Examining the Effects of Technology on Face to Face Communication

Trina L. Rogers

Marshall University

Abstract

We engage in conversations on a day to day basis and rarely monitor the conversations itself. Today, the forms of communication are becoming more advanced and steering away from traditional ways of interacting with people. Face to face communication is a huge part of our daily lives whether we realize it or not. The positive and negative effects of technology on human interaction are only just the start of a much bigger problem. This study is important because it examines the behaviors and frequent patterns to truly say that technology has influences on face to face interactions. It also helps expand knowledge on what could happen for generations to come. As well as, how technology could be downsized in some ways to have a balance between personal connections and technological interactions. Without a balance of human interaction and technology there could be worse problems to come aside from the ones that are known today, and maybe there is a way to make a change for the future. The goal for this study is to increase the amount of knowledge regarding effective communication and how technology has become dependent in our society today.

Interactions dealing with face to face small groups has been an area of study for years. Using this form of communication in gathering information, performing tasks, learning, teaching, and just to simply get to know someone. In the past, someone relied on mail to keep in contact between family and friends, then the telephone and computer were created to send calls or emails anywhere and everywhere. The evolution of ways to communicate have progressed so much and continues to progress as the years go on. When thinking about the things that contribute to how our society lacks or is lacking communication skills in face-to-face interactions. One main contributor to this communication barrier is technology; more specifically how different types of technology effect relationships, how it negatively effects the process of critical thinking, and how the progression of technology has become so dependable between now and in the past. Although, many don't think that this is a major problem in our society it raises the question of what will happen to the future generations to come?

RQ: How does the use of technology affect people's ability to communicate face-to-face?

Recently in the past few years, people have become more dependent on using technology to talk to one another versus in person. But has this advancement in technology started to limit how efficiently we communicate with one another. Our face to face communications styles may become weaker and not as effective as it used to be. The ineffectiveness of communication between people is likely to be connected to different types of technology used. This being important because in our society today it appears many people don't know how to talk, interact, or learn from one another in different types of settings without using technology to aid them. This literature review will discuss the effects of technology on face to face communication;

focusing on the miscommunications and disadvantages that technology causes on human interactions.

Reviewing the Literature

Using Technology

Every day it's hard not to interact with some form of technology; whether it be a cell phone, a television, or even a computer. Or in other cases, it's hard to walk outside and not see someone else using some form of technology today. As people, we use technology for all kinds of daily uses to help us accomplish a range of tasks. For example, cell phones are used nowadays to facetime friends around the world, text someone about meeting up or getting together for lunch, send an email to someone cancelling a big important meeting because of family mishaps, etc. But with the rapid expansion of technology, the fear of people being too immersed in the digital world and not present in the real world has become a real issue. For example, some games that can be played now replicate a virtual world reality of a person's imagination that they created. In some cases, restaurants are banning the use of electronics in their buildings to increase more face to face interactions (Drago, 2015).

H1: Do people use their devices to communicate more than face to face, or is it just the need to have a device with them always?

Emily Drago conducted field observation and a survey measuring the level of engagement students at Elon University had on their cell phones, other technology, and face to face. The survey was given to recruited participants via Facebook and email; which was composed of 11 questions dealing with technology usage, behaviors, and face to face communication. After she received 100 respondents, based on this, her field experiment was

conducted of four popular areas on campus. The observations took place recording those who interacted with others, those who were on cell phones, those not in contact with devices. After looking at results, 97% of the student carried their phone or tablets with them every time they leave the how. 74% sometime used their devices while they were with family or friends. And 46% communicate via technology more than in person, while 26% said it was the opposite with them. During her field observation, she found similar results regarding technology use and habits on the campus of Elon. Out of 200 students 69% used technology either way and 78 out 134 students, 58% were holding or texting on their cell phone, 16% were wearing ear bud or talking on their devices and 26% weren't using any type of device at all.

Based on the findings and the analysis of the previous studies technology is negatively effecting face to face communication. People are more reliant on communicating through technology and they're neglecting to engage personally even when in the presence of other people. Some limitations to this study were the fact that the survey was only administered through Facebook and email and excluded those who do not regularly check their forms of social media. It was gender bias consisting of 86% female respondents when the campus of Elon's population is made up of 60% female (Drago, 2015).

Overall, this is a generalized study based on the students of Elon University. But it represents some form of consistency to with *H1* and how more people would rather communicate using technology than face to face interaction. There is some type of consistency that most students carry a device with them always, even though they would rather communicate face to face than using technology. This also proves that there is an effect that technology has on people when communicating in different forms.

Online vs. Face to Face Interaction Processes

Over the year distance learning labs or online class have become popular among students at certain universities and even some high school. For many professor, like Dr. Laubach of Marshall University's Sociology Department says, "it's helpful to those who can't be in class that certain day for whatever the reason may be". For others, it's just the preferred method of wanting to take a class. But are these students missing out on face to face interactions with their fellow students and their teachers? Or is it simply faster and more efficient for those who are technical savvy and hate face to face encounters.

H2: Does online classes produce the same interactions as face to face learning?

H3: Is there any real education without face to face interactions?

Patrick J. Fahy, PhD at Athabasca University in Canada conducted a study based on Bales' Interaction Process Analysis. His study consisted of a 13-week distance graduate course, the transcripts consisted of 85,000 words in 534 postings (430 by the students, and 104 by the course instructor). There were 7 out of 9 units and one CMC participation exercise worth 10% of their grade. Each text dealing with some in-depth questions pertaining distance education, learning abilities, and the overall experience. In addressing reliability, 3 coding's occurred the first using categories, the second occurred a year later, and the 3rd was the recording. Coding every sentence in the transcripts was not necessary if the interaction process was present. The agreement level of 67% was achieved between the second and third coding.

In the findings, gender was not a factor in the participation because both women and men received back approximately equal numbers of messages. The online groups showed less negative socio-emotional behavior. Both the online and face to face groups were similar in tasks

asking processes. Task-giving opinion was at the higher end and giving suggestion was just below the lowest limit. And in positive socio-emotional processes it varied: solidarity was higher, tension-release was below estimate, and agrees were comfortably in the middle. Online groups differed from face to face groups overall engagement in tension release and giving suggestions, online showed no tension and antagonism, and less disagreement.

Based on these result, Fahy concluded that online communication of this group roughly resembled the face to face group. The lack of negative interpersonal interaction was real, whether this was based on the instructor's presence or the large number of student's opinions. Whether these typical participant's reactions and behaviors can't be determined from this study, it uses the same tool and processes to address that online course like this one is more of a replicant of a face to face interaction (Fahy, 2005). Further examination of these behaviors and the frequency of the pattern would be needed to be analyzed to truly say that online courses replicate face to face interactions. It does perhaps show that there is better liking to the online group because of the less tension and very little disagreement with is something you can't take away from a face to face learning course.

Method

Participants

This study excluded minors under the age of 18, prisoners, and subject without English as their primary language. The targeted population of interest was anyone who is 18 or older. These participants own or have used some form of technology and uses it for communicating purposes.

Procedures

The study was conducted via an online survey through Qualtrics. Consisting of fourteen questions along with the IRB certification stamp and anonymous consent form. It will take the participants up to fifteen minutes to fully complete this survey, and the survey will be live for approximately two weeks. There were minimal to no risks for this research since participants did not report directly to either researcher. The researcher hopes to recruit at least 100-150 participants to complete the study. Hoping to receive more in-depth examinations of behaviors and frequent patterns to truly say that technology renders face to face interactions. This survey was distributed via social media platforms, mass emails, and anonymous link distribution through text. They were first asked general questions dealing with race, gender, age, employment, and education. Followed by questions related to how many devices they have, how often these devices were use, and what they use/prefer when working in groups. Finally, they were asked an overall question of if they prefer to communicate in person or using technology. Thereafter, each participant was thanked for their time and participation.

Appendix

1) What is your gender?

    a. Male
    b. Female
    c. Other

2) What is your age range?

    a. 18-25
    b. 25-30
    c. 30-35
    d. 40+

3) Are you currently enrolled in school?

    a. Yes- I'm in high school
    b. Yes- I'm in college
    c. No- I'm not in school

4) Do you currently have a job?

    a. Yes-Full time
    b. Yes-Part time
    c. Yes-Season
    d. No-Currently looking
    e. No-Unemployed

5) Do you own a smartphone, tablet, or computer/lap top? (check all that apply)

    a. Smartphone
    b. Tablet
    c. Computer/Lap top
    d. None

6) How often do you use your devices for learning based purposes?

    a. Everyday
    b. Two or Three times a week
    c. Once a week
    d. Once a Month
    e. Never

7) What learning based purposes do you use your device for?

    a. School work
    b. Work Training
    c. Recreational Use
    d. Other (please specify, text box)

8) How often do you use your devices for communication-based purposes in a day? (Text Box)

9) I communicate more frequently via technology than I do in person

    a. Strongly agree
    b. Agree
    c. Disagree
    d. Strong Disagree

10) I currently work in groups via (check all that apply)

    a. In person
    b. Over phone call
    c. Texting
    d. Skype or Facetime
    e. Other

11) I prefer to work in groups via

    a. In person
    b. Over phone call
    c. Texting
    d. Skype or Facetime
    e. Other (please specify, text box)

12) Why do you like to communicate via technology?

    a. Convince
    b. Faster
    c. Dislike in person interactions
    d. Other (please specify, text box)

13) Why do you like to communicate via in person?

    a. More personal
    b. Less miscommunication
    c. Dislike technology
    d. Other (please specify, text box)

14) I prefer to communicate overall via

    a. In person
    b. Through technology

Results

  This study received a total of 108 participants. The overall result of the survey was that 80% preferred to communicate in person. In the overall ratio of participants 79% were females, the largest age range was tied between 18-25 and 40+. At least 99% of all the participants had one of thee three devices, the overall usage was everyday ranging from 30 minutes a day to 15 hours a day. More people used their devices specifically for recreational use, but when it comes to group work they preferred to work in person instead of using technology. People use technology for convenient purposes, however, communicating in person was more personal. This survey proved that more people like to communicate face to face compared to the literary review and research found during the beginning stages of this study. Some unintentional findings that were cool to learn were that a few people didn't own a cell phone at all and never use technology unless they must. Some used their devices for other needs that were never thought of before. While others caught on to important aspects that we miss when communicating through technology; such as lack of nonverbal, emotions, vocal tones, and that technology can create miscommunication when working in groups.

Reflections

After conducting this study, I received a better appreciation for a different emphasis in communication studies than my own. One thing that I would have done differently would have been to narrow my survey questions to be more specific, along with going more in depth with each question. For example, I would have asked questions geared toward why they prefer one way over the other when communicating and how these devices effect their daily relationships. I felt my survey consisted of general and basic questions to find a lead to begin research. Also, I would have liked to target different areas and groups of people. Such as, bigger cities and populations where there is more technology being used on a day to day basis. If I were to continue this study, I would delve deeper into the subject by targeting teachers in their preferred style of teaching, how they adapt to online classes vs. on campus class, and how they would go about encouraging student to interact with other students outside of using technology. As well as, learning what works better for students to learn in colleges with larger settings. For example, campuses (UCLA, WVU, etc.) that have classes with a cap of 50 to 100 students. To essentially compare if these types settings cause technology to have an effect on face to face communication.

References

Arbaugh, J. B. (2000). How classroom environment and student engagement affect learning in Internet-based MBA courses. *Business Communication Quarterly*, *63*(4), 9-26.

Bordia, P. (1997). Face-to-face versus computer-mediated communication: A synthesis of the experimental literature. *Journal of Business Communication*, *34*(1), 99-118.

Drago, E. (2015). "The Effect of Technology on Face-to-Face Communication." *Elon Journal of Undergraduate Research in Communications*, *6*(1). Retrieved from http://www.inquiriesjournal.com/a?id=1137

Fahy, P. J. (2005, September 9). *Online and Face-to-Face Group Interaction Processes.* Retrieved from Bales' Interaction Process Analysis (IPA): http://www.eurodl.org/materials/contrib/2006/Patrick_J_Fahy.htm

Frohlich, N., & Oppenheimer, J. (1998). Some consequences of e-mail vs. face-to-face communication in experiment. *Journal of Economic Behavior & Organization*, *35*(3), 389-403.

Lepp, A., Barkley, J. E., & Karpinski, A. C. (2014). The relationship between cell phone use, academic performance, anxiety, and satisfaction with life in college students. *Computers in Human Behavior*, *31*, 343-350.

MARKUS, M. Finding a Happy Medium: Explaining the Negative Effects of Electronic Communication on Social Life at Work.