The Effects of Smartphones on Social Lives: How They Affect Our Social Interactions and Attitudes

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THE EFFECTS OF SMARTPHONES ON SOCIAL LIVES:
HOW THEY AFFECT OUR SOCIAL INTERACTIONS AND ATTITUDES

by

D’Juan Gladden

B.S., May 2016, Old Dominion University

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Approved by:

Karina Arcaute, Ph.D.

SEPS 636 Instructor
ABSTRACT

New technologies available with cellular devices and the introduction of smartphones have become a large part of individual’s lives in the past few decades. Smartphones have the ability to perform almost every operation necessary for individuals at any time or place. Smartphones are means for individuals to communicate quickly while interacting on other websites and social networking platforms at the same time. Each day the capabilities of smartphones continue to grow and allow users to establish more information through these mediums, without the extra work of using other devices and programs.

The study investigated the daily usage of smartphones by individuals in different age groups. The study included a 13-question survey that asked questions about participants’ daily use of smartphones, including the social media applications they used, and hours spent using them. There were 20 participants in the study, and 6 of them responded to the 3 optional open-ended questions to describe any personal experiences participants have had with their smartphones. The data obtained from the surveys was compiled into graphs and tables to categorize the respondents into gender, age group, hours spent using smartphones, and the smartphone applications most used. A descriptive qualitative analysis was used to examine the findings in the study. The results of the study showed that the majority of respondents spend 3-5 hours a day using their smartphones, with 75% of respondents saying that they used Instagram and Facebook most. The conclusions of the study indicate that individuals in the 18-30 age range are the ones most affected in their social interactions because of the reliance on smartphones. These younger individuals use the smartphones as their main form of communication.
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CHAPTER I: INTRODUCTION

On April 3, 1973 the very first cellular phone was invented and used by an associate of Motorola (Goodwin, 2017). Since 1973, cell phones have grown in their capabilities and features, and are now an essential item in the hands of almost every individual. Numerous smartphones have the capability to access applications that allow emailing, sending messages to other cell phone devices, accessing school and work websites, and connecting on various social media platforms that are popular today. More specifically, most individuals rely on their cell phones to get through their daily plans, activities, and responsibilities. In addition to that, cell phones have become a sole means of communication for individuals and in the same sense, a distraction as well in the last decade (Westenberg, 2015). Cellular phones have taken away the more personal conversations that we used to have when they were not around. Now, individuals will plan to spend time with others while actually spending time together on their cell phones.

The introduction of the first smartphone came around in 1992 (Tweedie, 2015). A smartphone is considered to be the combination of the traditional personal digital assistant and cellular phone; they integrate mobile phone capabilities with more common features of a handheld computer (Beal, 2008). Smartphones are quite convenient for many of our busy lives, because we can easily send a text message to relay information or swiftly send an email to accomplish the same goal as we would interacting in person. The many capabilities of a cell phone make life easier for many individuals with simple clicks and swipes all the time. Despite the many benefits associated with smartphones and their capabilities to convenience our lives, it is important to ask the question, how have cell phones changed our ability to interact socially? Furthermore, are cell phones affecting us in a good or bad way, or both, in that way? In this study, a survey for individuals to rate their dependence on smartphones to communicate was designed and used to
collect information from individuals ages 18-55. The collected data was analyzed to determine how cell phones affect social interactions among individuals and provide an insight on why this is happening.

**STATEMENT OF THE PROBLEM**

The problem most individuals face with smartphones is that they are no longer able to hold face-to-face conversations or communicate effectively in person because they have been communicating solely through the systems available on the smartphones. Individuals often are likely to miscommunicate and further, misunderstand information through the use of cell phones, as well. This is extremely prevalent in the cases of younger adults and teenagers who use cell phones more frequently than others and are quite dependent on the devices (Smith, 2017). Individuals rely on their smartphones for to communicate through different mediums. As stated by Katz and Aakhus (2002), the novelty of mobile phone technology, and its intrusive power into people’s lives, allow us to observe aspects of the human communication process that would otherwise escape our attention, or at least be extremely difficult to discern. There have even been social anxiety and loneliness accusations said to come from too much smartphone and social media use linked together (Gao, 2016).

**PURPOSE OF THE STUDY**

The purpose of this study is to determine whether smartphones and their wide range of capabilities are affecting individuals in real life social interactions and in what ways. It is important to attempt to find out the link between smartphones and social interactions. Participants in the
The present study will be separated into three groups depending on their age. The three age groups will include the younger generation ages 18-28, then ages 29-40, and lastly ages 40-55.

**RESEARCH QUESTIONS**

The present study will address the following research questions:

- How do individuals in different generations perceive the usage of smartphones?
- How does the amount of time you spend on social media platforms through smartphones limit your face-to-face interaction?
- How have smartphones produced anxiety in any of your social settings in real life?

**SIGNIFICANCE OF THE STUDY**

The significance of this study is that it will provide an insight to the recognized reliance on smartphones to communicate in this day and age. The findings in the study will be beneficial because most individuals do not realize how much smartphones hinder their social abilities, even in the minor ways. An example is that it has been said that some suffer from social anxiety, as caused by the overuse of the cell phones. According to Sapacz et al. (2015),

“Social anxiety is described as a fear of social situations, resulting in avoidance of social situations or otherwise feelings of anxiety and stress when encountering the feared situations. It has been suggested that individuals who experience social anxiety tend to be more compulsive smartphone users.”
It will be significant to learn how many people show signs or characteristics of said social anxiety. However, cell phones have also proven to be somewhat positive in aiding social interaction with others. According to Wei and Lo (2006), focusing on the social role of the conventional telephone, past research (Pool, 1977), suggests that the fixed telephone facilitated the transformation of America into a decentralized matrix of what Aronson (1971) called ‘intimate social networks,’ geographically scattered ‘psychological neighborhoods.

ASSUMPTIONS

In conducting this study, the following assumptions were made. It was assumed that:

1. Smartphone use can cause social awkwardness or nervousness in public settings.
2. Most individuals have at least one social media account.
3. Individuals make decisions based on social media influence.
4. Individuals use social media outlets and communication means of smartphones to distribute messages of all kinds to other people.

LIMITATIONS

- Only a small group of individuals who frequently use smartphones will be evaluated in this study.
- Every type of social interaction will not be measured.

DELIMITATIONS

- There are only two individuals from each age group looked at in the study.
- The study does not reach every age group that utilizes a cell phone.
- The study is limited to the areas of Virginia, Maryland, and District of Columbia.
The population consists of undergraduate students in the College of Education that will be used to collect and analyze data in this study.

DEFINITION OF TERMS

**Cell phone**: a portable telephone that connects to other telephones by radio through a system of transmitters each of which covers a limited geographical area.

**Smartphone**: a mobile phone that performs many of the functions of a computer, typically with a touch screen interface, Internet access, and an operating system capable of running downloaded applications.

**Social**: likely to seek or enjoy the company of others.

**Interaction**: doings between individuals or groups.

**Social connectedness**: the relationship people share with others.

**Social anxiety**: the fear of social situations that involve interactions with other people.

**Social media**: websites and applications that enable users to create and share content or to participate in social networking.

SUMMARY AND OVERVIEW

This study will examine how smartphones affect social interactions and experiences for individuals at different ages, who communicate with different purposes. Chapter one introduced the reader to the statement on the problem, which is to reveal the role smartphones play in our social interactions on a daily basis.
A review of literature is provided in Chapter II in an attempt to identify the current state of smartphone usage and social interactions. The gaps in the literature justifying further research are also presented in Chapter II. Chapter III details the methods and procedures used to collect the data required to complete the study. The findings of the study are presented in Chapter IV. Chapter V offers a summary of the results and conclusions, as well as recommendations for future research.
CHAPTER II: LITERATURE REVIEW

While there are many influences of smartphones and their many capabilities on the lives of several individuals, this section will focus on the social aspects that affect individual’s lives directly because of smartphones. This chapter will cover the increased capabilities of smartphones in this decade to explain why these influences exist. This chapter will next introduce the research associated with the ideas and concepts revolving around this topic to include: social anxiety as a result of major dependence on smartphones, inability to hold regular conversations, and less contact with the outside world.

SMARTPHONES

Smartphones are mobile phones that perform many of the same functions as a computer, typically having a touchscreen interface, Internet access, and an operating system capable of running downloaded applications. Smartphones have changed the way individuals interact and bond with the entire world around them (Drago, 2015). In most circumstances, smartphones engage individuals in many more ways than computers can. With the many social networking sites that are available and popular to younger individuals, there is a way to communicate through any medium, whether that is social networking websites, messaging, or e-mail communication. Although the social networking sites accessible to these smartphones have some positive effects, they also have their share of negative effects. The negative effects will be explored more in depth in this study.
DEPENDENCE ON SMARTPHONES

Social needs, social influences, and the convenience of the smartphone are all factors that contribute to an individual’s dependence on the smartphone that they possess. People, in this day and age, are attached to their smartphones and use them to access any information they may need. Evidence was found in a study that proved there is a significant relationship between social needs and smartphone dependence (Sapacz et al., 2015). Social needs are the strongest force that allow students and people in general, to be most dependent on the smartphones. This dependence on social networking sites and smartphones for facts and different issues occurring could be misleading, because there is information that is not completely reliable on these websites. Since so many individuals are so vulnerable to information they find through these mediums, it is becoming more difficult for them to distinguish what is real and what is not. Smartphones and social media that is associated with them, can also serve as a “distraction” to the individuals who rely on it the most. In addition, it can “decrease productivity” among the students who are consumed by it (Al-Badi et al., 2014).

SOCIAL ANXIETY AND LONELINESS

Smartphones have grown to be such an important part of our lives because they are constructed with communication capabilities that are extremely similar to that of a computer, just more convenient due to their portability. There have been several studies performed by different groups of individuals that show a correlation between individual’s personalities and emotions and cell phone/smartphone usage. Social anxiety and loneliness happen to be two important characteristics that can be negatively correlated with smartphone usage. Social anxiety and loneliness are both factors that add to most poor quality relationships or the lack there of.
According to Blumenthal et al. (2011), social anxiety is characterized by an intense, pervasive fear of negative evaluation or of acting in a manner that is potentially embarrassing while under the scrutiny of others. A recent study showed that the Big Five personality traits (extraversion, agreeableness, openness, conscientiousness, and neuroticism) are displayed through smartphone usage. In a study done by several contributors, participants were separated into different groups based on the levels of social anxiety or loneliness that they displayed (Cherry, 2017). The Wilcoxon-Mann-Whitney test was used to evaluate the factors of social anxiety and loneliness brought about by smartphone usage and dependence (Gao, 2016). The factors that contributed to individuals with high levels of social anxiety were the ones making outgoing calls in the evening and barely receiving incoming calls. This demonstrated that the individuals basically avoided confrontation with others, based on their smartphone usage. As far as loneliness, the individuals barely received any incoming calls under any circumstance.

SOCIAL STRESS

Social stress is said to come from an over excessive use of smartphones, too. Because there are so many individuals who use smartphones to communicate so frequently, certain maladaptive habits are or can be formed. According to a study in Computers in Human Behavior (Sapacz et al., 2015), maladaptive habits can cause unintended behavior to include constant unintentional urges to check the smartphone at random, or possibly, the wrong times. Since overusing smartphones can lead to addictive behavior, emotions come into play. Because so many individuals are devoted to their smartphones, it is possible for them to develop anxiety or social stress when the phone is not in clear sight or reach. It is evident that it is harder for individuals to interact in social settings, if the smartphone is not there to guide them, in a way.
SUMMARY

Chapter II was a review of the research on the way smartphones effect social lives differently. Though there are both good and bad influences of smartphones, these social aspects are steadily changing and making it more difficult to maintain regular social lives with the heavy reliance on smartphones. There are several impacts that these smartphones have on individual’s lives, and will continue to have as the capabilities grow every day.

CHAPTER III: METHODOLOGY
This study was designed using a qualitative correlational survey approach. Overall, the research design includes a survey consisting of a series of basic questions related to demographic characteristics of the respondent, as well as use of smartphone as a social tool and means of communication, statements with a Likert-type scale for respondents to state their level of agreement or disagreement related to their smartphone use, and open questions for each participant to explain an example of smartphone use and how it has affected their social interactions. The survey also provides an optional series of open-ended questions that are able to be answered by typing two to three sentences in provided space of survey, if they choose to participate in that area of the study. These open-ended questions provide the option for participants’ to express their opinions on the significant experiences they have encountered that relate to their use of smartphones. These methods and procedures to conduct the study were assessed by the Old Dominion University College of Education Human Subjects Review Committee (see Appendix A for the letter of Determination of Exempt Status).

RESEARCH QUESTIONS

The research questions in the study include:

- How do individuals in different generations perceive the usage of smartphones?
- How does the amount of time you spend on social media platforms through smartphones limit your face-to-face interaction?
- How have smartphones produced anxiety in any of your social settings in real life?

PROCEDURES
In the study, each participant was provided the survey to complete in depth. The participants were allotted the chance to express their opinion on how the smartphones affect their social interactions and how this usage may directly correlate with any personal experience they may have. The surveys were then examined in detail to create tables that display the results and findings of the questions and agree/disagree items.

**RESEARCH SETTING/CONTEXT**

The research in the study was conducted in the DC, VA, and MD area. The setting was ultimately based on the participant, because the surveys were available to them at their disposal through a link formulated on the Qualtrics website.

**PARTICIPANTS**

The participants in the study included a random sample of 20 individuals. The individuals ranged in age from 18-55. These age groups varied with individuals that spend a significant amount of time using smartphones on a daily basis to some that may not. It was expected that participants in the study will include young adults who use smartphones for sole means of communication, to young working adults who connect socially quite frequently, to the older generation of working and retiring individuals who use smartphones less frequently but still for a great deal of activities. The participant responses were grouped into three age groups, including the younger generations ages 18-28, then ages 29-40, and lastly ages 40-55.

**DATA COLLECTION**
The research was conducted via an online survey that was developed in Qualtrics. Before responding to the survey, participants were informed of the purpose of the survey through an e-mail that was sent to distribute the survey. See Appendix B for full survey, and Appendix C for the cover letter in the distribution e-mail explaining the purpose of the study. Each participant was given a chance to either accept or deny the position of being a participant in this study. The emails were sent to randomly selected undergraduate and graduate students in the College of Education at Old Dominion University. The participants were allotted a time span of a week to complete the survey.

RESEARCH INSTRUMENT

The research instrument used in the study was a 13-question survey developed in the online platform Qualtrics. The data requested in questions 1 and 2 of the survey aimed to receive basic demographic information about the participants. Questions 3 through 5 requested information on the participant’s use of their smartphones and their use of social media through the smartphones. Questions 6 through 10 examined the participants’ perceptions and attitudes that are affected by the use of the smartphone and social media linked to them. These questions were more personal and provided further outlook into perceptions connected with and resulting from the use of smartphones. Question 6 asked how much participants communicate through a smartphone, Question 7 asked the participants’ perception about their confidence to speak in social settings. Question 8 explored whether participants preferred texting individuals over face to face interaction. Question 9 asked whether participants’ communicate more clearly through their smartphones and Question 10 asked if participants’ experienced any feelings of loneliness because of constant smartphone usage. In section 2, there were 3 open-ended questions available for
participants to answer or leave empty if they chose. These questions were to describe any personal experiences participants have had with their smartphones as it directly relates to the purpose of the study.

DATA ANALYSIS

The data in this study was analyzed through the use of graphs and tables that represented the different individuals who participated. This study used descriptive qualitative analysis to understand the breakdown of different genders and ages and their specific smartphone use, and experiences directly related to that use. Observations were made through the results found in the survey. After the surveys and answers to open questions were reviewed, responses were tabulated and results were compiled to uncover social behaviors that related to use of smartphones.

SUMMARY

Chapter III presented the methods and procedures used to find diverse data in the research study provided. The research design, population sample and participants, setting, and collection and analysis of data were described in detail. A 13-question survey was developed in Qualtrics and distributed via email to 65 individuals. The survey consisted of ten questions, related to demographic characteristics of the respondent, and statements with a Likert-type scale for respondents to state their level of agreement or disagreement related to their smartphone use; as well as three questions about the participants’ perceptions on their use of smartphones. The data in the study was analyzed in a descriptive qualitative method with graphs and tables used to represent the participants and their preferences.
CHAPTER IV: FINDINGS
The purpose of this study was to identify the different effects that smartphones have on social interactions and experiences in today’s time of extreme technology. This study was done in an effort to understand the deeper effects smartphones have and if there is any direct correlation to the reduction of social interactions. This chapter examines the findings from the data collected through the use of a survey.

**RESPONSE RATE**

There were about 65 individuals selected to receive the link with the survey from Qualtrics. There were 20 individuals who responded and completed the survey, overall. The response rate of the survey was 30.8%.

**DEMOGRAPHIC QUESTIONS**

The individuals were all in different age groups. The **first** question of the survey asked the participant to state their gender and the **second** question asked the participant to state their age. From the total 20 participants, 14 were females, 5 were males, and 1 respondent declined to answer. In terms of percentages, this means that the gender distribution of participants in the study is 70% female, 25% male, and 5% declined to answer (see Figure 1). From the total 20 participants, 7 were in the 18-28 range (35%), 8 were in the 29-40 range (40%) and 5 were in the 41-55 range (25%) (see Figure 2).
Figure 1. Gender distribution of participants.

Figure 2. Age distribution of participants.
SMARTPHONE USAGE QUESTIONS

Question 3 of the survey examined the amount of hours per day each participant spends using his/her smartphone. The most prevalent answer of this question was 3-5 hours per day, with 45% of participants choosing this answer. Table 1 shows the responses to Question 3.

Table 1. Responses to Question 3 How many hours a day do you spend using your smartphone? (Social media, texting, talking, email communication).

<table>
<thead>
<tr>
<th>Answer Option #</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>15.00%</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>45.00%</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>25.00%</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>15.00%</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>20</td>
</tr>
</tbody>
</table>

Question 4 examined the amount of social media applications each participant has available on their smartphone and the applications they use most frequently. The most selected answer for this question were Facebook and Instagram, with more than 75% of the participants reporting using this social media application in their selection. Figure 3 shows the participants responses to the use of social media applications.
Question 5 was used to determine if a smartphone was the only mean of communication for the participants. There were only 5 participants that answered yes to this question. This represents 25% of participants reporting using their smartphone for communication purposes to include social media networking, as well (see Figure 4). The majority of these participants who answered yes were 25 years old or younger, with only one of them being 55.
Question 6 asked how much participants communicate through a smartphone. Responses to question 6 indicate that most of the participants 75% agree or strongly agree that they use their smartphone to communicate with everyone in their life. Question 7 explained the participants’ perception about their confidence to speak in social settings. Responses to question 7 indicate that most of the participants 80% disagree or strongly disagree that they are sometimes nervous to speak in social settings. Question 8 explored whether participants preferred texting individuals over face to face interaction. Responses to question 8 indicate that most of the participants 65% disagree or strongly disagree that they would rather text than communicate face-to-face. Question 9 asked whether participants’ communicate more clearly through their smartphones and Question 10 asked if participants’ experienced any feelings of loneliness because of constant smartphone usage. Responses to question 9 indicate that most of the participants 70% disagree or strongly disagree that they get their message across more clearly through smartphones. Responses to question 10 indicate that the entire group of participants 100% disagree or strongly disagree that they experience a feeling of loneliness because of constant communication behind a smartphone. Table 2 shows the responses to questions 6 to 10 which were on a rating scale.
Table 2. Responses to questions 6 to 10 (rating responses).

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>SMA</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>#6</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>I use my smartphone to communicate with everyone in my life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#7</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Sometimes I am nervous to speak in social settings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#8</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>I often wish I could just text an individual rather than talk face-to-face.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#9</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>When I communicate through my smartphone, I get my message across more clearly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>I experience a feeling of loneliness because I am constantly communicating behind a smartphone.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 2 Responses

The responses collected from section 2, the open-ended questions, were all personal experience and real-life examples from the participants in the study. There were 6 (30%) participants total that answered either one or all of the optional short answer questions. Each participant that responded to these questions was female. The common factor among all these written responses was that the heavy reliance of smartphones in this day and age has put a damper on people’s ability to relate on a more personal level. One participant shared that smartphones have caused her to be lazy when it comes to communicating with others, and does not allow her brain to be challenged much. “Everything is right there for you,” she stated. There is not much room to really think on your own when it comes to learning or communicating when you have a smartphone that does it all for you. Another participant included that when her phone was not in her possession, she had no idea what to do with herself including communication. There were also comments made where the participant described that even though this reliance may not be the best,
it has certainly helped the participant in a lot of ways as well. There were 2 out of 6 participants that stated if it were not for these smartphones and their capabilities, they would not be able to keep up with daily duties and functions. Participants described that they can deal with the social losses smartphones bring just because of the many benefits added. In addition, experiences were also recorded from the same participant that shared how the smartphone affects the members of her family, which further affects her. A female participant shared that the social interactions within the comfort of her own home lack because everyone is always glued to their smartphone and communicating with other individuals, instead of the people they live with.

**SUMMARY**

Chapter IV examined and discussed the results of the surveys collected and the interviews that were completed. The results indicate that the gender distribution of participants was 70% female respondents and 25% male respondents. The majority of participants (45%) reported using their smartphones 3-5 hours per day. There were 75% of respondents who used mostly Instagram and Facebook. For questions 6 through 10, 75% agreed that smartphones were their sole means of communication, 80% disagreed that they are nervous in social settings because of their strong smartphone use, and 65% disagreed that they would rather text than communicate face-to-face. There were 70% that disagreed that their message comes across more clearly through smartphones and 100% disagreed that they experience feelings of loneliness because of their reliance on smartphones. There were 6 out of 20 respondents who participated in the optional open-ended section that believed smartphones put a damper on their social interactions, in one way or another.
CHAPTER V: CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summary of the study, as well as conclusions and recommendations for future research about smartphones and how these affect individuals’ social lives. The summary presents the details of the study and the results obtained. The conclusions
entailed the ideas and facts that were found when data was analyzed. The recommendations provide information that could assist with future research and questions related to this study.

**SUMMARY**

The purpose of this study was to determine whether smartphones had any distinct or direct effects on the experiences individuals face in their social lives and everyday interactions. The important factors to understand throughout the study were the relevance of smartphones in this era, their many functions and capabilities, and the ways they have caused us to be more secluded from the outside world. The goal of this research study was to collect information and examples from actual participants to determine whether individuals experience any social setbacks from the excessive use of smartphones.

There was a total of 20 individuals who responded to the survey in the study. To gather information and data from the participants, a two-part survey was developed with questions about their age and gender, their daily smartphone usage, ideas towards smartphones as they relate to their communication in certain situations, and any personal experiences, either positive or negative, due to dependence of the smartphone. From the 20 total participants, 6 participated in section 2 of the survey to provide any additional details about unique experiences they have encountered.

The results indicate that participants in the survey included 70% female respondents, 25% male respondents, with 45% of respondents reporting using their smartphones 3-5 hours per day. There were 6 out of 20 respondents who participated in the optional short answer section that believed smartphones put a damper on their social interactions, in one way or another. More than 50% of participants consider that smartphones have a negative effect in their social interactions.
CONCLUSIONS

The conclusions found through the completion of this study include:

- The individuals who reported being affected the most in their social interaction due to smartphone use were in the lower age groups such as 18-30 years old.
- The individuals in the younger age group spend more time on their smartphones on a day-to-day basis than those of the older age groups.
- The individuals in the younger age groups, who spend more time using their smartphones, use the smartphones as a main line of communication. Most of this communication is done in their homes and not in face-to-face interactions.
- The more applications and capabilities available to individuals increase the amount of negative social life impacts because the individuals rely solely on these methods.

RECOMMENDATIONS

Based on the research and results of this study, the following recommendations are proposed for future research in the topic of smartphones and their effects on social interactions.

- Increase the number of participants in study in order to make generalized conclusions,
- Increase and diversify the geographic location of participants to include the entire US.
- Include participants under the age of 18 as it has been reported that at least 30% of children 8-10 also use cellular devices (Davis, 2017).
REFERENCES


APPENDIX A: LETTER OF DETERMINATION OF EXEMPT STATUS FROM THE INSTITUTIONAL REVIEW BOARD

OFFICE OF THE VICE PRESIDENT FOR RESEARCH

DATE: September 3, 2017
TO: Karina Arcaute, Ph.D.
FROM: Old Dominion University Education Human Subjects Review Committee
REFERENCE #: 319590
SUBMISSION TYPE: New Project
ACTION: DETERMINATION OF EXEMPT STATUS
DECISION DATE: September 3, 2017
REVIEW CATEGORY: Exemption category # 6.2

Thank you for your submission of New Project materials for this project. The Old Dominion University Education Human Subjects Review Committee has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact Jill Stefaniak at (757) 683-6696 or jstefani@odu.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Old Dominion University Education Human Subjects Review Committee's records.
APPENDIX B: SURVEY

The purpose of this survey is to determine the average smartphone usage individuals of different ages participate in, and how that affects them in real life situations.

Section 1

Directions: Answer the questions to the best of your ability. Place a check mark in the correct response for the questions with a choice.

1. What is your gender? Male ___________ Female _________

2. What is your age? ______________

3. How many hours a day do you spend using your smartphone? (Social media, texting, talking, email communication)

4. How many social media accounts do you use? Select all that apply.
   Facebook
   Twitter
   Instagram
   LinkedIn
   Youtube
   Google+
   Vimeo
   Flickr
   Pinterest
   Reddit
   Snapchat
   WhatsApp

5. Is your smartphone your only means of communication? Yes __________ No __________

Directions: Circle the letters that correspond with your opinion on the following statements. SA=strongly agree, SMA=somewhat agree, A=agree, N=neither agree nor disagree, SMD= somewhat disagree D=disagree, SD=strongly disagree

6. I use my smartphone to communicate with everyone in my life.
   SA   SMA   A   N   SMD   D   SD
7. Sometimes I am nervous to speak in social settings.

SA  SMA  A  N  SMD  D  SD

8. I often wish I could just “text” an individual rather than talk to them face-to-face.

SA  SMA  A  N  SMD  D  SD

9. When I communicate through my smartphone, I get my message across more clearly.

SA  SMA  A  N  SMD  D  SD

10. I experience a feeling of loneliness because I am constantly communicating behind a smartphone.

SA  SMA  A  N  SMD  D  SD

Section 2

11. How have smartphones affected your social experiences in public settings with other individuals? Provide real life examples.

12. What significant experience made you realize how much smartphones play into your social experiences?

13. Are there any additional comments you would like to provide regarding the use of smartphones today?
Dear Selected Participants,

I am a graduate student in the Business and Industry Training Program at Old Dominion University. I am conducting a study to determine how new age smartphones affect the social lives and interactions (mostly negatively) of different individuals at different ages. The use of smartphones from texting and emailing to using social media applications will be evaluated within the study.

It is important to understand how the frequent dependence on smartphones and all they have to offer influence individual’s lives in the real world and in public settings. Most individuals do not realize that the smartphones alter those interactions, even though they present an abundance of advantages to communicating as well.

You are invited to participate in this study by filling out a 2-part survey, and engaging in an interview if you choose. The survey will ask a few demographic questions to begin, and then ask questions that revolve around your daily smartphone usage and your own personal experience with the technology. The survey will offer a section where you can free write about any significant experience that relates to the study.

Your participation is completely up to you. However, it would be greatly appreciated if you took the time to participate in the study. The survey will take about 15 minutes to complete. If you choose to participate in an interview, the interview will take around 15 minutes as well. There will be no surveys released to any person or in the findings of the study. The data collected will be the only information included in the findings of the study. I will be the only person that will access the full information in detail that you provided in the survey and/or interview.

The survey will be available at your disclosure through your email once you agree to participate. The survey will need to be completed and sent back by September 25, 2017. If there are any questions or concerns, I can be contacted at dglad001@odu.edu.

Thank you again for your time and consideration.

Sincerely,

D’Juan Gladden