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## **The Use of Media Technologies in Long-Distance Relationships**

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Rochester Institute of Technology

School of Communication

College of Liberal Arts

The Use of Media Technologies in Long-Distance Relationships

by

Paola P. Soto Herrera

*A Thesis* presented

in partial fulfillment of the Master of Science degree in

Communication & Media Technologies

Degree Awarded:

December 21, 2018

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Table of Contents

Abstract	4
Literature Review	5
Research Questions	13
Method	14
Results	15
Discussion and Conclusion	19
References	21
Appendix A	24

## The Use of Social Media in Long-Distance Relationships

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College of Liberal Arts

School of Communication

Master of Science degree in Communication & Media Technologies

Degree Awarded: Fall Semester 2018 (2181)

### Abstract

Communication technologies have helped reduce personal distances and stay connected. This study pursued the following questions: What are the most popular media used to communicate in long-distance relationships? Are those in long-distance relationships more likely to use rich or lean media? Do family, friends, and romantic partners differ in their selection of media? Instant Messaging, social media (Instagram, Facebook, Twitter, Snapchat), telephone (cellular, mobile, or landline), online video chat, online audio chat, SMS, and regular mail were the most used media. Respondents were significantly more likely to use rich media. Romantic partners were more likely than either family or friends to use Instant messaging, the telephone, audio chat, and video chat. Additional findings are presented.

*Keywords:* social media, relationships, computer-mediated communication, long distance, media technologies

### The Use of Social Media in Long-Distance Relationships

Long distance can be the enemy of relationships. Communicating is often the key to keeping relationships alive. If people fail to establish effective communication, the relationship will most likely suffer. Computer-mediated communication (CMC) has become an ally to these types of connections due to its facility and affordability. As Aguila (2009) observes that these connections can also produce cultural change, “such interactions also entail the exchange of new ideas on gender roles, family relations, and dominant-subordinate roles that lead to cultural change” (p. 83).

The importance of this study lies in the relevance that media technologies have acquired in recent years. Media technologies influence relationships more and more, especially long-distance ones. This is due to the variety of channels through which people can send messages and the added feature of interactivity that tools like social media provide. It was only a matter of time before social media became multibillion-dollar companies with enormous influence over the way people communicate and share their life experiences.

The purpose of this study is to determine what are the most popular media used to communicate in long-distance relationships (LDRs), to establish if those in long-distance relationships are more likely to use rich or lean media, and if family, friends, and romantic partners differ in their selection of media.

### **Literature Review**

#### **Long-Distance Relationships Before the Internet**

A study (2007) conducted in Toronto with data gathered in 1978 focused on how relationships changed after the advent of new ways of communicating, such as the Internet. Mok, Wellman, and Basu (2007) exposed the situation people faced in LDRs before computer-

mediated tools were available and questioned whether the Internet led to the death of distance, “Although railroads, ships and the post supported long distance travel and communication for centuries, their costly, fitful and slow nature before the 1960s meant that distance hindered frequent contact among spatially dispersed ties” (p. 2).

Additionally, the study titled “Did Distance Matter Before the Internet? Interpersonal Contact and Support in the 1970s” recalls how people used to remain in contact long before the Internet:

The lower cost and easier use of phone calls, air travel and car travel have made long-distance contact even easier. From the 1990s until now, mobile phones and the Internet have so enhanced this ability that some pundits have enthusiastically proclaimed “the death of distance” (Cairncross, 1997) and “the end of geography” (Hepworth, 1991; Thrift & Leyshon, 1988) in a “flat” world (Friedman, 2005). (Mok, Wellman, & Basu, 2007, p. 2)

The major obstacle to communicating over long distances before the Internet appeared was the high cost of overseas telephone calls. However, according to Mok et al. (2007), “The impact of distance on contact continues even with the advent of the Internet, in which communication over distance has no financial cost and participants may reply at their convenience” (p.4).

### **Long-Distance Relationship Maintenance Across Media**

Previous studies suggest that due to professional growth, educational affairs, immigration, and military responsibilities, people are forced to maintain LDRs (Wang & Anderson, 2007). For the purposes of this research, an LDR will be limited to those greater than

100 miles that were first developed face to face (FtF) with a close bond before the geographical separation. It includes relationships among friends, family, and dating partners.

In 2007, Wang and Anderson found that telephone, email, and Instant Messaging (IM), and FtF were the four communication channels most used in LDRs respectively. Furthermore, the researchers showed that letters and other forms of computer-mediated communication (CMC) were also used, although less often. According to this study, new forms of communicating such as CMC were popular, but the telephone exceeded other channels. It also suggested that CMC was preferred over more traditional methods, like letters. Furthermore, the more intimate the relationship was, the more varied the channels and the more frequent the communication. This indicates that people do not necessarily limit themselves to a single medium. Moreover, Wang and Anderson (2007) found that the use of CMC in long-distance communication did not result in less use of other channels of communication. They also point out that, “People did not have to wait till the invention of the Internet to cope with long-distance relationships but the emergence of the Internet did make relational communication between long-distance friends more affordable and convenient” (p. 22). The study concludes that only when CMC is combined with FtF is the friendship maintained satisfactorily.

In 2008, Johnson, Haigh, Becker, Craig, and Wigley investigated email as a CMC tool to maintain relationships over long distances. One of these benefits was that communicating via email did not require users to be synchronously connected. Therefore, if two people are far away and live in countries with different time zones, each one can send a message any time without having to wait for an immediate response. This is what Boneva, Kraut, and Frohlich (2001) called “asynchronous communication.” Social Media is also considered an asynchronous channel.



Furthermore, Johnson et al. (2008) found that long-distance relationship can be maintained over email and that the content shared is similar to those exchanged in FtF interactions. Moreover, the authors reported the idea that FtF relationships are more satisfying, hence long distance will weaken the friendship. However, Stafford (2005) postulates that with the advent of new technologies, individuals perceive that long-distance relationships can be as rewarding as FtF.

Chang (2003) analyzed the use of communication technologies in long-distance romantic relationships and concludes that while communication technologies help maintain a long-distance romantic relationship, in the majority of the cases it only extends an unavoidable ending. Le and Agnew (2001) found that the lack of hearing the voice of your significant other may lead to being misunderstood. Issues of that type could increase over time and harm the relationship. The study also found that people see communication technologies as a positive aspect of their lives when involved in a long-distance relationship. Communication technologies include social media and allow users the option of sending messages in a variety of forms (text, image, and video). Email is an asynchronous communication channel. However, a focus group performed in that same study suggested that people are aware that “there is a tremendous amount of time, energy, and patience required to maintain a long distance relationship” (Chang, 2003, p. 19). That means that although mediated communication plays a significant role in long-distance relationship maintenance, there are multiple factors that influence the survival of the relationship.

In 2007, Utz examined media use in long-distance friendships and found that the telephone is a richer medium than email because it allows people to better express emotions. Utz employed the media richness theory (Daft & Lengel, 1986), which holds that media are richer when they include nonverbal communication such as gestures and vocal intonation, and that

people choose the medium which best suits the specific task. Dainton and Aylor (2002) conducted a study that focused on the association between communication channels use and relational maintenance by people in long-distance romantic relationships. The authors took a uses and gratifications approach to communicative channel selection. They state, “a uses and gratifications perspective assumes that media use is often goal-directed to satisfy needs and is performed by an active audience that is able to articulate needs and motives” (p.2). Utz’s (2007) findings concur with those of Dainton and Aylor. Individuals in the Utz study preferred the telephone because they found more gratifications in that channel.

The purpose of Utz’s (2007) study was to determine which media people prefer when it comes to maintaining long-distance friendships, leaving aside the study of romantic and family type relationships. In Utz’s study, two experiments were conducted: one in the Netherlands and another in Germany. This first study found that email was the preferred medium in long-distance friendships, with 31% of the sample reporting that they used email to communicate with their friends abroad, 27% preferred FtF contact, 22% said their communication was done via telephone, and 11% said they preferred chat or instant messaging (IM). Written communication channels like letters and short message service (SMS) were almost unused (Utz, 2007).

It is noticeable that CMC, a category that includes social media, was only represented by email. However, since this study dates back to 2007, it is understandable that social media were not represented, especially since it was not until 2009 that social media became popular. Moreover, the results of this first study found that among young Dutch people, the most frequent channel used in long-distance friendships was email, and unlike Americans, Instant Messaging was not very popular. The second study focused on comparing email and mobile communication. It concluded that the closer the friendship, the higher the percentage of phone communication

and the lower the percentage of email communication (Utz, 2007). Since social media are used mostly for sharing, it is predictable that users who choose to communicate through it also interact through other channels, especially knowing that most of the messages sent through social media are not aimed at a single recipient but to a network of users. In the second study, 43% preferred email, 22% phone, 21% FtF, 6% SMS, and 3% chat. Utz (2007) found the same result in both studies: “Email is the most widely used medium in long-distance friendships – at least in Western Europe” (p. 707). Unlike the majority of the findings in this study, the phone was not the preferred channel.

Aguila (2009) explored communication technology’s effects in the relationships of Overseas Filipino Workers’ (OFW) and their loved ones in the Philippines. It was found that long-distance relationships benefit and suffer from the use of CMC tools. Although the ideal form of communication will always be FtF interaction, when it comes to long distance, CMC becomes the most realistic choice. Aguila reports that because most Filipinos are forced to work in more developed nations due to the economic conditions in their home country, there has been an “upsurge in communication creativity through Internet and cellular phone” (p. 85). Individuals preferred CMC to traditional tools mostly because of convenience and affordability factors, and on some occasions speed and time were concerns as well. Another factor that affected the individuals’ preference was the level of familiarity the person had with communication tools. In one of the case studies, a woman favored overseas phone calls because she lacked the skills to use the Internet; however, she later developed the ability to exchange e-mails with her significant other. A similar thing happened to a woman in another of the case studies who took computer classes to learn how to chat with her partner.

Moreover, Aguilá (2009) pointed out another change introduced by CMC in long-distance relationships, the speed in the deterioration or development of relationships. In his case studies, the individuals who experienced a change in their relationship while apart admitted that resolution of their issues happened more rapidly than in their FtF interactions. Additionally, individuals in Aguilá's study also agreed that CMC made it easier to avoid arguments and conflicts because they were able to turn off the cell phone or disconnect from the Internet. Also, since it was easier to generate misunderstanding because of the lack of oral interaction, individuals preferred to avoid conflicts. CMC was so important to long-distance relationships that the advantages overcame the disadvantages; furthermore, respondents argued that CMC improved the quality of long-distance relationships. Aguilá adds that in current times, even relationships that are not maintained over long distance depend greatly on mediated communication. Aguilá concludes with the following:

All of the above demonstrate how deeply long distance relationships have been transformed by the technology. While there is still some pessimism about the fate of LDRs, new media have made migration more acceptable than ever before. The Internet and mobile phone have given distant individuals the means to not only manage and maintain their connection but also to negotiate their roles through time. (p. 100)

### **Social Media**

Boyd and Ellison (2007) defined social media as a web service used to build profiles that could be set public, semi-public, or private and establish a list of users to share connections and view other users' lists. With social media, individuals have the ability to share content in any

format. It is not always a private and intimate channel of communication, but it is useful if users want to share the same message with their network of relatives.

In 2008, a study found that people in the US use the Internet to communicate in the following proportions: 56% for sending or reading emails, 10% for sending instant messages (IM), and 9% to use social media websites like Facebook or MySpace (Johnson, Haigh, Becker, Craig, & Wigley, 2008). In 2012, Smith and Zickuhr found that 65% of the activity that happens on the Internet is related to social media. In four years, social media increased 56 points, becoming the most popular activity among Internet users.

McDonnell (2011) explored social relations in the Internet by conducting interviews with a range of experts about their views on the Internet and the future of social relations. The majority were positive and concluded:

The ability to connect through text, pictures, social networks, and games allows a level of social interaction that we just haven't had before. It will change the way we use certain tools (such as the phone) and how we connect, but will allow us to stay more connected to friends and family who are no longer in our local area.

(p.3)

The advent of smartphones has dramatically increased the popularity of social media. Nowadays, it is easier to keep track of online networks through phone apps that provide notifications to the users. McDonnell (2011) adds that "status updates" on Twitter and "wall posts" on Facebook is what Ellison, Steinfield, and Lampe (2007) called "lightweight social surveillance," which fortifies offline relationships. However, Mok et al. (2007) pointed out that "Internet contact is best when intermittently reinforced and enhanced by physical, face-to-face contact" (p. 17).

McDonnell (2011) reported that Facebook was launching its own messaging system, which would include email, text messages, and IM. The author explained that these features would add more usability to that social network site and encourage the competitor sites to catch up, so that social media will allow users to be connected continuously and in real time. Harper (2010) argued that the issue with social media was not the time users spent communicating through it, but that they were not communicating in the correct way. People were limiting all their communication to social media. In an article for *Observer* he reflected:

Facebook post, for example, is ephemeral and does not necessarily expect an instant response, a text message is short and quick, a letter may be designed to carry some greater weight, an occasion may demand a telephone call or an email might suffice.  
(p. 33)

It could be said that social media are useful communication tools when used properly, that is, when combined with the other media. In 2008, Li and Bernoff found that the impact of social networking in relationships is more profound than the way technology has changed. This finding leaves the door open to the possibility that social media as a communication channel can be of huge influence to long-distance relationships. Perez-Latre, Blanco, and Sanchez (2011) claim that social networks tend to strengthen existent relationships and “building bridges between the online and the offline worlds” (p. 67).

### **Research Questions**

The present study addressed the following research questions:

**RQ1:** What are the most popular media used to communicate in long-distance relationships?

**RQ2:** Are those in long-distance relationships more likely to use rich or lean media?

**RQ3:** Do family, friends, and romantic partners differ in their selection of media?

## **Method**

### **Sampling**

For this study, snowball sampling was employed (Goodman, 1961). It is a non-probability (non-random) sample used when the population's characteristics are hidden, difficult to find, rare, and closely connected. It is also called "chain referral sampling" (Biernacki & Waldorf, 1981) and employs referrals among people who share some characteristic of interest to the research. The sample was comprised of 87 participants who have experienced a long-distance relationship of any type.

### **Procedure**

A survey (see Appendix A) was distributed in an online questionnaire via Facebook to gather the data. The method was chosen to gather characteristics of the population and provide a realistic context with reasonable cost. The study was submitted to and approved by The Human Subjects Research Office of RIT in advance of gathering the data.

The first part of the survey included a statement of informed consent which participants were required to agree to before completing the questionnaire. The survey was posted on the SurveyMonkey website and sent via mobile chat and social media, starting with five primary subjects who recruited other participants until a total of 90 surveys were completed. Participants who have never had a long-distance relationship of any kind were eliminated from the sample.

### **Participants**

Of the total participants, 11.49% were between 18 and 20 years of age, 19.54% between 21 and 25, 47.13% between 26 and 30, 16.09% between 31 and 35, 3.45% between 36 and 40, 1.15% between 41 and 45, and 1.15% has between 46 and 50. The sample was comprised of 68.97% female and 31.03% male respondents. Of all the participants, 42.53% said they were single, 12.64% engaged, 37.93% married, 3.45 living with a partner, 2.3% divorced, and 1.15% separated. When asked about the type of their most recent long-distance relationship 34.48% responded family, 11.49% friend, and 54.02% romantic partner. Of the total number of respondents, 14.94% held a long-distance relationship for 6 months or less, 20.69% from 7 months to 1 year, 25.29% between 1 and 2 years, 12.64% between 2 and 3 years, and 26.44% for more than 3 years.

### **Results**

Research question 1 states, “What are the most popular media used to communicate in long-distance relationships?” The media were used most in the following order: Instant Messaging, social media (Instagram, Facebook, Twitter, Snapchat, etc.), telephone (cellular, mobile, or landline), online video chat, online audio chat, SMS, and regular mail (see Table 1 and Figure 1).



Table 1

*Most Popular Media in Long-Distance Relationships*

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Medium	Mean Rank
Instant messaging (such as Facebook Messenger, iMessage, SKYPE)	2.64
Social media (Instagram, Facebook, Twitter, Snapchat)	3.33
Telephone (cellular/mobile or landline)	3.34
Online video chat	3.71
Online audio chat	3.96
E-mail	6.16
SMS	5.91
Regular mail	6.94

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Table 2

*Approximated Media Richness Rankings from Lean to Rich (Hornung, 2015).*

---

Lean

- Data reports
- Written letters
- Written memorandum
- Twitter
- Email
- Facebook status/Wall post
- Text messaging
- Online chat rooms

Rich

- Instant messaging
  - Voicemail
  - Telephone
  - Video chat
  - Google+
  - Multimedia smartphone
  - Group face-to-face meeting
  - 1:1 face-to-face meeting
-

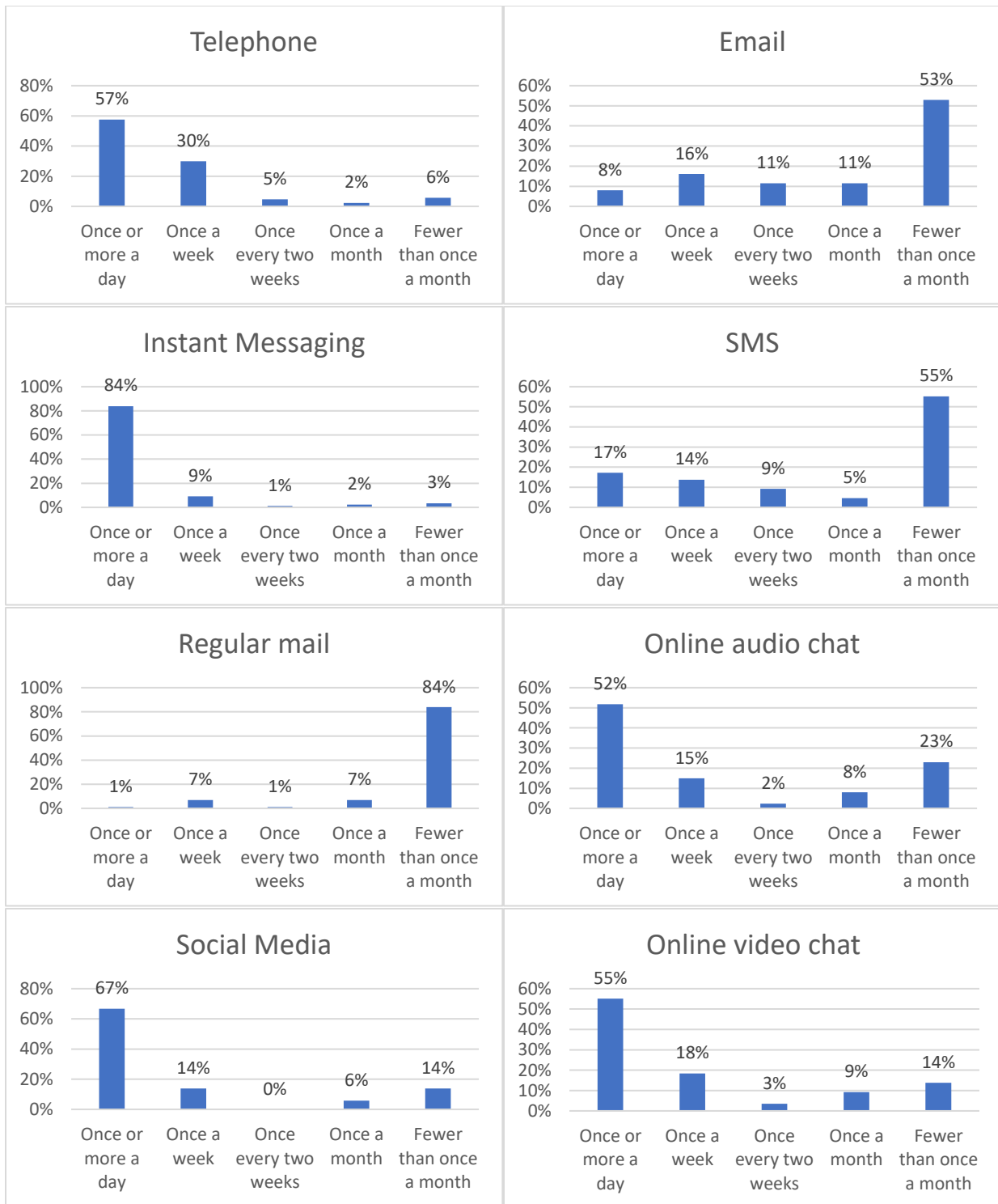


Figure 1. Frequency of media use by percent.

Research question 2 asked, “Are those in long-distance relationships more likely to use rich or lean media?” Using Hornung’s (2015) media richness rankings (see Table 2) the media

used in the present study were collapsed into two categories. Mail, e-mail, and short message service (SMS) were classified as “lean” while instant messaging, telephone, video chat, audio chat, and social media were classified as “rich.” Using the Wilcoxon matched pairs signed ranks test, respondents were significantly more likely to use rich media ( $z = -8.085, p = .000$ ). This is consistent with media richness theory. Subjects in the present study were comprised of family, friends, and romantic partners. These personal relationships and would tend to favor the selection of richer media.

Research question 3 asked, “Do family, friends, and romantic partners differ in their selection of media?” Using the Kruskal-Wallis one-way analysis of variance, no significant differences were found between these relationships and the use of mail, SMS, email, and social media. However, significant differences were found with Instant messaging, telephone, audio chat, and video chat. Romantic partners were more likely than either family or friends to use Instant messaging ( $H = 7.908, df = 2, p = .019$ ), the telephone ( $H = 15.143, df = 2, p = .001$ ), audio chat ( $H = 7.047, df = 2, p = .030$ ), and video chat ( $H = 20.919, df = 2, p = .000$ ).

In other results, 60.92% of the participants reported that the frequency of use of social networks increased greatly during the long-distance relationship. A total of 35.63% responded that direct messages are the tool they use most in social media, while 33.33% said they maintain communication in social networks using direct messages, stories, chat within the platform, and tweets. On the other hand, 67.82% indicated that they began to follow new profiles in social networks related to their city of origin to keep up with local news and events.

In responding to how satisfied they were with the use of technology as a communication tool in a long-distance relationship, 70.11% answered between very satisfied and satisfied, and

20.69% between very dissatisfied and dissatisfied; 9.2% answered they feel neutral.

Furthermore, in another question, 88.51% responded that they agreed with the statement that the use of technology has improved their long-distance relationship. Similarly, 81.67% said they agreed that the use of social networks has improved communication with their long-distance relationship.

### **Discussion and Conclusion**

Historically, communication has changed based on advances in technology. New technologies naturally reduce or eliminate the use of some media and increase the uses of others. Previous studies that sought to assess the role of computer-mediated communication (CMC) in relationship maintenance found that the use of CMC did not result in less use of other channels of communication. This study arrived at a similar finding about social media versus other media in long-distance communication, by exposing that 57.47% of the participants communicate once or more a day through telephone, which is a conventional medium, not a CMC. However, the telephone is not the most used for remote communication, a total of 83.91% participants answered that they use instant messaging services more than once a day. It should be noted that since 2010 Facebook introduced instant messaging in this platform and in 2013 Instagram did the same. If we take this into consideration, added to the result that 35.63% of the participants pointed to direct messages as the most used tool of social networks in distance relationships, it would make sense to assume that the evolution of social networks responds to the need of users to share content immediately as part of technology-based communication.

It is clear how, when it comes to maintaining a long-distance relationship, technology plays a fundamental role, as Cairncross (1997) said when he proclaimed that the Internet constituted "the death of distance." More than two decades later it has been established that the

Internet and its online platforms have shortened physical distances, and it is the users' needs that have led them to evolve, reinvent themselves, and guide their positioning strategies. This is evident with Facebook's acquisition of Instagram, a social network originally limited to images only that has become one of the most powerful and influential social networks.

This study found that 81.61% of participants accept that social networks have improved their long-distance communication. One of the participants commented that the most challenging aspect about having family members far away is not being able to witness the growth and development of their nephews, but that social networks reduce the feeling of distance, especially when using tools such as stories, which maintain constant and real-time contact.

Perhaps the main finding is that subjects were significantly more likely to use rich media. Although this has been the case with business tasks, it now seems to be true for family, friends, and romantic partners. It should come as no surprise that romantic partners were more likely than either family or friends to use Instant messaging, the telephone, audio chat, and video chat. These are the more immediate media, and best approximate the face-to-face communication. They tend to have more "telepresence."

### **Limitations**

There are some limitations in this study that should be taken into account. Finding a representative sample is always a challenge, and in this case a nonrandom, online snowball survey was the only method used. This limited the pool of respondents, and it would be difficult to generalize to a population. Future research about similar topics would take advantage of gathering data through a variety of other methods, such as focus groups, in-depth interviews, and laboratory experiments.

## References

- Aguila, A. P. (2009). Living long-distance relationships through computer-mediated communication. *Social Science Diliman*, 5(1-2), 83-106.
- Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological Methods & Research*, 10(2), 141-163.  
doi.org/10.1177/004912418101000205
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
- Cairncross, F. (1997). *The death of distance. How the communications revolution will change our lives*. Boston: Harvard Business School Press.
- Chang, S. (2003, May 27). Communication technologies and long-distance romantic relationships. Paper presented at the annual meeting of the International Communication Association, Marriott Hotel, San Diego, CA.
- Dainton, M., & Aylor, B. (2002). Patterns of communication channel use in the maintenance of long-distance relationships. *Communication Research Reports*, 19(2), 118-129.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168.
- Friedman, T. (2005). *The world is flat: A brief history of the twenty-first century*. New York: Farrar, Straus and Giroux.
- Goodman, L. A. (1961). Snowball sampling. *Annals of Mathematical Statistics*. 32(1), 148-170. doi:10.1214/aoms/1177705148.

- Gozzi, R. (1996). Will the media create a global village? *ETC: A Review of General Semantics*, 53, 65-69.
- Institutional Research and Policy Studies. (2009). *Fall Quarter Enrollment Summary*. Rochester, New York: Rochester Institute of Technology (RIT).
- Harper, D. (November 21, 2010). As Facebook finds a new way to chat, do we have communication overload? *Observer*, 33.
- Hepworth, M. (1991). Information technology and the global restructuring of capital markets. In S. D. Brunn & T. R. Leinbach (Eds.), *Collapsing space and time: Geographical aspects of communications and information*. London: Harper Collins Academic.
- Hornung, J. M. (2015). Revisiting media richness theory: Social cues impact on understanding in a textual world. Unpublished doctoral dissertation. Pace University, New York, NY. Available: <https://search.proquest.com/docview/1714139901?pq-origsite=gscholar>
- Johnson, A. J., Haigh, M. M., Becker, J. A., Craig, E., & Wigley, S. (2008). College students' use of relational management strategies in email in long-distance and geographically close relationships. *Journal of Computer-Mediated Communication*, 13(2), 381–404.
- Konijn, E. A., Utz, S., Tanis, M., & Barnes, S. (2008). *Mediated Interpersonal Communication*. Amsterdam: Taylor & Francis.
- Kuch, B., Briones, R., Liu, B., & Jin, Y. (2010). Keeping Up With the Digital Age: How the American Red Cross Uses Social Media to Build Relationships. *Public Relations Review*, 37(1), 37-43.
- Le, B., & Agnew, C. (2001). Need Fulfillment and Emotional Experience in Interdependent Romantic Relationships. *Journal of Social and Personal Relationships*, 440.

- Li, C., & Bernoff, J. (2008). *Groundswell: Winning in a world transformed by social technologies*. Boston, MA: Harvard Business Press.
- McDonnell, J. (2011). Only connect: social relations in an online world. *Media Development*, 58(1), 3-7.
- Mok, D., Wellman, B., & Basu, R. (2007). *Did distance matter before the Internet?* Toronto: University of Toronto.
- Perez-Latre, F. J., Portilla, I., & Blanco, C. S. (2011). Social networks, media and audiences: A literature review. *Communication & Society*, 24(1), 63-74.
- Smith, A., & Zickuhr, K. (2012). *Digital differences*. Washington, D.C.: Pew Internet.
- Stafford, L. (2005). Maintaining long-distance and cross-residential relationships. *Journal of Communication* .
- Reinard, J. C. (2008). *Introduction to communication research*. New York: McGraw Hill.
- Thrift, N. (1988). 'The gambling propensity': Banks, developing country debt exposure and the new international financial system. *Geoforum*, 19(1), 55-69.
- Utz, S. (2007). Media use in long-distance friendships. *Information, Communication & Society*, 10(5), 694-713.
- Wang, H., & Anderson, P. (2007). Computer-mediated communication in relationship maintenance: An examination of self-disclosure in long-distance friendships. Paper presented at the annual meeting of the International Communication Association, San Francisco, CA.



## Appendix A

**Survey**

You are invited to join a research study that seeks to understand the use of social media in long-distance relationship. You will be asked to complete a short survey that should take approximately 5 to 10 minutes. You may stop participating at any time without penalty.

**Risks:** There are no anticipated risks from completing this study.

**Benefits:** This study will result in a better understanding of the use of social media in interpersonal relationships.

**Confidentiality:** Your name will not be associated with the data obtained from this study and will not be published. Every effort will be made to keep your responses and other personal information confidential. Information regarding the study will be stored on a computer protected in accordance with the information security policy at Rochester Institute of Technology. <https://www.rit.edu/security/content/plain-english-guide-information-security-policy>

**Rights as a Research Participant:** Participation in this study is voluntary. You do not have to participate and you may leave the study at any time. Deciding not to participate or deciding to leave during the study will not result in any penalty or loss of benefits, nor will it will harm your relationship to the individuals conducting the study or RIT. If you decide to leave the study, simply exit the survey website.

**Contact Information:** You may contact the investigator at [psotoh@gmail.com](mailto:psotoh@gmail.com) if you have questions or concerns.

Click on Agree to continue.

1. What was your age on your last birthday?
  - a. \_\_\_\_\_
2. What is your gender?
  - a. Female
  - b. Male
  - c. Other \_\_\_\_\_
3. Race (select all applicable boxes)
  - a. White (not Hispanic or Latino)
  - b. Asian
  - c. Black or African American
  - d. Hispanic or Latino
  - e. American Indian or Alaska Native
    - i. Native Hawaiian or other Pacific Islander

4. Relationship status:
  - a. Single
  - b. Engaged
  - c. Married
  - d. Living with a partner
  - e. Divorced
  - f. Separated
  - g. Widowed
  
5. Have you ever been in a long-distance relationship of any kind (family, friends, or romantic partner)?  
 If your answer is NO, you may quit this survey.
  - a. Yes
  - b. No
  
6. What is (was) the status of your relationship?
  - a. Family
  - b. Friend
  - c. Romantic partner
  
7. How long did your most recent long-distance relationship last?
  - a. Fewer than three months
  - b. Three to six months
  - c. Six months to one year
  - d. Between one and three years
  - e. Between three to five years
  - f. Five year or longer
  
8. How often did you communicate with your family/friend/romantic partner during your current or most recent long-distance relationship using the following media?
  - a. Telephone (cellular/mobile or landline)
    - Once or more a day
    - Once a week
    - Once every two weeks
    - Once a month
    - Fewer than once a month
  
  - b. E-mail
    - Once or more a day
    - Once a week
    - Once every two weeks
    - Once a month
    - Fewer than once a month

c. Instant messaging (such as Facebook Messenger, iMessage, SKYPE, Whatsapp,)  
 Once or more a day  
 Once a week  
 Once every two weeks  
 Once a month  
 Fewer than once a month

d. SMS  
 Once or more a day  
 Once a week  
 Once every two weeks  
 Once a month  
 Fewer than once a month

e. Regular mail  
 Once or more a day  
 Once a week  
 Once every two weeks  
 Once a month  
 Fewer than once a month

f. Online audio chat  
 Once or more a day  
 Once a week  
 Once every two weeks  
 Once a month  
 Fewer than once a month

g. Online video chat  
 Once or more a day  
 Once a week  
 Once every two weeks  
 Once a month  
 Fewer than once a month

h. Social Media (Instagram, Facebook, Twitter, Snapchat, etc.)  
 Once or more a day  
 Once a week  
 Once every two weeks  
 Once a month  
 Fewer than once a month

9. If you used real-time audio or video with your friend/family/romantic partner, what was the length of time of the conversation?
- a. Less than 5 minutes

- b. 5 to less than 10 minutes
  - c. 10 to less than 30 minutes
  - d. 30 minutes to less than one hour
  - e. 1 hour to less than 2 hours
  - f. 2 to less than 3 hours
  - g. 3 hours or longer
10. Excluding real-time audio or video conversations, approximately how often, if ever, do (or did) you and your friend/family/romantic partner in your current or most recent long distance relationship communicate with each other using other forms of communication combined?
- a. Less than 5 minutes
  - b. 5 to less than 10 minutes
  - c. 10 to less than 30 minutes
  - d. 30 to less than one hour
  - e. 1 hour to less than 2 hours
  - f. 2 to less than 3 hours
  - g. 3 hours or longer
11. Approximately how often do (or did) you visit your friend/family/romantic partner in your current or most recent long-distance relationship?
- a. Never
  - b. Once a week
  - c. Once a month
  - d. Once every six months
  - e. Once a year
  - f. Less than once a year
12. How did the frequency of social media use change when you were in the long-distance relationship?
- a. Increased greatly
  - b. Increased slightly
  - c. Stayed the same
  - d. Decreased slightly
  - e. Decreased greatly
13. What social media tools do (or did) you use to keep in touch with your friend/family/romantic partner?
- a. Direct messages
  - b. Stories
  - c. Facebook chat
  - d. Tweets
  - e. All of the above
  - f. I never used social media to keep in touch

14. Do (or did) you follow new accounts from your place of origin or the place of origin of your family/friend/romantic partner to keep in touch with local reality?
- Yes, I now follow more local accounts.
  - No, I do (did) not follow any new accounts.
15. How satisfied are (were) you with the use of technology in your current or most recent long-distance relationship?
- Answer for each method:
- Very dissatisfied
  - Dissatisfied
  - Neutral
  - Satisfied
  - Very satisfied
16. Has technology improved your long-distance relationship?
- strongly agree
  - agree
  - undecided
  - disagree
  - strongly disagree
17. Have social media improved your long-distance relationship?
- strongly agree
  - agree
  - undecided
  - disagree
  - strongly disagree
18. What is (was) the most challenging aspect of being in a long-distance dating relationship?