainton (Eds.), *Maintaining relationships through communication: Relational, contextual, and cultural variations* (pp. 127-139). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bachen, C.M. (2007). Just part of the family? Exploring the connections between family life and media use. In S.R. Mazzarella (Ed.), *20 questions about youth and the media* (pp. 239-252). New York: Peter Lang.
- Bargh, J.A., & McKenna, K.Y.A. (2004). The Internet and social life. *Annual Review of Psychology, 55*, 573-590.
- Bergen, K.M., Kirby, E., & McBride, M.C. (2007). "How do you get two houses cleaned?": Accomplishing family caregiving in commuter marriages. *Journal of Family Communication, 7*, 287-307.
- Berscheid, E., Snyder, M., & Omoto, A. (1989). The relationship closeness inventory: Assessing the closeness of interpersonal relationships. *Journal of Personality and Social Psychology, 57*, 792-807.
- Blieszner, R., & Adams, R.G. (1992). *Adult friendship*. Newbury Park, CA: Sage.
- Boase, J., Horrigan, J.B., Wellman, B. & Rainie, L. (2006) 'The strength of internet ties', [Online] Available at: [http://www.pewinternet.org/pdfs/PIP\\_Internet\\_ties.pdf](http://www.pewinternet.org/pdfs/PIP_Internet_ties.pdf) (26 January 2006).

- Boase, J. & Wellman, B. (2006) 'Personal relationships: on and off the internet', in *Cambridge Handbook of Personal Relationships*, eds. A.L. Vangelisti & D. Perlman), Cambridge University Press, Cambridge, pp.709-726.
- Boden, D. & Molotch, H. (1994) The compulsion of proximity. In Friedland, R. & Boden, D. eds. *NowHere: Space, time, and modernity*, University of California Press, Berkeley, 257-286.
- Carlson, J.R., & Zmud, R.W. (1999). Channel expansion theory and the experiential nature of media richness perceptions. *Academy of Management Journal*, 42, 153-170.
- Canary, D.J., & Stafford, L. (1992). Relational maintenance strategies and equity in marriage. *Communication Monographs*, 59, 243-267.
- Canary, D.J. & Stafford, L. (1994) Maintaining relationships through strategic and routine interaction. In Canary, D.J. & Stafford, L. eds. *Communication and relational maintenance*, Academic Press, San Diego, CA, US, 3-22.
- Canary, D.J., Stafford, L., Hause, K.S., & Wallace, L.A., (1993). An inductive analysis of relational maintenance strategies: Comparisons among lovers, relatives, friends, and others. *Communication Research Reports*, 10(1), 5-14.
- Coyne, S.M., Stockdale, L., Busby, D., Iverson, B., & Grant, D.M. (2011). "I luv u :)": A descriptive study of the media use of individuals in romantic relationships. *Family Relations*, 60, 150-162. doi: 10.1111/j.1741-3729.2010.00639.x
- Dainton, M., & Stafford, L. (1993). Routine maintenance behaviors: A comparison of relationship type, partner similarity, and sex differences. *Journal of Social and Personal Relationships*, 10, 255-272.

- Daft, R.L., & Lengel, R.H. (1984). Information richness: A new approach to managerial behavior and organizational design. In B. Staw & L.L. Cummings (Eds.), *Research in organizational behavior* (Vol. 6, pp. 191-233). Greenwich, CT: JAI.
- Daft, R.L., & Lengel, R.H. (1986). Organizational information requirements: Media richness and structural design. *Management Science*, 32, 554-571.
- Dellmann-Jenkins, M., Bernard-Paolucci, T.S., & Rushing, B. (1994). Does distance make the heart grow fonder? A comparison of college students in long-distance and geographically close dating relationships. *College Student Journal*, 28, 212-219.
- Dindia, K., & Canary, D.J. (1993). Definitions and theoretical perspectives on maintaining relationships. *Journal of Social and Personal Relationships*, 10, 163-173.
- Doring, N. & Dietmarc, C. (2003). Mediated communication in couple relationships: Approaches for theoretical modeling and initial qualitative findings. *Forum: Qualitative Social Research*, 4(3), 1-14.
- Duck, S.W. (1986). *Human Relationships*. Newbury Park, CA: Sage.
- Ensmenger, Nathan. (2006). History of communications. Retrieved from <http://www.fi.edu/learn/case-files/communication.html>
- Fehr, B. (1999). Stability and commitment in friendships. In J.M. Adams & W.H. Jones (Eds.), *Handbook of interpersonal commitment and relationship stability* (pp. 239-256). New York: Kluwer Academic/Plenum.
- Flanagin, A.J. (2005). IM online: Instant messaging use among college students. *Communication Research Reports*, 22,3, 175-187.
- Graham, J. (2003, October 20). Instant messaging program are no longer just for messages. USA Today, p. 5D.

- Green, N. (2003). Outwardly mobile: Young people and mobile technologies. In J. Katz (Ed.), *Machines that become us: The social context of personal communication technology* (pp.201-218). New Brunswick, NJ: Transaction.
- Green, M.C. (2005). Communication via instant messenger: Short-and long-term effects. *Journal of Applied Social Psychology, 35*, 445-462.
- Guldner, G.T. (1996). Long-distance romantic relationships: Prevalence and separation related symptoms in college students. *Journal of College Student Development, 37*, 289-296.
- Guldner, G., & Swensen, C. (1995). Time spent together and relationship quality: Long distance relationships as a test case. *Journal of Social and Personal Relationships, 12*, 313-320.
- Hampton, K. & Wellman, B. (2001) 'Long distance community in the network society: contact and support beyond Netville', *American Behavioral Scientist*, vol. 45, no. 3, pp.476-495.
- Hoffman, D., Novak, T.P. & Venkatesh, A. (2004) Has the Internet become indispensable? *Communications of the ACM, 47(7)*. 37-42.
- International Telecommunication Union. (2010). ITU yearbook of statistics. Retrieved from <http://www.itu.int>
- Johnson, A.J. (2001). Examining the maintenance of friendships: Are there differences between geographically close and long-distance friends? *Communication Quarterly, 49(4)*, 424-435.
- Johnson, G.M., Staton, A.Q., & Jorgensen-Earp, C.R. (1995). An ecological perspective on the transition of new university freshmen. *Communication Education, 44*, 336-352.

- Kahai, S.S., & Cooper, R.B. (2003). Exploring the core concepts of media richness theory: The impact of cue multiplicity and feedback immediacy on decision quality. *Journal of Management Information Systems*, 20, 263-281.
- Kamibeppu, K., & Sugiura, H. (2005). Impact of the mobile phone on junior high-school student's friendships in the Tokyo metropolitan area. *CyberPsychology and Behavior*, 2, 121-130.
- Kelly, L., Keaten, J.A., Hazel, M., & Williams, J.A. (2010). Effects of reticence, affect for communication channels, and self-perceived competence on usage of instant messaging. *Communication Research Reports*, 27, 131-142.
- Kock, N. (2004). The psychobiological model: Towards a new theory of computer-mediated communication based on Darwinian evolution. *Organization Science*, 15, 327-349.
- Larsen, J., Urry, J., & Axhausen, K. (2006). *Mobilities, networks, geographies*. Hampshire, UK: Ashgate.
- Lenhart, A., Madden, M. & Hitlin, P. (2005) 'Teens and technology', [Online] Available at: [http://www.pewinternet.org/pdfs/PIP\\_Teens\\_Tech\\_July2005web.pdf](http://www.pewinternet.org/pdfs/PIP_Teens_Tech_July2005web.pdf) (13 September 2005).
- Leung, L. (2001). College student motives for chatting on ICQ. *New Media & Society*, 3, 483-500.
- Ling, R. (2004). *The mobile connection: The cell phone's impact on society*. San Francisco: Morgan Kauffman.
- Madell, D.E., & Muncer, J.J. (2007). Control over social interactions: An important reason for young people's use of the Internet and mobile phones for communication? *CyberPsychology and Behavior*, 10, 137-140.

- Manago, A.M., Graham, M.B., Greenfield, P.M., & Salimkhan, G. (2008). Self presentation and gender on MySpace. *Journal of Applied Developmental Psychology, 29*, 446-458.
- Mello, A. (2002). Instant messaging, instant service. Retrieved 2 August 2004 from:  
<http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2865520,00.html>.
- Merolla, A.J. (2010). Relational maintenance during military deployment: Perspectives of wives of deployed US soldiers. *Journal of Applied Communication Research, 38*, 4-26.
- Mietzner, S. (2005). Would you do it again? *College Student Journal, 39*, 192-200.
- Muise, A., Christofides, E., & Desmarais, S. (2009). More information that you ever wanted: Does Facebook bring out the green-eyed monster of jealousy? *CyberPsychology & Behavior, 12*, 441-444.
- National Consumer Study. (2010). Mobile phone statistics. Retrieved from  
<http://www.simmonsurvey.com>
- (n.d.) Skype. Retrieved from <http://www.skype.com>
- Nielsen//NetRatings (2002). Nearly 20 percent of the active online population are kids and teens, creating opportunities for marketers, according to Nielsen//NetRatings.  
Retrieved 5 August 2004 from [http://direct.www.netratings.com/pr/pr\\_020813.pdf](http://direct.www.netratings.com/pr/pr_020813.pdf).
- Nussbaum, J.F. (1994) Friendship in older adulthood. In Hummert, M.L., Wiemann, J.M. & Nussbaum, J.F. eds. *Interpersonal communication in older adulthood: interdisciplinary theory and research*, Sage Publications, Thousand Oaks, Calif., 209-225.
- Orlikowski, W.J. & Yates, J. (1994) Genre repertoire: The structuring of communicative practices in organizations. *Administrative Science Quarterly, 39*(4). 541-574.
- Pettigrew, J. (2009). Text messaging and connectedness within close interpersonal relationships. *Marriage and Family Review, 45*, 697-716.

- Pew Research (2001). Teenage life online: The rise of the instant message generation and the Internet's impact on friendships and family relationships. Retrieved 4 December 2003 from: [http://www.pewinternet.org/reports/pdfs/PIP\\_teens\\_report.pdf](http://www.pewinternet.org/reports/pdfs/PIP_teens_report.pdf).
- Pistole, C.M., Roberts, A., & Chapman, M.L. (2010). Attachment, relationship maintenance, and stress in long distance, and stress in long distance and geographically close romantic relationships. *Journal of Social and Personal Relationships*, 27 (253). doi: 10.1177/0265407510363427
- Quan-Hasse, A., Wellman, B., Witte, J. & Hampton, K.N. (2002) 'Capitalizing on the Net: social contact, civic engagement, and sense of community', in *The Internet in Everyday Life*, eds B. Wellman & C. Haythornthwaite, Blackwell, Malden, MA, pp. 291-324.
- Radicati Group (2003). Instant Messaging and Presence Market Trends, 2003-2007. Retrieved 5, August 2004 from [http://www.researchandmarkets.com/reportinfo.asp?report\\_id35248 & te&cat\\_id4](http://www.researchandmarkets.com/reportinfo.asp?report_id35248&te&cat_id4).
- Ramirez, A. R., Dimmick, J., & Lin, S. (May, 2004). Revisiting media competition: The gratification niches of instant messaging, e-mail, and telephone. Paper presented at the Annual Meetings of the International Communication Association, New Orleans, LA.
- Rohlfing, M.E. (1995). "Doesn't anybody stay in one place anymore?" An exploration of the understudied phenomenon of long-distance relationships. In J.T. Wood & S. Duck(Eds.), *Under-studied relationships: Off the beaten track* (pp. 173-196). ThousandOaks, CA: Sage.

- Sahlstein, E. (2010). Communication and distance: The present and future interpreted through the past. *Journal of Applied Communication Research, 38(1)*, 106-114.
- Scott, V.M., Mottarella, K.E., & Lavooy, M.J. (2006). Does virtual intimacy exist?: A brief exploration into reported levels of intimacy in online relationships. *Cyberpsychology and Behavior, 9*, 759-763.
- Sheer, V.C. (2011). Teenagers' use of MSN features, discussion topics, and online friendship development: The impact of media richness and communication control. *Communication Quarterly, 59(1)*, 82-103.
- Sheldon, P. (2008). The relationship between unwillingness-to-communicate and students' Facebook use. *Journal of Media Psychology: Theories, Methods, and Application, 20*, 67-75.
- Shklovski, I. & Mainwaring, S. (2005). Exploring technology adoption through the lens of residential mobility. *In proceedings of CHI 2005, Portland, Oregon.*
- Shklovski, I., Kraut, R., & Cummings, J. (2008). Keeping in touch by technology: Maintaining friendship after a residential move. *CHI 2008 Proceedings*, 807-816.
- Smoreda, Z. & Thomas, F. (2001). Social networks and residential ICT adoption and use. In *EURESCOM Summit*, (Heidelberg).
- Sprecher, S. (2009). Relationship initiation and formation on the Internet. *Marriage & Family Review, 45*, 761-782.
- Stafford, L. (2003). Maintaining romantic relationships: A summary and analysis of one research program. In D.J. Canary & M. Dainton (Eds.), *Maintaining relationships through communication: Relational, contextual, and cultural variations* (pp. 51-77). Mahwah, NJ: Erlbaum.

- Stafford, L. (2005). *Maintaining long-distance and cross residential relationships*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Stafford, L. (2010). Geographic distance and communication during courtship. *Communication Research*, 37, 275-297. doi: 10.1177/0093650209356390
- Stafford, L., & Canary, D.J. (1991). Maintenance strategies and romantic relationship type, gender, and relational characteristics. *Journal of Social and Personal Relationships*, 8, 217-242.
- Stafford, L., Dainton, M., & Haas, S. (2000). Measuring routine and strategic relational maintenance: Scale development, sex versus gender roles, and the prediction of relational characteristics. *Communication Monographs*, 67, 306–323.
- Stafford, L., & Merolla, A.J. (2007). Idealization, reunions, and stability in long-distance dating relationships. *Journal of Social and Personal Relationships*, 24, 37-54.
- Tntdj. (2011). Media Richness Theory Explanatory Diagram. Retrieved from [http://en.wikipedia.org/wiki/File:Media\\_Richness\\_Theory\\_Diagram\\_PNG.png](http://en.wikipedia.org/wiki/File:Media_Richness_Theory_Diagram_PNG.png)
- Utz, S. (2007). Media use in long-distance friendships. *Information, Communication, and Society*, 10(5), 694-713.
- Walker, K., Krehbiel, M., & Koyner, L. (2009). “Hey you! Just stopping by to say hi!” Communicating with friends and family on MySpace. *Marriage and Family Review*, 45, 677-695.
- Whelan, D. (2001). The instant messaging market. *American Demographics*, 23(12), 28–31.
- Whitty, M. & Gavin, J. (2001) ‘age/sex/location: uncovering the social cues in the development of online relationships’, *CyberPsychology and Behavior*, vol. 4, no. 5, pp. 623-630.

Wood, J.T. (1995). *Relational communication: Continuity and change in personal relationships*.

Detroit: Wadsworth Publishing Co.

Zuckerman, M., Amidon, M.D., Bishop, S.E., & Pomerantz, S.D. (1982). Face and tone of voice in the communication of deception. *Journal of Personality and Social Psychology*, 43, 347-357.

## Appendix A

**Informed Consent to Participate in Human Subject Research**

Professor Rhonda Sprague at the University of Wisconsin-Stevens Point, and her student, Ashley Martens, are conducting a study on how communication technology is used among individuals in long-distance and geographically close relationships. We would appreciate your participation in this study, as it will assist Ashley Martens in completing her Master's thesis.

As part of this study, we would like you to participate in a survey regarding communication technology and your opinions on it. This survey will be distributed online. Participants will have two weeks to complete the online survey.

We do not anticipate the study will present any medical or social risk to you other than the inconvenience of the extra time required for you to answer the survey. However, Student Health Services can be contacted if you experience any distress upon recalling your current relationship. Student Health Services can be reached at 1.715.346.4646.

By participating in this study, you will contribute general knowledge of communication technologies within long-distance relationships. Also, this study will help you consider which communication technologies are the most useful for you within your own life. Depending on your Communication 101 course instructor, extra credit may also be earned by participating in this study.

The information we gather through the surveys will be completely anonymous. If you want to withdraw from the study at any time you may do so without penalty.

Once the study is completed, we would be glad to give you the results. In the meantime, if you have any questions, please ask us or contact:

Professor Rhonda Sprague  
Department of Communication  
University of Wisconsin-Stevens Point  
Stevens Point, WI 54481 (715) 346-3918

If you have any complaints about your treatment as participant in this study, please call or write:

Dr. Jason R. Davis, Chair  
Institutional Review Board for the Protection of Human Subjects  
School of Business and Economics  
University of Wisconsin-Stevens Point  
Stevens Point, WI 54481  
(715) 346-4598

Although Dr. Davis will ask your name, all complaints are kept in confidence. **This research project has been approved by the UWSP Institutional Review Board for the Protection of Human Subjects.**

Appendix B

**Demographic Information**

**Sex:**

- Male
- Female
- I prefer not to say

**Age:**

---

**Are you currently in a romantic relationship?**

- Yes
- No

**Which of the following best describes your current romantic relationship?**

- Geographically Close (we can see each other face-to-face most days)
- Long Distance (we cannot see each other face-to-face most days)

**How long have you been in this romantic relationship? Please type in an approximate number in years and/or months.**

---

## Appendix C

**Measure of Media Selection**

Of the total amount of time you spend communicating with your romantic partner in a normal week, which percentage do you spend using each of the following communication methods? (The sum of the numbers entered must equal 100).

Talking on the phone	_____
Text messaging	_____
E-mail	_____
Social networks (Facebook, Twitter, MySpace, etc.)	_____
Instant messaging (IM)	_____
Video chat (Skype, etc.)	_____
Blogging	_____
Letters	_____
Other (this will be rare)	_____

## Appendix D

**Measure of Media Satisfaction and Impact**

The remaining questions ask you to consider the most frequent communication method you identified above (the one with the highest percentage).

**How much do you like using the communication method you use most frequently?**

- LOVE it
- Like it
- Don't like it or dislike it (neutral)
- Don't like it
- HATE it

**What kind of impact do you feel your most frequent type of communication method has upon your romantic relationship?**

- Helps the relationship a lot
- Helps the relationship a little
- Does not help or hurt the relationship
- Hurts the relationship a little
- Hurts the relationship a lot

## Appendix E

**Measure of Strategic Maintenance Behaviors**

The following seven items are the most frequently reported strategic maintenance devices used to sustain relationships. Please read each definition and the given example(s). Then answer the questions that follow thinking about your most frequently used communication device.

“Assurances” are positive declarations about the relationship. Examples include, “I tell my partner how much s/he means to me,” and, “I talk about our plans for the future.”

**How often do you use your primary communication method to provide “assurances” about your relationship?**

- All the time
- Very often
- Once in a while
- Rarely
- Not at all

**Do you like using your primary communication method to provide “assurances” in your relationship?**

- YES!
- Yes.
- Neutral.
- No.
- NO!

**If you could use a different communication method to provide “assurances” within your relationship, what device would you use?**

---

“Openness” is disclosing personal information to your partner and encouraging them to do the same. Examples include, “I am open about my feelings,” and, “I encourage my partner to be open with me.”

**How often do you use your primary communication method to provide “openness” about your relationship?**

- All the time
- Very often
- Once in a while
- Rarely
- Not at all

**Do you like using your primary communication method to provide “openness” in your relationship?**

- YES!
- Yes.
- Neutral.
- No.
- NO!

**If you could use a different communication method to provide “openness” within your relationship, what device would you use?**

---

“Conflict management” is cooperating with your partner when problems arise. Examples include, “I apologize when I am wrong,” and, “I accept my partner’s apology when they are wrong.”

**How often do you use your primary communication method to provide “conflict management” in your relationship?**

- All the time
- Very often
- Once in a while
- Rarely
- Not at all

**Do you like using your primary communication method to provide “conflict management” in your relationship?**

- YES!
- Yes.
- Neutral.
- No.
- NO!

**If you could use a different communication method to provide “conflict management” within your relationship, what device would you use?**

---

“Sharing tasks” is equally dividing relational responsibilities between you and your partner. Examples include, “My partner and I both make an effort to contact one another on a daily basis,” and, “My partner and I both make plans to see one another when are schedules allow.”

**How often do you use your primary communication method to “share tasks” in your relationship?**

- All the time
- Very often
- Once in a while
- Rarely
- Not at all

**Do you like using your primary communication method to “share tasks” in your relationship?**

- YES!
- Yes.
- Neutral.
- No.
- NO!

**If you could use a different communication method to “share tasks” within your relationship, what device would you use?**

---

“Statements of positivity” means acting positive towards your partner. Examples include, “I act cheerful when I communicate with my partner,” and, “I give my partner compliments.”

**How often do you use your primary communication method to provide “statements of positivity” in your relationship?**

- All the time
- Very often
- Once in a while
- Rarely
- Not at all

**Do you like using your primary communication method to provide “statements of positivity” in your relationship?**

- YES!
- Yes.
- Neutral.
- No.
- NO!

**If you could use a different communication method to provide “statements of positivity” within your relationship, what device would you use?**

---

“Statements of advice” means offering support to your partner when they need it. Examples include, “I offer advice to my partner,” and, “I give my opinion to my partner when they need it.”

**How often do you use your primary communication method to provide “statements of advice” in your relationship?**

- All the time
- Very often
- Once in a while
- Rarely
- Not at all

**Do you like using your primary communication method to provide “statements of advice” “in your relationship?**

- YES!
- Yes.
- Neutral.
- No.
- NO!

**If you could use a different communication method to provide “statements of advice” within your relationship, what device would you use?**

---

“Social networks” means communicating with your partner’s family members and friends. Examples include, “I contact my partner’s family members,” and, “I include my partners friends in our plans.” “I invite my partner’s family members and friends to events.”

**How often do you use your primary communication method to use “social networks” in your relationship?**

- All the time
- Very often
- Once in a while
- Rarely
- Not at all

**Do you like using your primary communication method to use “social networks” in your relationship?**

- YES!
- Yes.
- Neutral.
- No.
- NO!

**If you could use a different communication method to use “social networks” within your relationship, what device would you use?**

---

## Appendix F

**Measure of Relational Satisfaction**

Please think about your relationship with your partner over the past month or so and mark your level of agreement with each of the following statements.

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Not Sure</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
My partner meets my needs.					
My relationship is much worse than other couples' relationships.					
I often wish I had not gotten into this relationship.					
My relationship has met all of my original expectations.					
My relationship has a lot of problems.					
I am completely satisfied with my relationship.					

## Appendix G

**Thank You/Extra Credit**

If you are enrolled in Communication 101 and plan on using this survey as an opportunity to earn extra participation points, please print the final “Thank You” page. Please write your first and last name on the paper along with your section number. Please give the form to your instructor before or after class.