University of Central Oklahoma

Edmond, Oklahoma

Jackson College of Graduate Studies and Research

Exploring Cell Phone Use in Romantic Relationships

A Thesis

Submitted to the Graduate Faculty

in partial fulfillment of requirements

for the degree of

Master of Science in Family and Child Studies

by

Michelle Annette Watson

Edmond, Oklahoma

December, 2015

Exploring Cell Phone Use in Romantic Relationships

A Thesis Approved for

The Department Of Human Environmental Sciences

December, 2015

By

Glee Bertram

Dr. Glee Bertram, Committee Chairperson

Brandon Burr

Dr. Brandon Burr, Committee Member

Brett S. Sharp

Dr. Brett S. Sharp, Committee Member

Dedication

This body of work is dedicated to my late mother, Louise Elizabeth Samples. She was an amazing woman who fought with all her might to keep a raucous bunch of kids together when left alone to raise them. I pray she has a place of honor in heaven. She earned it.

Acknowledgements

I am grateful and humbled to be at this point in my educational journey and have many to thank. My thesis advisor Dr. Glee Bertram has been a constant cheerleader throughout the process. Dr. Bertram and committee members Dr. Brandon Burr and Dr. Brett Sharp have provided ongoing advice, pushed me beyond what I felt was possible and encouraged me to stay the course when life got in the way. Dr. Kaye Sears, Chair of the Department of Human Environmental Sciences, has inspired me to keep moving forward, no matter what life brings. Education was the catalyst to open my mind to new ideas, and these professors have been faithful guides throughout the process.

The desire to return to college to complete my degree was inspired by a group of children in Texas who helped me realize I had a lot to learn about parenting. I would not be where I am today without Ammanuel, Augustine, Bruce, Castle, Daniel, Denver, Felix, Irvin, Kennedy, Lucky, Melecio, Michael, Mickey, Salvador and Shawn. My mission was to teach them, but they became my teachers.

My daughters Meg and Marissa, daughter-in-law Kim and sons Sam and Daniel helped me navigate the numerous hoops of higher education. I would have been lost without their guidance. My children, including sons-in-laws Cory and Shane, and children by marriage and adoption Jessica, Josiah and Laura—all played a part in my education by offering ongoing support and encouragement, editing papers, preparing a home-cooked meal or providing a child to hug. Many family functions were adjusted to accommodate my study schedule. I am exceedingly grateful for my family's patience as I pursued my dream of a college degree.

My grandchildren Emma, Olivia, Ethan, Gavin, Ayden, Molly, Gabe, Owen, Thomas and Lucy were my motivation to complete my degree when it paled in comparison to family matters. I hope these children will see their Granny as an example of the positive impacts of education.

Words cannot express the love and gratitude I have for my husband Marcus. Countless times I called or texted asking him to “pray me through” a class or a project. If there were a limit on prayers, I would have exceeded mine. He has encouraged me from the first day onward and assured me I was doing the right thing. His strength and love have been invaluable.

Thanks to Sherri, Claudette, Gloria and Christa, dear friends who have provided prayers, encouragement and advice many times. Their support was priceless. I had many co-workers who also provided much needed support along the way: Sheila, Liz, Crystal, Alex, Michael, Annette and Chabria.

TABLE OF CONTENTS

LIST OF TABLES ix

ABSTRACT x

CHAPTER ONE: INTRODUCTION 1

Overview 1

Statement of the Problem 3

Purpose of the Study 6

Significance of the Study 7

Content Overview of Subsequent Chapters 7

CHAPTER TWO: REVIEW OF THE LITERATURE 8

Introduction 8

Theoretical Framework—Symbolic Interactionism 8

Past Research 10

Summary 13

CHAPTER THREE: METHODOLOGY 14

Introduction 14

Participants 14

Instrument 14

Procedure 15

Data Analysis 16

Summary 17

CHAPTER FOUR: RESULTS 18

Introduction 18

Descriptive Data 19

Typical Use of Cell Phone 21

Feelings without Access to Cell Phone 22

Tolerance of Cell Phone Use 24

Activities Affecting Time with Partner 25

Relationship Satisfaction 27

Most Valued Interactions 28

Summary 31

CHAPTER FIVE: DISCUSSION AND CONCLUSION 32

Introduction 32

Discussion of Findings 33

Conclusions 39

Recommendations for Future Research 40

Summary 41

REFERENCES 44

APPENDICES 49

Appendix A: IRB Approval 50

Appendix B: Permission to Use Survey Questions 54

Appendix C: Survey Cover Letter 57

Appendix D: Study Survey 59

Appendix E: Protecting Human Research Participants Certificate of Completion ... 65

LIST OF TABLES

Table 1: Participants by age group ……. 20

Table 2: Summary of demographic information ……. 21

Table 3: Number of calls and texts in a typical day …… 22

Table 4: Feelings without access to cell phone ……. 24

Table 5: Tolerance of cell phone use ……. 26

Table 6: Distraction from relationship due to cell phone ……. 27

Table 7: Activities which distract from time with partner ……. 27

Table 8: Activities which promote feeling valued ……. 30

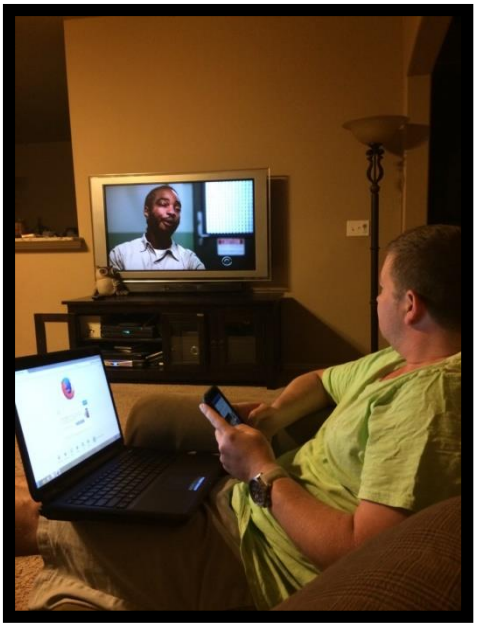
ABSTRACT

Mobile technology has changed the way we interact with people on many levels. The impact of cell phone use on romantic relationships is viewed through the theoretical lens of symbolic interactionism which posits the world is in a constant state of change. Objects are given meaning based on how each person or group uses them, and individuals can act as change agents when needed. The survey was distributed through an online listserv and also through Facebook for diversity. Data were gathered using Qualtrics, a secure, confidential program, to ensure anonymity of respondents. There were 391 adults participants, ranging in age from 18-69. The majority were Caucasian (283) women (290), and over half (53%) were married. Annual income was above $60,000 for 33.6% of participants. Results showed 98% of participants own a Smartphone or iPhone and about half would feel unhappy (52%) or anxious (50%) without access to their phone. Across genders and age groups, calls made and sent averaged less than 10 per day, while texts sent and received averaged 11-30 per day. Visiting social networking sites was the cell phone activity which interrupted time spent with a partner by 69% of respondents. The majority of participants (64.3%) prefer spending time with their partner over calls, texts, media posts, gifts and acts of kindness.

CHAPTER ONE: INTRODUCTION

Overview

Mobile technology has changed the way we interact with people on many levels. Cell phones provide a different level of access than home computers. According to Pertierra (2005), cell phones "more closely resemble tools or prosthetic devices as extensions of the body" (p. 25), allowing constant access to personal and professional contacts. While there is a growing awareness by some that time spent with technology may be problematic for relationships (Stafford, 2013; Tech Timeout, n.d.), there appears to be an overall lack of concern. Recent research has put into words what is witnessed in public and private settings on a daily basis: people focused on their handheld technology, yet ignoring, or paying partial attention to the person right in front of them. This *continuous partial attention* (Olson, DeFrain & Skogrand, 2014, p. 121) or dividing one's focus into several areas, is often a result of technological devices like cell phones and computers (Olson, et al., 2014; Rose, 2010), and results in a lack of full attention to any one thing or person. It is not uncommon in today's technology-saturated society to see someone watching television while surfing the internet on a laptop computer and checking for



© Meg Moore | Photo used by permission

social media updates on a cell phone.

Similar to continuous partial attention, *absent presence* has received some mention in research since at least 2002. According to Campbell and Kwak (2011), "absent presence refers to being socially removed from one's physical surroundings and others in them through the use of communication technology" (p. 208). With the increase in cell phone use for both informational and relational uses, it is easy to see how someone can be physically present but mentally absent (Gibbs, 2012; Pertierra, 2005). Loss of different components of communication can help avoid uncomfortable situations yet lead to "hiding in plain sight" (Kluger, 2012, p. 2) which is akin to "absent presence" (Campbell & Kwak, 2011, p. 208). In his blog about friends, Chaplain Ronnie Melancon (2013) says: "We are more connected yet more isolated than at any other time in history" (para. 6). In our virtual world we may have hundreds or even thousands of "friends" who are able to follow us daily through social network sites, yet we are in a state of continuous partial attention, unable to focus on just one thing for more than a few minutes at a time. Our children may be growing up without learning proper interpersonal skills because the adults in their lives are physically present, but so engaged with their virtual friends that they don't have time for face-to-face conversations

© Meg Moore | Photo used by permission

with those right in front of them. According to Melancon (2013), "we've traded trust for 'tweets,' smiles for 'statuses,' love for 'likes,' and conversations for 'comments'" (para. 6).

Statement of the Problem

Technology has forever changed the way we communicate with loved ones, yet this type of communication is relatively new for all but tech natives—those who grew up with computers at their disposal. Although the majority of Americans (90%) now own cell phones (Gibbs, 2012; Pew Research Center Internet & American Life Project, 2014), those in the age fifty and over category can remember when they were seen as a status symbol, unaffordable to most people. Compared to landline telephones, radios, video cassette recorders and television, the "adoption rate" (Madrigal, 2013, para. 2) of cell phones into society surpassed other devices.

The trend toward individualized entertainment began with radios in homes in 1923, continued with the television in 1948 and was intensified with the cell phone. At the turn of the twentieth century, entertainment was a community affair. Radios and televisions brought entertainment into the home, provided a multitude of station and channel choices and spoke to individual interests, but also resulted in less face-to-face interaction among family members. Indeed, "the electronic transmission of news and entertainment changed virtually all features of American life" (Putnam, 2000, p. 217). T. S. Eliot spoke of the television as, "a medium of entertainment which permits millions

of people to listen to the same joke at the same time, yet remain lonesome," (Putnam, 2000, p. 217), but that could easily apply to Facebook posts viewed on cell phones.

In *Better Together*, Putnam, Feldstein and Cohen (2003) addressed the effect of internet access in relation to social capital. Social capital "refers to social networks, norms of reciprocity, mutual assistance, and trustworthiness" (p. 2) and is developed over time through "face-to-face conversations" between individuals or groups of people (p. 9). The importance of social capital has been widely studied since the 1990s while at the same time community involvement has dwindled (Putnam, 2000; Putnam, et al, 2003). Social capital provides valuable support to help individuals and groups accomplish goals, whether organizing an event, supporting a campaign or assisting a neighbor in need. *Bonding*— inward looking social capital is used to bring together like-minded individuals, while *bridging*—outward looking social capital helps build connections among people or groups (Putnam, 2000). In *Bowling Alone*, Putnam (2000) shared Yiddish terms to describe community involvement: *Machers*, the more formal social connections, are the movers and shakers. They are the "people who make things happen in the community" (Putnam, 2000, p. 93). Machers are typically higher income homeowners and more politically inclined. *Schmoozers*, the informal connections, are more likely to be renters, move more often, host dinner parties and go to clubs. Machers and Schmoozers both provide important connections, "but informal connections are very important in sustaining social networks" (Putnam, 2000, p. 95) and according to Putnam, there is a trend toward devoting time to the less formal connections. Technology provides

countless opportunities to interact with others in a virtual world, but will these online connections provide social capital as do face to face interactions?

In *Bowling Alone* Putnam (2000) said, "the spread of internet access will rival TV's record but probably not surpass it" (p. 217). Putnam however may not have anticipated the impact cell phones, specifically smart phones, would have on internet access. Cell phones now serve many purposes including arranging meetings, seeking directions, connecting with family and friends and seeking information (Campbell & Kwak, 2011; Duran, Kelly, & Rotaru, 2011). Smart phones have taken over some functions once reserved for desktop computers with rates of use for "internet access, emails or instant messaging" up "from 32% to 40% between 2009 and 2010" (Campbell & Kwak, 2011, p. 217). According to the Pew Institute Internet Research Project, monthly text messages in the U.S. increased from 14 billion to 188 billion between 2000 and 2010 (Kluger, 2012), and Americans ages 18 to 29 "send 88 text messages a day" (Piper, 2013, p. 1). In just three decades since the sale of the first cell phone in 1984 (Wolpin, 2014), cell phones have become more of a necessity than a status symbol.

Cell phones allow couples to stay connected throughout the day (Jin & Peña, 2010), but the ability to be constantly connected contributes to relationship satisfaction for some, and inhibits autonomy for others (Duran, et al., 2011). Attachment styles—anxious or avoidant—may affect the number and frequency of calls and texts sent between individuals in romantic relationships (Jin & Peña, 2010; Weisskirch, 2012). Attachment styles, formed from birth through parent/child interactions, affect adult

romantic relationships (Weisskirch, 2012). Attachment style can be viewed on a continuum from anxious to avoidant. Anxious attachment is associated with the need for reassurance and closeness, while avoidant attachment style is associated with "fear of commitment" and the need for relational distance (Weisskirch, 2012, p. 282). Weisskirch (2010) found participants who score higher on attachment anxiety send and receive more text messages than those who are less anxious. Those who score higher on attachment anxiety may use phone calls to confirm their "own and their partner's involvement in the relationship," yet individuals with lower scores on attachment anxiety made fewer calls (Jin & Peña, 2010, p. 47). This could indicate those with more confidence in their relationship do not feel the need to call as often. Cell phones facilitate connection, yet may cause distraction from meaningful, face-to-face conversations (Przybylski & Weinstein, 2012). If the trend of cell phone use continues, couples will need to learn how to communicate their wants and needs, perhaps in an old-fashioned face-to-face conversation, to promote healthy relationships.

Purpose of the Study

The purpose of this study is to explore cell phone use and attitudes about cell phone use in romantic relationships in a diverse population. Based on the literature review there are several research questions: *1) Do demographic variables (age, gender, ethnicity, income) affect cell phone use and attitudes? 2) Are individuals more tolerant of their own cell phone use than their partner's cell phone use? 3) Are some activities involving a cell phone more likely to affect time spent with a romantic partner? 4) Does*

the ability to stay connected contribute to relationship satisfaction? and *5) What type of interaction promotes feeling valued in a romantic relationship?*

Significance of the Study

Recent research has predominantly drawn from traditional college aged participants for responses on cell phone use, which has left a gap in responses from those aged twenty-five and older (Forgays, Hyman & Schreiber, 2014; Miller-Ott, Kelly & Duran, 2012). The purpose of this study is to address the gap in information about cell phone usage and attitudes in an older population than previously studied.

Content Overview of Subsequent Chapters

Chapter 2 presents symbolic interactionism, the theoretical framework used for this study, and also presents a review of past literature. Chapter 3 describes the research methodology in detail, including participants, survey instrument, procedure and data analysis. Chapter 4 presents results from the survey by topic, based on original research questions. Chapter 5 discusses findings, implications of the study and recommendations for future research.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

Theoretical Framework—Symbolic Interactionism

The impact of cell phone use on romantic relationships is viewed through the theoretical lens of symbolic interactionism. Symbolic interactionism, one of the oldest theories used to study families, is based on contributions from pragmatic philosophers in the early 1900s. Although developed over one hundred years ago, it is "still one of the most commonly used theoretical perspectives today, perhaps because it continues to develop" (Smith & Hamon, 2012, p. 12).

These philosophers "contributed four important ideas that laid the foundation for the development of symbolic interactionism:" 1) the world is in a constant state of change; 2) "social structure" changes with the developing world; 3) objects are given meaning based on how each person or group uses them; and perhaps the most important 4) their "commitment to progress and democratic values" is the basis for research in the family sciences (Smith & Hamon, 2012, p. 12). "These four ideas came about" during the time of the Industrial Revolution when people "were desperate for information about how the changing structure of society was going to affect them" (Smith & Hamon, 2012, p. 12). Many families were struggling to adapt from farm life to urban living and factory work. The tenets of symbolic interactionism provide hope "based on the idea that" people are not victims of some predetermined course of history, but are instead able to change how things happen in communication and interaction" (Smith & Hamon, 2012, p. 13).

According to this theory, if research shows cell phone use has become problematic among couples and families, changes can be made to promote healthier families. Forester, an international financial service provider responded to research which addressed the impact of excessive use of technology with the *Tech Timeout* initiative. Forester's *Tech Timeout* challenges families to turn off all technology for at least one hour per day in order to reconnect (Tech Timeout, n.d.).

Many theories are based on the ideas and research of one person, but symbolic interactionism was influenced by several individuals including George Herbert Mead, Herbert Blumer, Charles Horton Cooley and William Isaac Thomas. Mead contributed the idea that "we learn about ourselves through interactions with others that are based on gestures…and eventually develop an 'understanding of social norms and expectations'" (Smith & Hamon, p. 14).

Herbert Blumer is credited with naming the theory and developing basic themes. One theme is "meaning is a central element of human behavior—people will react to something according to the meaning it has for them" (Smith & Hamon, p. 15). Cell phones are used by some just as tools to do a job, yet for those who are so attached that they sleep with their phone, the meaning is much greater.

Charles Horton Cooley is best known for the concept of the "looking-glass self" (Smith and Hamon, 2012, p. 14). We develop an image of ourselves partially based on what we think others think about us. A modern-day example that might surprise Cooley is the infatuation with *selfie*s—self-portraits taken with cell phones. Many people today

base their self-worth on the number of views or comments their pictures receive when posted on social media (George, 2014). A recent series at a mega-church in Oklahoma City focused on how people portray themselves "in a selfie-centered world." According to statistics shared by the pastor, 80% of what we do on social media relates to ourselves and we may be "training ourselves to be more self-centered" (Groeschel, 2014).

William Isaac Thomas is credited with first using the concepts associated with social interactionism. One foundational concept, "definition of the situation" (Smith & Hamon, 2012, p. 15) means each person perceives situations differently, and each is correct in his or her own eyes. He also introduced the idea "the family has a role in the socialization process" (Smith & Hamon, p. 14). The use of technology has greatly impacted the way families interact.

Past Research

Past research has shown conflicting reports about whether or not the ability to stay connected via cell phone usage contributes to relationship satisfaction (Miller-Ott, Kelly & Duran, 2012). Couples may have spoken or unspoken rules about cell phone communication (Duran, Kelly & Rotaru, 2011) and the rules vary by individuals and couples. One partner may have a rule which dictates when during the day it is appropriate to call while the other may think twenty-four hour access is appropriate. One partner may believe the number of calls or texts is indicative of the level of love or commitment in the relationship while the other places more value on face-to-face conversation (Miller-Ott, et al., 2012). Staying in touch through text messaging throughout the day may be seen as

positive by one partner, yet bothersome to another (Duran, et al., 2011). Coyne, Stockdale, Busby, Iverson and Grant (2011) found texting a quick message of love or affirmation can contribute to relationship satisfaction. Communicating through text or email, rather than a phone call, may be used in positive ways to help stay connected but is often used to avoid uncomfortable situations with a partner (Miller-Ott, et al., 2012). The ability to be constantly connected through technology has resulted in the need for a different level of time management.

Birnholtz, Reynolds, Smith & Hancock (2013) found constant access to personal and professional contacts via technology has resulted in the need for "availability management" which refers to what individuals say and do to manage "social interactions" (p. 2230). We live in an age where information is more accessible than ever before. Rose (2010) says this "infomania" or continual distraction and the constant need to be connected to technology to check email, social network sites and network news postings has resulted in media multitasking as the accepted norm.

People all over the world are attached to their cell phones. Data from the Time Mobility Poll with almost 5,000 participants in seven countries showed that about 25% of cell phone owners check their phone every half hour, while about 20% check it "every 10 minutes" (Gibbs, 2012, p. 2). The desire to be constantly connected is evident in the 25 to 29 year old age group, as 75% report they take their phone to bed with them (Gibbs, 2012). Data from the Pew Research Internet Project (2014) showed that "44% of cell owners have slept with their cell phone next to their bed" to ensure that they didn't miss

anything (p. 1). In America 52% of cell phone owners report never turning off their phone and "81% of users who only own a cell [and not a landline] always keep their phones turned on" (Miller-Ott, et al., 2012, p.19). Miller-Ott, et al. (2012) referenced data from a 2006 Pew Research Study which found "Americans ages 18 to 29" felt compelled "to answer their cell phones even when it interrupts a meal or meeting" (Miller-Ott, et al., 2012, p.19). We are so tied to our phones that there is now a name for our addiction: "nomophobia" meaning, 'no mobile phone phobia'" (Forgays, Hyman & Schreiber, 2014; Piper, 2013, p. 1). Piper (2013) sees this addiction as one of the biggest problems in history "since the bubonic plague" (p. 1).

Even though Americans are heavy mobile phone users, the Time Mobility Poll showed they use their phones less than people in other countries to ask "someone on a date by text" (U.S.-20%, Brazil-60%, Chinese-80%)(Gibbs, 2012, p. 2). According to the Time Mobility Poll, less than 10% of "married U.S. respondents admitted to using texting to coordinate adultery," compared to 33% of Indians and "a majority of Chinese" (Gibbs, 2012, p. 2). Cell phones are used for sexting, or sending a "sexually provocative picture" by 25% of adults in the U.S. "including a majority of 18-to-35-year-old men" but we lag behind other countries (South Africa-45%, India-54%, Brazil-64%) (Gibbs, 2012, p. 2). The majority of adults in the U.S (76%) report the ability to be "constantly connected to technology is mostly helpful" similar to results in the United Kingdom (78%) and South Korea (79%), but lagging behind China (85%), Brazil (92%) and India (94%) (Gibbs, 2012, p. 2).

Summary

Although the majority of adults in various polls agreed that the ability to be constantly connected is mostly helpful, some developmental psychologists are concerned about how technology will impact the development of "interpersonal skills" (Kluger, 2012, p. 1) in our children and youth. Children learn interpersonal skills through observing and interacting with others, but if a growing number of people would rather text than talk (almost one-third according to the Time Mobility Poll), children growing up today won't have the same opportunities to learn appropriate social skills (Kluger, 2012). Communication at any given time involves much more than the actual words. Body language, eye contact and tone of voice are all important components which are lost when thumbs or keyboards are the primary method of communication. Emoticons, all capital letters and punctuation marks may be helpful, but they are not as effective as voice tone or body language to convey meaning. Technology has forever changed the way we communicate. This may be troublesome for adults who have learned the components of communication, but may prove to be a bigger problem for children and youth as they are being raised at a time when being able to use the latest application on a cell phone is more important than knowing how to carry on a face-to-face conversation. Adults have (hopefully) had the opportunity to practice communication skills, but with the ever-increasing use of technology, norms are changing and new skills will need to be developed.

CHAPTER THREE: METHODOLOGY

Introduction

This descriptive, non-experimental study was designed to explore cell phone use in adult, long-term relationships. Participation was limited to men and women, ages 18 and over, who were in a committed relationship for at least one year and own a cell phone. Permission to conduct the study was obtained from the Institutional Review Board prior to survey distribution. Participants were recruited through a Facebook posting and also by email distribution through a Listserv of an organization which promotes family research. The survey was distributed online via a secure link provided by Qualtrics (See Appendix A). Data were collected through Qualtrics and analyzed using Qualtrics and SPSS.

Participants

The participants were 391 adults, ages 18-69 (*range* = 51; *M* = 32.1). The convenience sample consisted of 290 women and 46 men, with 55 undisclosed. The majority of participants (84%, *n* = 283) were Caucasian. Over half (53%, *n* = 179) were married, with average length of relationship over nine years. Annual income was above $60,000 for 33.6% of participants.

Instrument

Study participants completed a 22-item self-report survey which included questions used with permission from the Pew Research Center Internet and American

Life Project (2014), a cell phone usage survey conducted by Dr. Ira Hyman (Forgays, Hyman & Schreiber, 2014), also used with permission, and demographic questions (See Appendix B for permission from Dr. Hyman and Appendix D for Survey). This descriptive, exploratory study used a combination of quantitative and qualitative analysis to develop an understanding of how individuals use their cell phones to communicate with their romantic partner. Quantitative data was analyzed to explore possible differences in cell phone use and attitudes about cell phone use based on demographics (age, gender and/or income level). In addition, two qualitative, open-ended questions were included in the survey. The question, "If you do turn off your cell phone, how frequently and for how long do you turn off your cell phone*"* was used with permission from Dr. Ira Hyman (Forgays, Hyman, & Schreiber, 2014) to provide additional insight into the cell phone habits of an older population than typically surveyed concerning cell phone use. Data from the open-ended question, "please share how you feel cell phone use positively or negatively affects your relationship with your partner" was included to help gain an understanding of how individuals feel cell phone use affects their relationship with their romantic partner.

Procedure

This research used a non-random, convenience sampling from an organization which promotes family research. The membership base of this organization is comprised of students, university faculty, public school teachers and professionals employed in a variety of fields, with the common interest of promoting family wellness. This

organization has strict standards concerning research and requires the lead institution and IRB number be included in the email announcing the study. Membership in this organization suggests the overwhelming majority have completed at least some college. In order to obtain data from a more diverse population, participants were also recruited through a post on Facebook, a social media website. This study was not expected to pose any risk to participants. Prior to distribution, the proposal and the attached survey were reviewed by the university Institutional Review Board to ensure that there would be, at the most, minimal risk to participants.

The researcher announced email distribution of the study link, provided eligibility requirements (participants must be age 18 or over, in a committed relationship for at least one year, and own a cell phone), and informed participants of the voluntary nature of the survey. Additionally, contact information was provided for the researcher and also for the university Institutional Review Board, in case participants had questions or concerns. Participants were given two weeks to respond to the survey with a reminder being sent after one week.

Data Analysis

Statistics from data obtained were analyzed using both Qualtrics and SPSS. Correlational analyses were used to examine possible relationships between some variables. Responses from the open-ended question *Please share how you feel technology positively or negatively affects your relationship with your partner*, was analyzed for

recurrent themes to gain insight into how respondents view the impact of cell phone use on their relationship with their partner.

Summary

This non-experimental study involved both quantitative and qualitative measures. The methods used in this study were used to gather data about cell phone use in romantic relationships. The intent of survey distribution through an online listserv and also through Facebook was to gain information about cell phone use and attitudes in a more diverse group than previously surveyed. Data was gathered using Qualtrics, a secure, confidential program, ensuring anonymity of respondents. The data were analyzed and findings summarized. In Chapter 4, results are reported and discussed in Chapter 5.

CHAPTER FOUR: RESULTS

Introduction

This chapter reviews the sample used in detail and the analysis of data based on original research questions. The purpose of this study was to gain information about cell phone use in romantic relationships. The 22-item self-report survey was a compilation of questions from the Pew Research Center Internet and American Life Project (2014), a cell phone usage study conducted by Forgays, Hyman and Schreiber (2014), and those created by the author of this paper. The Pew Research Center conducts ongoing research about social trends in America and around the world and was inspirational when developing the demographic questions for this research paper. Permission to use the following questions from a 2014 cell phone usage study (Forgays, Hyman & Schreiber, 2014) was obtained from Dr. Ira Hyman:

1) *What type of cell phone do you have?*
2) *In a typical day how many calls and texts do you make and receive?*
3) *Do you ever turn off your cell phone?*
4) *If you do turn off your cell phone, how frequently and for how long do you turn off your cell phone?*
5) *If you didn't have access to your cell phone (dead battery, lost, left at home), what would be your response?*

Other questions were created to address areas of interest based on the literature review and scenarios involving cell phone use witnessed in public or on social media websites.

Survey questions addressed demographics of participants, daily cell phone habits, tolerance of cell phone use, activities reported as distractors from time spent with a romantic partner, relationship satisfaction and interactions which promote feeling valued in a relationship. Responses to survey questions were grouped to address individual research questions and are reported by topics.

Research Question 1: Do demographic variables (age, gender, ethnicity, income) affect cell phone use and attitude?

Descriptive Data

There were 391 adults in this study, 46 men (13.7%), 290 women (86.3%), and 55 who did not report their gender. Participants ranged in age from 18 to 69 (*range* = 51; *M* = 32.1), with over one-third of participants (39.1%, *n* = 129) in the 25-34 age group. Table 1 shows participants by age group.

Table 1
Participants by age group

	Age	Frequency	%	Valid %
Valid	18-24	92	23.5	27.9
	25-34	129	33.0	39.1
	35-49	78	19.9	23.6
	50-69	31	7.9	9.4
	Total	330	84.4	100.0
Missing	System	61	15.6	
Total		391	100.0	

The majority of participants (84.5%) were *Caucasian/White*, women. Over one-third (33.6%) reported annual income over $60,000. Over half were married. Relationship

length ranged from less than one year to 47-48 years (n = 332), with an average of 9.13 years. Table 2 provides a summary of demographic information.

Table 2
Summary of Demographic Information

		Gender		
		Male	Female	Total
Race				
	African Amer/Black	1	17	18
	Hispanic/Latino(a)	0	16	16
	Caucasian/White	43	240	283
	Asian	0	6	6
	Native American	1	5	6
	Other, please specify	1	5	6
	Total	46	289	335
Income				
	Under $20,000	6	88	94
	$20,000 - $30,000	11	32	43
	$30,000 - $45,000	7	35	42
	$45,000 - $60,000	5	37	42
	Over $60,000	17	95	112
	Total	46	287	333
Relationship Status				
	Dating	8	82	90
	Cohabitating	3	41	44
	Married	30	149	179
	Other, please specify	5	18	23
	Total	46	290	336

The overwhelming majority of participants (98%) reported having a Smart phone or iPhone, 16% own a cell phone with texting capabilities, 9% own a cell phone with a

keyboard, and 7% own a cell phone for calls only. This descriptive data gives the reader some background information about the participants.

Typical Use of Cell Phone

Participants were asked how many calls and texts they made and received in a typical day. Across genders and age groups, calls made and sent averaged less than 10 per day, while texts sent and received averaged 11-30 per day. Table 3 shows the number of calls and texts in a typical day.

Table 3
Number of calls and texts in a typical day

Calls made						
	< 10	11 - 30	31-50	51-100	> 100	Total
Male	37	5	1	1	1	45
Female	269	14	3	1	1	288
Total	306	19	4	2	2	333
Calls received						
Male	40	5	1	0	0	46
Female	266	17	2	1	0	286
Total	306	22	3	1	0	332
Texts sent						
Male	11	21	7	6	1	46
Female	66	120	37	42	19	284
Total	77	141	44	48	20	330
Texts received						
Male	12	21	7	6	0	46
Female	69	117	37	45	19	287
Total	81	138	44	51	19	333

Participants were asked, *do you ever turn off your cell phone.* Over half of men (58.7%, $n = 27$) and women (62.1%, $n = 180$) never turn off their cell phone.

The open ended question, *if you do turn off your cell phone, how frequently and for how long,* provided an opportunity to expand on the question above. The following quotes are a sampling of the 93 responses:

> *I turn off my cell phone if I need to reset apps.*
>
> *I turn it off and right back on once every few weeks for updates.*
>
> *Once in a blue moon.*
>
> *When it dies, I go one to two days without recharging it.*
>
> *I don't really need to turn it off…it's not constantly ringing or pinging me, and I want to be available in case of emergencies (kids and husband).*
>
> *When I am on vacation/trip break, once or twice per year for a few days at a time.*
>
> *It is off every night while sleeping, as well as while I am at church or in meetings or teaching a class at work.*

Analyzation of this data revealed some common themes. Over half (55%, $n = 51$) rarely turn off their phone. If they do turn off their phone, the main reason is to reset applications. Twenty-seven percent turn off their phone daily to not interrupt sleep. Only 2% said they turn their phone off frequently.

Feelings without Access to Cell Phone

Participants were asked if they would feel unhappy or anxious without access to their cell phone. Forgays, Hyman and Schreiber (2014) used a 5-point scale from *not at all* (*anxious* or *unhappy*) to *extremely* (*anxious* or *unhappy*), while the current study used a 4-point scale, eliminating the neutral answer. Across all age groups, participants reported they would feel *somewhat unhappy* (52%, $n = 170$) and *somewhat anxious*

(50%, *n* = 163) more than other categories. Table 4 shows the complete breakdown by age group.

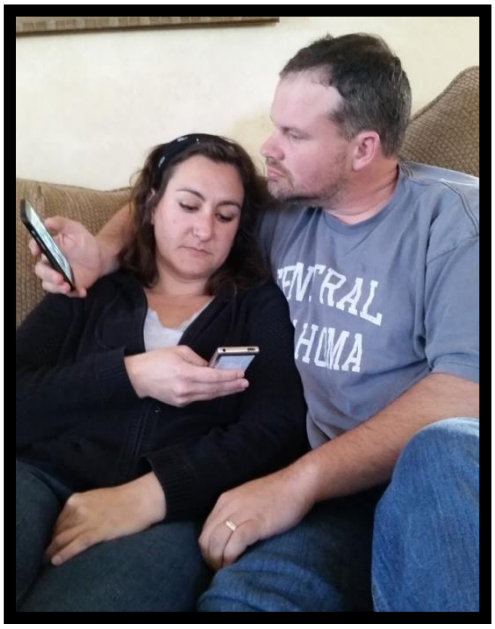
Table 4
Feelings without access to cell phone

	Age				
	18-24	25-34	35-49	50-69	Total
Unhappy					
Not at all (unhappy)	18	33	20	9	80
Somewhat	51	67	36	16	170
Very	18	17	12	5	52
Extremely	4	12	9	1	26
Total	91	129	77	31	328
Anxious					
Not at all (anxious)	11	15	19	9	54
Somewhat	47	68	32	16	163
Very	20	35	19	3	77
Extremely	13	11	8	1	33
Total	91	129	78	29	327

Tolerance of Cell Phone Use

Research Question 2: Are individuals more tolerant of their own cell phone use than their partner's?

Participants were asked, *in your opinion, does your partner spend too much time on their cell phone,* to gain information about how they gage their cell phone use compared to their partner's cell phone. Across age groups, 60.6% of respondents felt their partner did not spend too much time on their cell phone, however, within the 50-69 age group, the percentage was higher at 80.6%.



© Emma Bowers | Photo of Marissa and Shane Bowers used by permission

Next participants were asked, *does your partner think you spend too much time on your cell phone.* Again, across age groups, the majority (70.9%) reported *no,* with the 50-69 age group higher at 87.1%.

By gender, the majority of men and women did not feel their partner spent too much time on their cell phone. Likewise, when asked if their partner felt they spent too much time on their cell phone, the majority said no. Table 5 shows frequencies for tolerance of cell phone use by gender.

Table 5
Tolerance of cell phone use

Partner spends too much time on their cell phone			
	Male	Female	Total
No	36	168	204
Yes	10	122	132
Total	46	290	336
Partner feels you spend too much time on your cell phone			
	Male	Female	Total
No	34	202	236
Yes	12	88	100
Total	46	290	336

Research Question 3: Are some activities involving a cell phone more likely to affect time spent with a romantic partner?

Activities Affecting Time with Partner

Participants were asked to use a 4-point scale from *completely disagree to completely agree* to rate the statement: *thinking about my free time, I feel some activities involving my cell phone take me away from time spent with my romantic partner.* Overall, 43.28% (n = 145) of respondents *somewhat agreed* with the statement with a slightly lower percentage of men than women (men = 37%, n = 17; women = 44%, n = 128). Table 5 shows other responses.

Table 6
Distraction from relationship due to cell phone use

	Male	Female	Total
(Some activities distract)			
Completely agree	8	71	79
Somewhat agree	17	128	145
Somewhat disagree	16	59	75
Completely disagree	6	37	43
Total	46	289	335

Participants were also asked *what activities involving your cell phone take time away from your relationship with your partner.* A variety of activities were reported to interrupt time spent with a romantic partner, with visiting social networking sites (68%), surfing the web (53%) and text messaging (52%) as the biggest distractors. Checking emails was listed by 57% (n = 12) of those who completed the *other, please specify* comment box. Other activities listed by participants include: *shopping, Pinterest, receiving work calls, Snapchat, news* and *weather*. Table 6 shows the complete list of survey choices with responses by gender.

Table 7
Activities which distract from time with partner

Activity	Male	Female	Total
This doesn't apply to me	4	35	39
Making phone calls	11	62	73
Text messaging	21	153	174
Surfing the Web	23	154	177
Playing games	17	94	111
Visiting Social Media sites	29	201	230
Other, please specify	8	13	21
Total	46	289	335

Participants were asked how often they used their cell phone to visit social networking websites with a scale from 0—*I don't visit social networking websites* to 5—*I can't go for more than 10 minutes without checking social networking sites*. Of the 337 responses, 30 said they did not visit social networking sites, 29 visited once or twice a week, 92 visited a few minutes a day. About one-third of participants (35.6%, *n* = 119) spent an hour a day visiting social networking sites, 58 spent several hours a day and 9 participants said they could not go for more than 10 minutes without checking social networking sites.

Research Question 4: **Does the ability to stay connected contribute to relationship satisfaction?**

Relationship Satisfaction

Participants were asked how often they communicate via cell phone with their partner while at work, including calls, texts and messages through social websites. Results show 155 (46%) participants communicate with their partner once or twice during the workday via their cell phone, and 136 (40%) communicate 5-10 times per day via their cell phone. A four-point Likert scale was used to gage relationship satisfaction ranging from very satisfied (1) to very dissatisfied (4). Seventy percent of respondents (n = 237) were very satisfied in their relationship and 23% (n = 78) were somewhat satisfied in their relationship.

Participants were asked to choose the statement which best reflects how they feel about the ability to stay in touch through cell phone use with these choices: *I love being*

able to stay in touch 24/7; I enjoy the convenience but not constant access; It hasn't helped or hurt our relationship; I wish he/she would not call or text as often; and *I feel I can never get away from my phone.* Results showed 151 (45%) prefer twenty-four seven access, while 140 (42%) enjoy the convenience, but not constant access.

A correlational analysis was used to examine the possible relationship between *activities involving my cell phone take me away from time spent with my romantic partner* and relationship satisfaction. Results showed a negative correlation approaching significance at $r = .09$ ($p = < .10$), suggesting the more people report cell phone use as a distraction from the relationship, the less satisfied they are in the relationship.

Research Question 5: What type of interaction promotes feeling valued in a romantic relationship?

Most Valued Interactions

Participants were asked if they feel most valued when their partner: calls, texts, posts something on social media about them or their relationship, gives them a gift, does something nice for them or spends time with them. Over half (64.3%) of men and women said they feel most valued when their partner spent time with them. A slightly higher percentage of men (30.4%, $n = 29$) than women (27.6%, $n = 187$) feel most valued when their partner does something nice for them. Table 8 shows responses to all activities by age groups.

Table 8
Activities which promote feeling valued

	Age				
Activity	18-24	25-34	35-49	50-69	Total
calls me	5	3	2	2	12
texts me	1	0	2	0	3
social media post about me or our relationship	2	2	0	0	4
gives me a gift	1	3	3	0	7
does something nice for me	17	39	24	11	91
spends time with me	66	82	47	18	213
Total	92	129	78	31	330

Responses to the open-ended question *please share how you feel cell phone use positively or negatively affects your relationship with your partner* were grouped into common themes. Several participants noted both positive and negative effects of cell phone use in their relationship. Results showed 52% (n = 147) feel their cell phone allows them to stay connected to their partner throughout the day or in a long-distance relationship, while 48% (n = 135) feel it distracts from quality time with their partner and 31% (n = 88) feel it interferes with face to face communication. The following quotes provide a sampling of the 284 qualitative responses.

Positive impacts from cell phone use in relationship

> *We stay in touch throughout the day.*
>
> *We're able to text quick messages during a busy day for the other to find when they get free, since our schedules are so different.*
>
> *I can immediately take care of things in general to free up time instead of waiting around.*
>
> *I like that if I have an emergency I can get ahold of him.*

We use our phones a lot for productivity and fitness, as well as communication.

It allows us to send sweet messages to each other every day and coordinate plans.

Both positive and negative impacts from cell phone use in relationship

I think it helps us stay in touch, but using it for social media is distracting.

I use my cell for work mostly. That would be positive. The negative would be the ease to ignore a call or text.

It helps our business, but it seems to be my partner's constant friend.

When you're apart you can stay in touch more…when you're together instead of spending time together you're on your phone.

It helps in that it allows us to stay connected when physically apart. It hurts our relationship when we use our phones too much when physically together.

I believe it can be positive if used right but the ability to cheat and keep secrets on them are far worse than the positives when it comes to romantic relationships.

Negative impacts from cell phone use in relationship

It distracts from our time together.

It interferes with face to face communication.

I think it takes us away from spending time with each other in the present.

We argue a lot about my cell phone usage.

He's on it too much when we are together, and when we are apart I feel I should hear from him often.

It keeps us from talking to each other face to face and can cause miscommunication because it is difficult to read non-verbal signals through the cellphone

Summary

This study consisted of 391 adults ranging in age from 18 to 69 (M = 32.1). There were 290 women and 46 men, with 55 not reporting their gender. The sample was predominantly Caucasian (84%) and married (53%). Participants were recruited through an online listserv and also through Facebook. They completed an online survey through Qualtrics which provided anonymity for respondents. Data analysis was conducted through Qualtrics and SPSS. Calls made and sent averaged less than 10 per day, while texts sent and received averaged 11-30 per day. The cell phone activity which caused the most distraction from time spent with a partner was visiting social networking sites. The majority of participants (64.3%) feel most valued when their partner spends time, compared to phone calls, texts, media posts, gifts and acts of kindness. Participants reported both positive and negative effects from cell phone use in romantic relationships. The ability to stay in touch throughout the day was seen as biggest benefit, with distraction during time together as the negative effect of cell phone use in romantic relationships. Chapter 5 includes a discussion of the results, implications and future recommendations.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

Introduction

This chapter discusses the findings outlined in previous chapters and makes recommendations for future research about the impact of cell phone use in relationships. This study explored cell phone use in romantic relationships. The online survey asked questions about daily cell phone use, cell phone tolerance, activities involving cell phones which distract from time with a romantic partner, cell phone connectivity and relationship satisfaction, and interactions which promote feeling valued in a relationship. The total sample size for this study was 391 participants. Responses were analyzed using Qualtrics and SPSS. The discussion of findings is presented in relation to the research questions.

Symbolic interactionism influenced this research. This theory posits 1) the world is constantly changing; 2) "social structure" changes with the developing world; and 3) objects are given meaning based on how each person or group uses them (Smith & Hamon, 2012, p. 12). There is no doubt that mobile technology has changed the way we communicate with each other. The adoption rate of cell phones has far exceeded that of other mass communication devices like radios and television (Pertierra, 2005). Cell phones continually change as technology improves. These technological advances influence cell phone use and in turn, cell phone users continue to inspire more sophisticated technology (Khunou, 2012), thus creating ongoing change in communication. "Societies and cultures hitherto built on face-to-face oral communication are reconstituting themselves along unexpected grounds" (Pertierra, 2005, p. 26).

Discussion of Findings

A primary concern for this study was achieving a demographically diverse sample. In hopes of a more diverse population, the survey for this research was distributed through a Facebook posting and also through an organization's member listserv. This organization is comprised of students, university faculty, public school teachers and professionals employed in a variety of fields, all whom are interested in promoting family wellness.

Research Question 1*: Do demographic variables (age, gender, ethnicity, income) affect cell phone use and attitudes?*

One purpose of this study was to contribute information about cell phone use among an older population than previously surveyed because past research has focused on traditional college-aged participants, typically ages 18 to 24 (Forgays, Hyman & Schreiber, 2014; Miller-Ott, Kelly & Duran, 2012). Participants in the Forgays, Hyman and Schreiber study ranged in age from 18-68 with 58.6% in the 18-24 age group. The average age in the Miller-Ott, Kelly and Duran (2014) study was 20.33 years, while the mean age in the current study was 32.1, thus an older average age group than previously studied. The participants were predominantly Caucasian (84.5%) women (86.3%). Over half of the participants in this study were married, with the average length of relationship over nine years. Cell phone ownership was a requirement for participation in this study.

The majority of participants make and receive fewer than ten cell phone calls per day, similar to Weisskirch's (2008) findings of 0 to 11 calls per day. Past research shows Americans ages 18 to 29 "send 88 text messages a day" (Piper, 2013, p. 1). However in this study, only 14.5% of men and women send between 50 and 100 texts a day, with 11-30 texts daily the highest reporting category. As this was a self-report quantitative question, there was no method in place to count the actual texts sent and received. Future research should consider using participants' phone records to count the number of calls and texts in a typical day.

Participants in the current study were older than typically surveyed for cell phone research. Future research may reveal if there is a negative correlation between texting and age, as Forgays, Hyman and Schreiber (2014) found "younger groups are more accepting of text messages than older groups" (p. 316).

Results from this study showed 62% never turn off their cell phone, similar to the 52% found in a Miller-Ott, Kelly and Duran (2012) study. When participants were given the opportunity to explain in their own words how often and why they turn off their cell phones, some shared how they navigate "availability management" (Birnholtz, Reynolds, Smith & Hancock, 2013, p. 2230):

> *[I turn off my phone] on an irregular basis, but as needed for privacy*
>
> *[I turn off my phone] once or twice a week, overnight or anytime I don't want to receive calls or texts.*
>
> *[I turn off my phone] during class and during church, so for a few hours at a time.*

> *[I turn off my phone] once or twice a year to spend the weekend unplugged with my romantic partner.*

The 2014 study by Forgays, Hyman and Schreiber addressed "the emotional response to no cell phone access" (p. 318). In their study, like this study, the oldest age group (50-68; 50-69 in this study) experienced the least amount of unhappiness and anxiety with no cell phone access. Future research could explore whether life experience, relationship length, or length of cell phone ownership affects feelings about cell phone access.

Research Question 2: *Are individuals more tolerant of their own cell phone use than their partner's?*

People in this study were more tolerant of cell phone use than was expected. It's not uncommon in the workplace to hear a co-worker complain about their partner's cell phone use, however respondents in this study (60.6%) felt their partner's cell phone use was not a problem. Likewise, 70.9% answered *no* when asked if their partner felt they spent too much time on their cell phone. Although large percentages of participants reported cell phone use was not a problem in their relationship, 39.4% felt their partner was on the phone too much and 29.1% reported their cell phone use was a problem in the eyes of their partner. Responses to this open-ended question revealed the frustration felt by some participants due to their partner's, or their own, cell phone use:

> *He spends too much time playing games and we have problems when he doesn't use his phone to communicate with me.*

> *He's on it too much when we are together, and when we are apart I feel I should hear from him often.*
>
> *I could focus on my husband more, if I weren't addicted to my phone.*
>
> *[Cell phones allow]distraction from each other. They're used for work, so my partner has to be accessible to the office too frequently. This limits his ability to focus on us.*
>
> *He feels I don't spend enough time with him. I get upset as well when he is on the Internet, so it is not good.*

The conflicts noted above may be a result of unclear expectations about cell phone use. Duran, Kelly and Rotaru (2011) found conflict ensued when unspoken rules of communication were violated, and the rules were typically about the amount of calls—some felt their partner didn't call or text enough while others reported their partner called or texted too often.

Research Question 3: *Are some activities involving a cell phone more likely to affect time spent with a romantic partner?*

Over half of participants in this study completely or somewhat agreed that certain activities take them away from time spent with their romantic partner, with visiting social networking sites reported as the biggest distractor. Many responses to the open-ended question about positive or negative effects of cell phone use were about the distraction they cause, resulting in less face to face communication. Their partner may be present in the same room, but mentally absent (Gibbs, 2012) due to their cell phone.

> *HATE IT WHEN HE OR ANYONE USES THE CELL PHONE DURING MEALS. I AM RIGHT HERE!!! INTERACT WTH ME!!!!!! (participant's emphasis)*

> *It can keep us from talking to each other face to face and can lead to miscommunication because it's hard to read non-verbal signals through the cell phone.*
>
> *Our cell phones are often a distraction-a text message or alert comes up while we're spending time together, and we both look at it and usually respond.*
>
> *It has created an effective communication barrier. Feelings and/or issues are no longer discussed verbally. Verbal communication has been replaced by text messaging one another. When face to face, there's often nothing much to say! It really sucks.*

Another issue mentioned by several was the ease of access to applications which "allow for infidelity" (participant's words):

> *My partner uses distraction as a primary coping mechanism in general. Having his cell phone provides him with the ability to distract himself anytime, anywhere. He plays games and claims to multitask. He uses it a lot more than I do for social media and texting. I also worry sometimes about access to certain apps that encourage or allow for infidelity.*
>
> *My partner doesn't leave the house or do any activities because he is always on his phone. He has also emotionally cheated using his cell phone. The cell phone has caused a lack of trust in our relationship.*
>
> *Texting has come up as an issue since we've been married. Texting allows for more secrecy since you can delete texts you sent or received. I told my partner I no longer wanted him texting his friends that were girls, and he agreed that this was a safe boundary to have.*

Research Question 4: *Does the ability to stay connected contribute to relationship satisfaction?*

Although this question refers to connectivity with a romantic partner, it seems greater connectivity via cell phones may result in stronger workplace connections leading to more distractions at home. The cell phone has taken "bringing your work home" to a

new level. As Birnholtz, Reynolds, Smith and Hancock (2013) found, constant access to personal and professional contacts via technology results in the need for a different type of time management than in the past. Several individuals expressed frustration about their partner's distractedness due to work/email access on their cell phone:

> *Cell phones' "convenience" and the accessibility make it harder to compartmentalize work from marriage, friendships from romantic relationships, and together-time from not-together-time.*
>
> *Cell phones have somewhat negatively affected our relationship when my partner is busy playing Plants vs. Zombies or I am able to check my email in the middle of the night and be anxious about work.*
>
> *For the most part, cell phone use has negatively affected my relationship. I feel as though my cell phone usage takes time away from my partner and this creates conflict. Also, my partner texts me a lot. It is hard to get work done during this time, which also remains a source of conflict.*

The ongoing challenge of autonomy vs. connectivity (Duran, Kelly & Rotaru, 2011) was evident in this study as 42% enjoy the convenience of a cell phone but prefer not to have constant access.

Research Question 5: *What type of interaction promotes feeling valued in a romantic relationship?*

With the popularity of Facebook, I assumed younger participants might prefer a social media post over other survey choices. However across all age groups, the type of interaction which promoted feeling valued in a romantic relationship was spending time together.

Conclusions

Cell phone use has become a social norm, yet the ability to be constantly connected via mobile technology is a relatively new issue with positive and negative effects. As one participant reported, "sometimes it [cell phone] just fills up the free time, where one of us (usually my wife) gets on it because she is feeding our baby and wants something to do." According to the "looking-glass self" concept from symbolic interactionism, self- image is partially based on what others think about us (Smith and Hamon, 2012, p. 14). Since the core family plays an important role in the socialization of children (Smith & Hamon, 2012), parents may want to consider what children learn about themselves as a result of their parents' distraction due to cell phone use.

© Michelle Watson | Photo of Kim Watson used by permission

Texting, according to one participant, "gives relationships a false sense of security, because you don't truly communicate through text. Texting can result in misinterpretations because cues like body language, facial expressions and voice tone are missing (Coyne, Stockdale, Busby, Iverson & Grant, 2011).

Pertierra (2005) found although cell phones "are seen as providing reliable knowledge" (p. 42), "it is often difficult to distinguish media hype from sober reality" (p.

26). Pastor Steven Furtick with Elevation Church agrees. Furtick, during an interview with Pastor Craig Groeschel of Life.Church said social media posts often result in comparisons. He said there is a tendency to judge ourselves and our relationships by what we see online which may not be reality because, "we're comparing our behind the scenes with everyone else's highlight reel" (Groeschel, 2015), posting only the best things about yourself, your relationship and your family. Comparing with others may lead to prejudging them based on their posts and may also result in diminishing self-worth if a person feels they or their relationship does not measure up.

Recommendations for Future Research

Although I gathered information about cell phone use and attitudes in the context of couples, using qualitative interviews with actual dyads may provide a better picture of how couples view each other's cell phone use. It would be interesting to see if similar responses occur within the dyad when asked if their partner finds their cell phone use problematic.

Respondents to a practice survey provided additional ideas for future research. One idea was to explore how couples use cell phones to deal with behavioral issues of children. Through the use of technology couples can both be present to handle problems. Instead of *wait until your father gets home,* father can be there in a split second via Skype.

Future research should also explore how technology affects image development in children. As children are often the subject of photos, what is the impact when they are constantly being photographed? How do they feel when they see the backs of cell phones rather than their family's faces as their loved one is trying to capture the perfect shot? Is the photograph itself or the memory of the event more important?

© Meg Moore | Photo of birthday party used by permission

Finally, another participant asked if this research would address the issue of adultery as a result of relationships formed through online gaming. With the increased use of technology, ongoing research could explore "authentic relationship" (Pertierra, 2005, p. 42) formation as a result of virtual connections.

Summary

This non-experimental study was conducted to explore cell phone use in romantic relationships. Participants completed an online survey which asked questions about typical daily cell phone usage, feelings about their own and their partner's cell phone use, activities which distract from time spent with their romantic partner, relationship

satisfaction, what promotes feeling valued in a relationship and basic demographic questions.

The majority of participants were Caucasian women, with an average age older than participants in past cell phone research. Across age groups, over half reported they would feel unhappy or anxious without access to their cell phone. Across genders and age groups, calls made and sent averaged less than 10 per day, while texts sent and received averaged 11-30 per day. Visiting social networking sites was the cell phone activity which most often interrupted time spent with a partner. The majority of participants preferred spending time with their partner over calls, texts, media posts, gifts and acts of kindness.

Cell phone ownership was a requirement for participation in this study. However, 98% of participants owned a Smartphone or iPhone, and were able to access the internet from their phone. Results showed people would still rather spend time with their loved one than have a phone call, text, or social media post about them.

Perhaps the most valuable data from this study are responses to the open-ended question *please share how you feel cell phone use has positively or negatively affected your relationship with your romantic partner*. The large number of responses showed a willingness to discuss issues couples face due to cell phone use. Although there were both positive and negative responses to the question above, 81% had something negative to share about the impact of cell phone use in their romantic relationship, highlighting the

need to educate couples and families about the relational issues surrounding cell phone use. One participant's response sums up the feelings many had about cell phone use:

> *Its constant availability lends to us not being intentional about its use, it can be used like water to fill a jar full of marbles. A phone can fill in the silences instead of having moments to think or speak. It encourages multi-tasking instead of giving eye contact and your full attention to the person speaking to you or the people you are with, or the situation you are in. Sometimes, that is fine, but not most of the time. Sometimes it is useful to have a tool to use while waiting on something else to be done... we must choose to be intentional about everything. Don't let life happen, LIVE your life.*

Cell phones are here to stay and provide access to the world in ways no one could have imagined, yet their use should be managed to promote healthy couple and family relationships.

REFERENCES

Birnholtz, J., Reynolds, L., Smith, M. E., & Hancock, J. (2013). "Everyone has to do it:" A joint approach to managing social inattention. *Computers in Human Behavior 29*, 2230-2238. http://dx.doi.org/10.1016/j.chb.2013.05.004

Campbell, S. W., & Kwak, N. (2010). Mobile communication and social capital: An analysis of geographically differentiated usage patterns. *New Media Society,* 435-451. Retrieved from nms.sagepub.com at the University of Central Oklahoma on March 17, 2014. DOI: 10.1177/1461444809343307

Campbell, S. W., & Kwak, N. (2011). Mobile communication and civil society: Linking patterns and places of use to engagement with others in public. *Human Communication Research 37*, 207-222. DOI: 10.1111/j.1468-2958.2010.01399.x

Coyne, S. M., Busby, D., Bushman, B. J., Gentile, D. A., Ridge, R., & Stockdale, L. (2012). Gaming in the game of love: Effects of video games on conflict in couples. *Family Relations 61,* 388 – 396. DOI: 10.1111/j.1741-3729.2012.00712.x

Coyne, S. M., Stockdale, L., Busby, D., Iverson, B., & Grant, D. M. (2011). "I luv u:)!" A descriptive study of the media use of individuals in romantic relationships. *Family Relations 60,* 150 –162. DOI: 10.1111/j.1741-3729.2010.00639.x

Duran, R. L., Kelly, L., & Rotaru, T. (2011). Mobile phones in romantic relationships and the dialectic of autonomy versus connection. *Communication Quarterly 59:1,* 19 – 36. DOI: 10.1080/01463373.2011.541336

Forgays, D. K., Hyman, I., & Schreiber, J. (2014). Texting everywhere for everything: Gender and age differences in cell phone etiquette and use. *Computers in Human Behavior 31,* 314–321.

George, A. (2014, September 14). *#struggles: Relationships* [Online sermon series]. Retrieved from http://www.lifechurch.tv/watch/struggles/

Gibbs, N. (2012, August 16). Your life is fully mobile. *Time Tech*. Retrieved March 18, 2014, from http://techland.time.com/2012/08/16/your-life-is-fully-mobile/

Groeschel, C. (2014, September 28). *#struggles: Compassion* [Online sermon series]. Retrieved from http://www.lifechurch.tv/watch/struggles/

Groeschel, C. (2015, October 25) *#Struggles* [Online sermon]. Retrieved from http://www.life.church/watch/struggles2015/

Jin, B., & Peña, J. F. (2010). Mobile communication in romantic relationships: Mobile phone use, relational uncertainty, love commitment, and attachment styles. *Communication Reports 23*(1), 39-51.

Khunou, G. (2012). Making love possible: Cell phones and intimate relationships. *African Identities 10*(2), 169-179.

Kluger, J. (2012, September 6). We never talk anymore: The problem with text messaging. *CNN Tech: Our Mobile Society.* Retrieved March 18, 2014, from http://www.cnn.com/2012/08/31/tech/mobile/problem-text-messaging-oms

Madrigal, A C. (2013) More Than 90% of adult Americans have cell phones. *Atlantic Monthly.* Retrieved October 4, 2015 from http://www.theatlantic.com/technology/archive/2013/06/more-than-90-of-adult-americans-have-cell-phones/276615/

Melancon, R. (2013, November 24). Show me your friends and I'll show you your future. *Thibodauxpd*. Retrieved March 21, 2014, from http://thibodauxpd.wordpress.com/2013/ 11/24/show-me-your-friends-and-ill-show-you-your-future/

Miller-Ott, A. E, Kelly, L., & Duran R. L. (2012, January-March). The effects of cell phone usage on satisfaction in romantic relationships. *Communication Quarterly 60*(1), 17-34.

Olson, D. H., DeFrain, J., & Skogrand, L. (2014). *Marriages and families: Intimacy, diversity, and strengths* (p. 121) (8th ed.). New York, NY: McGraw-Hill Education.

Pertierra, R. (2005). Mobile phones, identity and discursive intimacy. *An Interdisciplinary Journal on Humans in ICT Environments 1* (1), 23–44. Retrieved November 7, 2015, from http://www.humantechnology.jyu.fi/articles/volume1/2005/ pertierra.pdf

Pew Research Center Internet & American Life Project (2014). *Mobile Technology Fact Sheet*. Retrieved March 23, 2014, from http://www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet/

Piper, R. (2013, September 24). Your cell phone is not part of your body--You can let it go. *Huff Post Screen Sense: The Blog*. Retrieved March 18, 2014, from http://www.huffingtonpost.com/robert-piper/cell-phone-addiction_b_3937062.html

Przybylski, A. K., & Weinstein, N. (2012). Can you connect with me now? How the presence of mobile communication technology influences face-to-face conversation quality. *Journal of Social and Personal Relationships 30*(3), 237-246.

Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon and Schuster.

Putnam, R., Feldman, L. M., & Cohen, D. (2003). *Better together: Restoring the American community*. New York, NY: Simon and Schuster.

Rose, E. (2010). Continuous partial attention: Reconsidering the role of online learning in the age of interruption. *Education Technology 50*(4), 41-46.

Smith, S.R., & Hamon, R. R. (2012). *Exploring family theories* (3rd ed.). New York, NY: Oxford University Press, Inc.

Stafford, R. M. (2013). *Hands free mama: A guide to putting down the phone, burning the to-do list, and letting go of perfection to grasp what really matters.* Grand Rapids, MI: Zondervan.

Tech Timeout (n.d.) *Foresters Insurance*. Retrieved from http://techtimeout.com/

Weisskirch, R. S. (2012). Women's adult romantic attachment style and communication by cell phone with romantic partners. *Psychological Reports: Relationships & Communications 111*(1), 281-288. DOI: 10.2466/21.02.20.PR0.111.4.281-288

Wolpin, S. (2014, March 13). The first cellphone went on sale 30 years ago for $4000. *Mashable.com*. Retrieved November 9, 2014 from http://mashable.com/2014/03/13/first-cellphone-on-sale/

APPENDICES

Appendix A: IRB Approval

Ms. Michelle Watson

Dr. Glee Bertram

Department of Human Environmental Sciences

College of Education and Professional Studies

Campus Box 118

University of Central Oklahoma

Edmond, OK 73034

March 10, 2015

Subject: IRB #15021 Approval

Dear Ms. Watson and Dr. Bertram:

Re: Application for IRB Review of Research Involving Human Subjects

We have received your materials for your application. The UCO IRB has determined that the above named application is APPROVED BY EXPEDITED REVIEW. The Board has provided expedited review under 45 CFR 46.110, for research involving no more that minimal risk and research category 7.

Date of Approval: 3/10/2015

Date of Approval Expiration: 3/9/2016

If applicable, informed consent (and HIPAA authorization) must be obtained from subjects or their legally authorized representatives and documented prior to research involvement. A stamped, approved copy of the informed consent form will be sent to you via campus mail. The IRB-approved consent form and process must be used. While this project is approved for the period noted above, any modification to the procedures and/or consent form must be approved prior to incorporation into the study. A written request is needed to initiate the amendment process. You will be contacted in writing prior to the approval expiration to determine if a continuing review is needed, which must be obtained before the anniversary date. Notification of the completion of the project must be sent to the IRB office in writing and all records must be retained and available for audit for at least 3 years after the research has ended.

It is the responsibility of the investigators to promptly report to the IRB any serious or unexpected adverse events or unanticipated problems that may be a risk to the subjects.

On behalf of the UCO IRB, I wish you the best of luck with your research project. If our office can be of any further assistance, please do not hesitate to contact us.

Sincerely,

Robert D. Mather, Ph.D.

Chair, Institutional Review Board

NUC 341, Campus Box 132

University of Central Oklahoma

Edmond, OK 73034

405-974-5479

irb@uco.edu

Appendix B: Permission to Use Survey Questions

-------- Original message --------
From: Ira Hyman
Date:11/03/2014 12:56 PM (GMT-06:00)
To: mwatson6@live.com
Subject: RE: [PT] Inquiry via Psychology Today

Hi Michelle --

Good luck with your work. I'll be interested in how your work goes. I've attached our paper published earlier in the year and a copy of the on-line survey we used. I don't think I would call it an instrument. Instead we're just trying to see what the rules are for using cell phones. One part that you may find interesting is how quickly people expect others to return their text messages. We don't give romantic partners much time.

There have also been a couple of interesting studies lately on how Facebook influences trust in romantic relationships. I mentioned a copy of those in another Psych Today Post (http://www.psychologytoday.com/blog/mental-mishaps/201406/how-social-networks-can-inflame-jealousy).

Let me know if I can do anything else for you.

Ira

Ira Hyman
Professor
Psychology Department
Western Washington University
WWU web page
Mental Mishaps blog at Psychology Today

-----Original Message-----
From: Psychology Today [mailto:no-reply@psychologytoday.com]
Sent: Sunday, November 02, 2014 3:58 PM
To: Ira Hyman
Subject: [PT] Inquiry via Psychology Today

From:
Michelle Watson <mwatson6@live.com>

Reason:
Other

Message:

Dr. Hyman, In your article Cell Phones are Changing Social Interactions, you mentioned interviewing people from different age groups. I am working on my Master's Thesis and will look at how cell phone use is impacting trust and intimacy in relationships, but I am having a difficult time finding a survey instrument. I was wondering if you would be willing to share your survey for me to use for my research. I would, of course cite your work. I look forward to hearing from you.

Sincerely,
Michelle Watson
Graduate Student in Family Life Education
University of Central Oklahoma

Appendix C: Survey Cover Letter

You have the opportunity to participate in a research study examining the experiences of cell phone use in relationships. There will be no compensation for participation.

Hello friends and colleagues,

I am a graduate student in the Family and Child Studies program at the University of Central Oklahoma. My thesis project examines the experiences of cell phone use in romantic relationships.

Would you mind passing the word along to those who qualify for the study?

The survey link will be active for two weeks with a reminder after one week.

Eligibility Requirements for Study:

- Must be 18 or older
- Must have been in a romantic relationship for at least one year
- Must own a cell phone

Here is the survey link: _____

Those interested in participating or in more info concerning the study can contact me at mboyles@uco.edu.

This research is approved by the University of Central Oklahoma IRB, Study # 15021.

Appendix D: Study Survey

For the purpose of this study, romantic partner refers to spouse, partner, boyfriend or girlfriend

1. Do you have a cell phone?

(0) No
(1) Yes

2. What type of cell phone do you have? (Check all that apply.)

(1) Cell phone for calls only
(2) Cell phone with texting capability
(3) Cell phone with keyboard
(4) Smart phone or iPhone

3. In a typical day, how many calls and texts do you make and receive?

	Less than 10	**11-30**	**31-50**	**51-100**	**More than 100**
Calls made	_____	_____	_____	_____	_____
Calls received	_____	_____	_____	_____	_____
Texts sent	_____	_____	_____	_____	_____
Texts received	_____	_____	_____	_____	_____

4. How often do you use your cell phone to communicate with your romantic partner while at work? Please include calls, texts and messages through social websites in your count.

(0) I don't communicate with my partner while at work.
(1) Once or twice a day
(2) Five to ten times a day
(3) Every few minutes
(4) I haven't thought about it.

5. Please rate this statement: *Thinking about my free time, I feel that some activities involving my cell phone take me away from time spent with my romantic partner.*

(1) Completely agree
(2) Somewhat agree
(3) Somewhat disagree
(4) Completely disagree

6. What activities involving your cell phone take time away from your relationship with your partner? (Circle all that apply.)

(0) This doesn't apply to me.
(1) Making phone calls
(2) Text messaging
(3) Surfing the Web
(4) Playing games
(5) Visiting Social Networking sites
(6) Other, please specify _____

7. How often do you use your cell phone to visit social networking websites?

(0) I don't visit social networking websites.
(1) Once or twice a week
(2) A few minutes a day
(3) An hour a day
(4) Several hours a day
(5) I can't go for more than 10 minutes without checking social networking sites.

8. **How would you rate your relationship with your romantic partner?**
   I am:

(1) very satisfied with our relationship.
(2) somewhat satisfied with our relationship.
(3) somewhat dissatisfied with our relationship.
(4) very dissatisfied with our relationship.

9. Please choose the statement which best reflects how you feel about the ability to stay in touch with your romantic partner through cell phone use:

(1) I love being able to stay in touch 24/7.
(2) I enjoy the convenience but not constant access.
(3) It hasn't helped or hurt our relationship.
(4) I wish he/she would not call or text as often.
(5) I feel I can never get away from my phone.

10. I feel most valued when my romantic partner:

(1) calls me
(2) texts me
(3) posts something on social media about me or our relationship
(4) gives me a gift
(5) does something nice for me
(6) spends time with me

11. Do you ever turn off your cell phone?

(0) No
(1) Yes

12. If you do turn off your cell phone, how frequently and for how long do you turn off your cell phone?

Fill in box

13. If you didn't have access to your cell phone (dead battery, lost, left at home), what would be your response?

	Not at all			**Extremely**
Unhappy	1	2	3	4
Anxious	1	2	3	4

14. In your opinion, does your partner spend too much time on their cell phone?

(0) No
(1) Yes

15. Does your partner feel you spend too much time on your cell phone?

(0) No
(1) Yes

16. Please share how you feel cell phone use positively or negatively affects your relationship with your partner.

Fill in box

17. With what gender do you identify?

(1) Male
(2) Female

18. What is your race/ethnicity? (You may circle more than one.)

(1) African American/Black
(2) Hispanic/Latino(a)
(3) Caucasian/White

(4) Asian
(5) Native American
(6) Other, please specify: _____

19. What is your age? _____

20. What is your income bracket?
(0) Under $20,000
(1) $20,000-$30,000
(2) $30,000-$45,000
(3) $45,000-$60,000
(4) Over $60,000

21. Which best describes your relationship status?
(1) Dating
(2) Cohabitating
(3) Married
(4) Other _____

22. How long have you been in the current relationship? (please list length of relationship)
_____ Months and/or _____ Years

Appendix E: Protecting Human Research Participants Certificate of Completion

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Michelle Watson** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 11/22/2014

Certification Number: 1624095