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**COMMUNICATION: THE LOST ART**

by  
Mary Elizabeth Zenyuk

A Thesis

Submitted to the  
Department of Psychology  
College of Science and Mathematics  
In partial fulfillment of the requirement  
For the degree of  
Master of Arts in School Psychology  
at  
Rowan University  
April 2013

Thesis Chair: Roberta Dihoff, Ph.D.

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## **Dedication**

*I would like to dedicate this manuscript to my family*

## **Acknowledgments**

I would like to express my appreciation to Dr. Dihoff and Dr. Allen for their guidance and help throughout this research.

## **Abstract**

Mary Elizabeth Zenyuk  
COMUNICATION: THE LOST ART  
2012/13  
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The purpose of this study was to determine if technology, specifically text messaging, has an affect on young adult's face-to-face communication. Technology is improving on a daily basis. This continuous evolution and advancement in technology has paved the way for numerous methods of communication such as texting and social media. Not only has the methods of communication increased, so has the access to these methods become unlimited. This study is important to analyze how individuals are adapting their communication habits to conform with changing technology. A survey was developed and consisted of questions such as the student's age, major, preferred mode of communication, and approximately how many text messages they sent per day. Out of 116 participants 74% preferred to talk on the phone, 23% preferred to talk through text messaging, and 3% preferred to talk in person.

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## **Chapter 1**

### **Introduction**

Technology is improving on a daily basis. This continuous evolution and advancement in technology has paved the way for numerous methods of communication such as texting and social media. Email, text messaging, Face Time, and social networks are forms of electronic communication used daily by an increasing number of individuals. Webster Dictionary defines technology as the, practical application of knowledge especially in a particular area (Webster, 2012). Online dictionary defines technology as, “the branch of knowledge that deals with the creation and use of technical means and their interrelation with life, society, and the environment (Dictionary, 2012). Nye (2006) defines technology as simply evolution. Not only has the methods of communication increased, so has the access to these methods become unlimited. Even though technology impacts every aspect of our lives, how has it impacted our face-to-face communication skills? Electronic communication is becoming a reliable and chosen form of communication. Stacy Hanke, owner of 1<sup>st</sup> Impression Consulting Inc, states that, “There’s a real danger to the maintenance and perception of meaningful communications and personal and professional relationships. If individuals become overly dependent on e-mail or text messages, they will focus on the object, but not the person. As a result, individuals become uncomfortable communicating face to face” (Hanke, 2011). In text messages and e-mails the human element and content are absent (Hanke, 2011). Interpersonal communication is necessary for humans. Through previous studies and my own research, I hope to gain insight into this topic. The subject of this research is communication, specifically the affect of texting on young adults’ communication skills. This study is important to analyze how individuals are adapting their communication

habits to conform with changing technology. In order to become effective communicators, we must understand how others interpret our communication skills, which requires self-awareness. This self-awareness will allow us to adapt our styles to meet the needs of others. My method of research is to collect data through surveying and reviewing studies previously completed. I will survey Rowan University students through the Rowan subject pool. My survey will include such questions as the individual's age, major preferred mode of communication, and approximate number of text messages sent daily. This study may include some limitations such as a limited population size since I will only be surveying Rowan University students. My hypothesis is that technology, specifically text messaging, has negatively affected one's preference for face-to-face communication. My intuitive understanding based on components of this study suggests that electronic communication has a negative effect on individual's communication skills. This research should develop throughout the following chapters. Chapter two outlines the review of literature that applies to this area of research. The literature review includes prior research and existing literature on the relationship between technology and communication as well as the relationship between text messaging and academic progress. Chapter three focuses on methodology of the research. The experiment used a between-subjects design. A Two-way analysis was used to test the data. Chapter four will provide the results and an analysis of the research. A summary, conclusions, and suggestions will be found in chapter five.

## **Chapter 2**

### **Introduction**

Review of the literature will be presented in three major discussions. The definition of technology will be presented first followed by the different forms of technology and the advances in technology. Following this discussion will be the relationship between technology and communication, specifically text messaging and communication. Included in this discussion will also be the relationship between text messaging and academic progress. The final review will be of adolescent literature pertaining to texting and the link between face-to-face communication. Included in this discussion will also be a review of the limitations of available research.

#### **2.1 Definition of Technology**

Many researchers, along with individuals, have tried to define technology, leading to numerous definitions of the term. However, according to Webster's Dictionary, technology is defined as the, practical application of knowledge especially in a particular area (Webster, 2012). Online dictionary defines technology as, "the branch of knowledge that deals with the creation and use of technical means and their interrelation with life, society, and the environment (Dictionary, 2012). Nye (2006) simply defines technology as evolution. Technology is continuously evolving. There are many forms of technology including cell phones, i-pods, computers, the Internet, instant messaging, texting, MySpace and Facebook accounts, computer and console video games and multimedia (Nikirk, 2009). The millennial generation also known as the i-Kids, the "digital natives" and the net generation is the first generation with technology integrated into their lives (Nikirk, 2009). As stated by Joyce and Leo (2010) science and technology is central to

the experiences of life. Others define technology as a problem because we cannot live without it (Lawler, 2005).

Cell phones were first introduced in the 1980s (Engineering and Physical Sciences research Counsel, 2006) and as prices became more affordable more people were able to own one. Now cell phones seem to be a staple in almost everyone's life. One of the most recent technological advances is that all cell phones come with text messaging as one of the standard features and is no longer an option that must be requested. According to Plester, Wood and Bell (2008) text messaging is the fastest growing mode of communication. One hundred and thirty five billion messages were sent in the first 3 months of 2004 (Plester, Wood, & Bell, 2008). For adolescents, text messaging is one of the most common forms of communication. Text messages, also known as short message service, can be sent inexpensively, sent and received fairly effortlessly, and can take up unoccupied time (Reid & Reid, 2007). An additional benefit of SMS is that messages can be sent when phone calls can not be accepted or placed allowing for continuous communication, as well as privacy between the sender and receiver. According to one study, 75% of U.S. 12–17 year olds owned a cell phone in 2010, compared with 45% in 2004 (Lenhart, Ling, Campbell, & Purcell, 2010). According to the 2008 Nielsen report, Americans increased their use of text messaging by a staggering 450% over 2 years (Reardon, 2008).

## **2.2 Communication**

A majority of research is focused on adolescents using text messaging as a standard form of communication. According to a survey on teens and texting conducted by the Pew Internet and American Life Project, 75% of 12- to 17-year-olds own cell

phones, 72% of all adolescents (88% of cell phone users) use text messaging regularly, 75% of teenagers who use cell phones have service plans for unlimited text messaging, and 54% contact friends daily via text messaging (Lenhart, Ling, Campbell, & Purcell, 2010). This study also found that adolescents interact with their friends via text messaging more frequently than via face-to-face communication. According to the Pew study, 14- to 17-year-olds report sending and receiving 60 or so text messages per day; 15% of youths who use text messaging send more than 200 text messages per day (Lenhart et al., 2010).

Some adolescents prefer to text because it allows them more time to think about what they want to say and how to word it. It also allows them to be informed and candid in their conversation (Reid & Reid, 2007). Not all adolescents prefer to text message. Reid & Reid, (2007) conducted a study that examined whether individuals with social anxiety and loneliness showed a preference between talking on the phone or texting. Their results showed a relationship between loneliness and making a voice call as well as social anxiety and text messaging. According to Reid, M.Sc. & Reid, Ph.D. (2007) results, lonely participants preferred to make voice calls and socially anxious participants preferred to text message. These participants also used texting as a way to pass the time (Reid & Reid, 2007).

Text messaging creates more opportunity for communication among peers (Guan & Subrahmanyam, 2009; Subrahmanyam & Greenfield, 2008). As previously mentioned, text messaging is available when individuals are unable to talk on the phone or want more privacy. When text messaging, conversations are most likely direct and to the point, this allows for a shorter conversation when time is limited. Researchers have

examined the content of adolescents' text messaging as well as language usage. Underwood, Rosen, More, Ehrenrich, and Gentsch (2012) conducted a longitudinal study to examine the content of adolescences' text messaging. They found that their research provided, "rich, and detailed observations of their interactions with peers, parents, and other adults (Underwood, Rosen, More, Ehrenrich, & Gentsch, 2012). They also found that teens were using text messaging as a great support system for each other being intimate with their parents and peers, as well as a way to be hurtful to others in their peer group (Underwood et al., 2012). Approximately 97% of United States college students use texting more than e-mail or instant message (Kelly, 2010). Since cell phones are a key resource for communication and information gathering, many adolescents feel they can not survive without their phones. However, this resource can also have some negative impacts. Text messaging may interfere with things such as face-to-face communication. Individuals that text message often may become uncomfortable with face-to-face communication and are more likely to avoid face-to-face communication. This lack of face-to-face communication may lead to some individuals using text messaging as their platform for cyber bullying (Guan & Subrahmanyam, 2009; Subrahmanyam & Greenfield, 2008).

Text messaging has become the front runner for a new writing style. This new style is known as "textese" and is described as a hybrid between spoken and written English language (Plester & Wood, 2009). "Textese" is based on sound based or a phonological form of spelling. Common abbreviations, also known as "textisms", include letters and number homophones, emtionicons, as well as contractions and "non-conventional spelling" (Thurlow, 2003; Plester & Wood, 2009). Younger individuals

tend to use “textese” and “textisms” more often than older individuals. Many of the contracted linguistics of textese resemble children’s early spelling techniques (Drouin, 2011). According to Kemp and Bushnell (2011), “textese is an important feature of text-message writing, and yet it is not clear that the use of this abbreviated spelling system consistently enhances the efficiency with which messages are read or even written.” Kemp and Bushnell (2011) found that all children were slower and less accurate when reading “textese” compared to regular messages regardless of experience (Kemp & Bushnell 2011).

### **2.3 Academic Skills**

Numerous studies have examined text messaging and its affects on academic progress. Children are in possession of cell phone at a much younger age. This may be positive for parents since they can be in constant contact with their child while tracking their precise location. Because of the young age of children with cell phones, Hofferth and Moon (2012) found it compelling to explore the link between cell phone use and the development of literacy skills. Time spent on the phone could take away from valuable homework and study time. However, text messaging could provide greater reading proficiency because it is a form of written communication that requires some form of literacy (Plester & Wood 2009).

Hofferth and Moon (2012) found that, “the more time spent talking on the phone, was associated with lower scores in a Letter-Word Identification assessment.” This could also be connected to the idea that children who do not like to read, or have a hard time reading, could be more likely to talk on the phone or participate in a none-reading activity (Hofferth & Moon 2012). They also supported their hypothesis that the greater number

of children who sent more text messages would score higher on their reading comprehension test (Hofferth & Moon 2012). One of the most important conclusions that Hofferth and Moon found was that “family factor” had a significant affect on children’s word decoding and comprehension than does cell phone use (Hofferth & Moon 2012).

Many educators claim that students are using textese in their formal writing assignments, although the teachers themselves can understand it, it is not a proper writing style. Drouin and Davis (2009) discuss two memory theories that are relevant to the thought that textese may have a negative effect on literacy. These two theories are retroactive interference and decay. Retroactive interference refers to the idea that new information may interfere with old information (Drouin 2011). Decay refers to the loss of information if it is not used over a period of time (Drouin 2011). Constant use of texts may interfere with the remembrance of the rules of Standard English.

Drouin (2011) examined the relationship between texting and literacy in undergraduate students. He found that students only used textese thoughtfully when deemed ‘appropriate’ (Drouin 2011). This is known as the High-Road theory, defined as making a conscious effort for use Standard English spelling where appropriate (Drouin 2011). Since textese were used more commonly between peers, Drouin mentions the idea of textese being used to initially establish social identities, in an attempt to fit in amongst their peers.

Using a cross-sectional survey sample Wei, Wang, and Klausner (2012) investigated whether texting during class influences students’ cognitive learning. Their results showed that texting during class partially affected students’ attention towards



classroom content (Wei, Wang, & Klausner, 2012). They also found that if students were fully engaged they were less likely to text during class. The results could also indicate that self-regulated students are less likely to text during class and are more likely to pay attention which facilitates cognitive learning (Wei, Wang, & Klausner, 2012).

In 2011 Coe and Oakhill also conducted a study to examine whether or not there is a relationship between children's reading ability and text-messaging behavior. Ten and eleven year olds from the United Kingdom completed three assessments. The study found that although poor readers spent more time on their phone (Coe & Oakhill, 2011), the readers used more textisms in their text messages and were able to read their messages faster (Coe and Oakhill, 2011).

Durkin, Conti-Ramsdent, and Walker (2011) took their exploration a step further, they examined the relationship between text messaging and textese use and literacy and language skills. They studied both typically developing teenagers and teenagers with specific language impairment. These participants completed several standardized assessments of cognitive, language, and literacy abilities, and interviews about their texting habits and were asked to reply to a message (Durkin et al., 2011). They found that those with specific language impairment were less likely to reply to text messages. These individuals had significantly lower reading ability than those who replied back (Durkin et al., 2011). A correlational analysis revealed significant positive relationships between textism density, different types used, and measures of literacy in adolescences (Durkin et al., 2011).

Much of the research previously mentioned had limitations. Some studies, for example Reid and Reid (2007), had shortcomings in their design of the study as well as

potential sample biases. Other studies found that their sample size was too small, this included Coe and Oakhill's 2011 study. Durkin et al., (2011) found that more tests needed to be conducted to determine if individuals with specific language impairment would benefit, in terms of access and participation in peer networking, from supported introductions to texting. Overall the limitations included shortcomings in study designs, sample biases, including small sample sizes, and a need for future testing.

However, generally the research, despite some methodological limitations, had similar conclusions, mainly, texting does not seem to have a negative outcome on literacy among adolescents' and young adults. Considerable attention has focused on youth cell phone use (Lenhart et al., 2010) but less has been paid to its affects on face-to-face communication skills.

## **2.4 Purpose**

This study examines the relationship between text messaging and its affects on face to face communication and academic skills. More specifically, the study assessed the relationship between adolescents and young adults text messaging and its affects on their face-to-face communication skills. If these relationships exist, it would be possible to collect the data from surveys distributed to freshman undergraduate students on their text messaging and communication habits. This review of literature was conducted on the assumption that communications skills are affected by the students' use of text messaging. Before this study could be conducted, it was important to evaluate the literature already existing on this topic.

## **Chapter 3**

### **Methodology**

#### **3.1 Participates**

Approximately 116 College students at Rowan University volunteered to participate in a survey (Appendix A) through the Rowan Pool. The mean age was 18 years old. Through random sampling, 60 males and 58 females were included in this survey. All individuals were included in this survey to measure young adults communication habits. The subjects were not paid and the study did not involve any cost to the subjects. Consent was gained through a consent statement which I provided at the beginning of the survey. It was stated in the survey that individuals under the age of 18 should not continue with the survey. No names were collected on the survey, the subjects were not able to be identified. There was little to no risk for the subjects.

#### **3.2 Materials**

The purpose of my study is to see if today's technology, specifically text messaging, has an effect on young adult's face-to-face communication skills. Communication habits were measure through a survey in which I developed. I asked the subjects their age and major. I then asked the subjects about their preferred mode of communication. They could choose from face-to-face communication, talking on the phone, or text messaging. The subjects were then asked approximately how many text messages they send a day, they were supplied with a wide range to choose from.

#### **3.3 Design**

The experiment used a between-subjects design. A Two-way analysis was used to test the data. The independent variables were major and preferred mode of

communication. The dependent variable was the approximate amount of text messages sent daily.

### **3.4 Procedure**

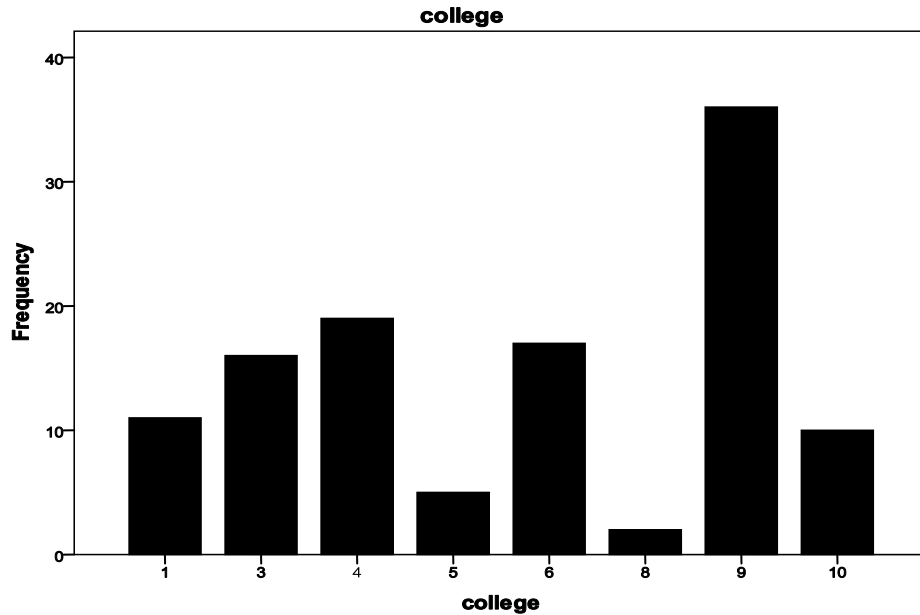
The survey was made available through the Rowan pool. The subjects were able to sign up for the survey at their leisure and given the opportunity to withdraw from the study at any time. I explained the intent of the survey and provided a consent statement. The subjects were then asked to proceed with the following questions; age, major, preferred mode of communication, and approximate number of text messages sent daily. The results were collected through the Rowan Sona System allowing the data to be processed and coded. Once this was complete, conclusions were drawn. The survey was a method to test my hypothesis that technology has an affect on young adult's communication skills.

## Chapter 4

### Results

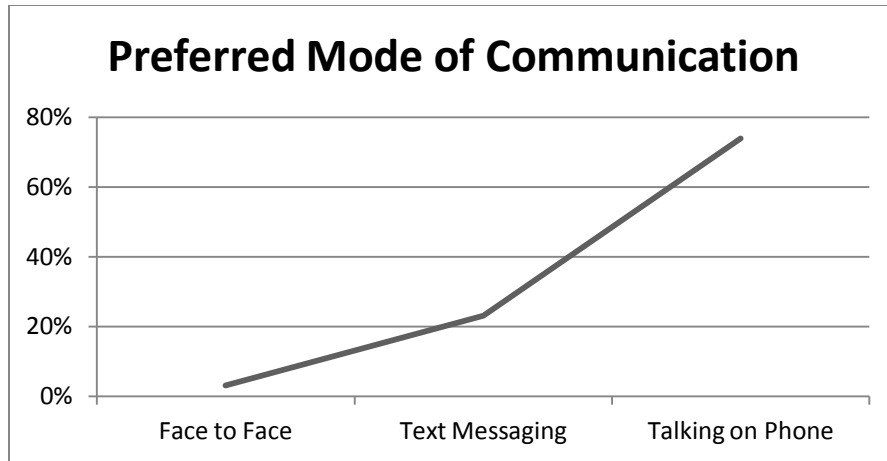
The survey was distributed through the Rowan Sona system. The survey consisted of questions such as the student's age, major, preferred mode of communication, and approximately how many text messages they sent per day. One hundred and eight teen subjects responded to the survey, but only 116 participant's data could be used due to students choosing not to disclose their major. Participants were between the ages of 18 and 20. Through random sampling, 60 males and 58 females were included in the data collection. The purpose of this study was to see if today's technology, specifically text messaging, has an effect on young adult's face-to-face communication skills.

After the data was collected, it was analyzed using a between-subjects, two-way analysis. Out of 116 participants 74% preferred to talk on the phone, 23% preferred to talk through text messaging, and 3% preferred to talk in person. The 3% significantly affected the results. Subjects preferred to talk on the phone over text messaging and talking in person. Students preferred to text message more than talk in person. Data was analyzed utilizing a two way independent sample analysis of variance. The results showed that the mode of communication was significant, ( $F_{df=7.192} p \geq .001$ ). There was no significant result with the participants preferred mode of communication and the participants major. The major was coded into the colleges for the purpose of data processing. The following graphs and charts display the results.



**Figure 1 Disclosed Majors**

Figure 1 shows the participants disclosed major. The majors were coded into colleges for data processing purposes. The majors are coded as follows: Group one is the College of Business, group two is the College of Biomedical studies, group three is the College of Communication of Communication and Creative Arts, group four is the College of Education, and group five is the College of Engineering. Group six is the College of Humanities and Social Sciences, group seven is the College of Medicine, group eight is the College of Performing Arts, group nine is the College of Science and Mathematics, and group ten in for participants who have not yet declared a major.



**Figure 2 Preferred Mode of Communication**

Figure 2 shows that the preferred mode of communication amongst the participants is talking on the phone. Face-to-face communication is the least preferred mode of communication.

## **Chapter 5**

### **Summary, Conclusions, and Recommendations**

#### **5.1 Introduction**

The purpose of this chapter is to summarize the thesis research, discuss limitations, and suggest further research. The first section of the chapter will discuss the objectives of the research and the methodology used to accomplish the study. A summary of major results will be discussed. The second part of the chapter will discuss limitations of the research and propose recommendations for further research.

#### **5.2 Summary and Conclusions**

The objective of this study was to see if technology, specifically text messaging, has an affect on young adults face-to-face communication skills. A survey was developed to achieve this objective. One hundred and eighteen subjects responded to the survey, but only 116 participant's data could be used due to students choosing not to disclose their major. The participants chose their age from four categories, this included 18, 19, 20 and over 20. If the participant was under 18 they were asked not to continue. The participants would then disclose their major. The majors were coded into colleges for the purpose of data analysis. Subjects were then asked about their preferred mode of communication. They could choose from talking on the phone, text messaging, and face-to-face communication skills. Next subjects were asked approximately how many text messages they send a day and were supplied with a wide range to choose from. The experiment used a between-subjects design. A Two-way analysis was used to test the data. The independent variables were major and preferred mode of communication. The dependent variable was the approximate amount of text messages sent daily. The survey was made available through the Rowan pool. The subjects were able to sign up for the survey at



their leisure. They were given the opportunity to back out of the survey at any time. An explained of the survey was given and a consent statement was provided. The subjects when then asked to proceed with the following questions; age, major, preferred mode of communication, and approximate number of text messages sent daily. The results were collected through the Rowan Sona, System allowing the data to be processed and coded. Once this was complete, the following conclusions were drawn.

Out of 116 participants 74% preferred to talk on the phone, 23% preferred to talk through text messaging, and 3% preferred to talk in person. The 3% was an undo weight on the results. Subjects preferred to talk on the phone over text messaging and talking in person. The results showed that the mode of communication was significant, ( $F_{df=7.192} p \geq .001$ ). There was no correlation between the participants preferred mode of communication and the participants major. The major was coded into the colleges for the purpose of data processing. These results show that talking on the phone is the preferred mode of communication. This was very unexpected, although the results still prove my hypothesis to be correct, text messaging does have an effect on young adults face-to-face communication skills.

As previously mentioned in chapter two, text messaging is one of the latest technological advances that comes equipped with cell phones. According to Plester, Wood and Bell (2008) text messaging is the fastest growing mode of communication. One hundred and thirty five billion text messages were sent in the first 3 months of 2004 (Plester, Wood, & Bell 2008). For adolescents, text messaging is a common form of communication that is most often used. Approximately 97% of United States college students use texting more than e-mail or instant messaging (Kelly, 2010). According to

one study, 75% of U.S. 12–17 year olds owned a cell phone in 2010, compared with 45% in 2004 (Lenhart, Ling, Campbell, & Purcell, 2010). According to the 2008 Nielsen report, Americans increased their use of text messaging by a staggering 450% over 2 years (Reardon, 2008). The results of my study agreed with the literature review.

### **5.3 Limitations and Recommendations**

The results of this study show that young adults prefer to talk on the phone over face-to-face communication. As previously mentioned, the results were unusual. It was very unexpected that the subjects did not prefer to text message over all other modes of communication. Only three students preferred to talk face to face.

This study did have some limitations. First it was a limited sample size, the survey was only open to Rowan University students. The results may have been different if the survey were open to a larger and more diverse population. The second limitation was the design of the survey. Some questions could have been worded differently. The third limitation was the participant's majors. There were thirty six participants that were in the same college and only 2 participants in another. As one can see this was extremely out of balance.

These limitations show that there is opportunity for further research. Since participants preferred to talk on the phone there are other questions that could be presented. Questions for future research may include, when do the participants like to talk on the phone, how long do they talk on the phone, who do they typically talk to, and if they call someone and they are forwarded to a voice mail do they leave a message.

As suggested by my research, text messaging does affect young adult's face-to-face communication skills. Technology is improving on a daily basis. This continuous

evolution and advancement in technology has paved the way for numerous methods of communication such as texting and social media. Not only has the methods of communication increased, so has the access to these methods become unlimited. Through previous studies and my own research, I have gained insight into this topic. This study is important to analyze how individuals are adapting their communication habits to conform with changing technology. In order to become effective communicators, we must understand how others interpret our communication skills which requires self-awareness. This self-awareness will allow us to adapt our styles to meet the needs of others.

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## Appendix A Survey

The Purpose of this survey is to see if text messaging affects face-to-face communication skills. The research entitled, "Communication: The Lost Art" is being conducted by Mary Beth Zenyuk of the Psychology Department, Rowan University, in partial fulfillment of her M.A. degree in School Psychology. For this study you will answer some questions about your age, major, communication preferences, and text messaging habits. Your participation in the study should not exceed 15 minutes. There are no physical or psychological risks involved in this study, and you are free to withdraw your participation at any time without penalty. The data collected in this study will be combined with data from previous studies. Your responses will be anonymous and all the data gathered will be kept confidential.

By taking this survey you agree that any information obtained from this study may be used in any way thought best for publication or education provided that you are in no way identified and your name is not used. Participation does not imply employment with the state of New Jersey, Rowan University, the principal investigator, or any other project facilitator.

If you have any questions or problems concerning your participation in this study, please contact Mary Beth Zenyuk at [zenyuk94@students.rowan.edu](mailto:zenyuk94@students.rowan.edu), or her faculty advisor, Dr. Roberta Dihoff, [dihoff@rowan.edu](mailto:dihoff@rowan.edu)

1) What is your age:

- 18
- 19
- 20
- Over 20

2) What is your major:

- |                  |                                                     |
|------------------|-----------------------------------------------------|
| Accounting       | <input type="checkbox"/> Biochemistry               |
| Advertising      | <input type="checkbox"/> Biological Sciences        |
| Africana Studies | <input type="checkbox"/> Business: Entrepreneurship |

American Studies	<input type="checkbox"/> Business: Finance
Art Education (BA)	<input type="checkbox"/> Business: Human Resource Management
Art-General Fine Art (BA)	<input type="checkbox"/> Business: Management
Athletic Training	<input type="checkbox"/> Business: Management information Systems
Business: Management	Medicine
Chemical Engineering	Music (BA)
Chemistry	Music: Composition
Civil Engineering	Music: Jazz Studies
Communication Studies	Music Education
Computer Science	Music: Performance
Early Education (P-3)	Nursing
Economics	Physiology & Religion
Electrical & Computer Engineering	Physical Science
Elementary Education (K-5)	Physics
English	Planning
Environmental Studies	Political Science
Exploratory Studies	Psychology
Geography	Public Relations
Geographic Information Systems (GIS)	<input type="checkbox"/> Radio-TV-Film
Health and Physical Education	Sociology
Health Promotion & Fitness Management	<input type="checkbox"/> Spanish

History

Studio Art

Journalism

Subject Matter Education (K-12)

Law and Justice Studies

Theater Arts

Liberal Studies: Humanities/Social Sciences Undecided

Liberal Studies: Math/Science

Writing Arts

Mathematics (BA/BS)

Mechanical Engineering

3) What is your preferred mode of communication?

In Person

Talking on the phone

Text Messaging

4) Approximately how many text messages do you send per day?

0

1-10 per day

10-20 per day

20-30 per day

30-40 per day

40-50 per day

50-60 per day

60-70 per day

70-80 per day

80-90 per day

90-100 per day

Over 100 per day