

To the Graduate Council:

I am submitting herewith a dissertation written by Steven Jerome Seiler entitled “Interstitial Copresence: Experiencing Self With and Within Everyday Forms of Electronically Mediated Communication.” I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Sociology.

Suzanne B. Kurth
Major Professor

We have read this [dissertation or thesis]
and recommend its acceptance:

Thomas C. Hood

Robert E. Jones

David Houston

Accepted for the Council:

Carolyn R. Hodges
Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

**INTERSTITIAL COPRESENCE: EXPERIENCING SELF WITH AND WITHIN EVERYDAY FORMS OF
ELECTRONICALLY MEDIATED COMMUNICATION**

A Dissertation Presented for
the Philosophy of Science
Degree
The University of Tennessee, Knoxville

Steven Jerome Seiler

August 2010

Copyright © 2010 by Steven J. Seiler

All Rights Reserved

DEDICATION

This dissertation is dedicated to my parents, Joanne and John Seiler, for their unconditional love, continuous encouragement, and unyielding support over the years, and to my late and dearly missed grandmother, Emily Ritchey, whose kind and gentle spirit will always be remembered.

ACKNOWLEDGEMENTS

It is a pleasure to thank those who made this dissertation possible. I would first like to thank the faculty in the Department of Sociology for granting me the opportunity to pursue my doctoral studies at the University of Tennessee, the privilege of training under such knowledgeable, supportive, and professional sociologists, and the honor of teaching some of the brightest students in the country for five consecutive years. I will be forever indebted to them for granting me these privileges. All of my current and future successes were made possible by them, and they will always have my sincerest appreciation.

I am grateful to my committee members for their insights and encouragement throughout the dissertation process. I owe my deepest gratitude to my advisor and mentor, Dr. Suzanne B. Kurth, who has been a constant source of inspiration, wisdom, and support over the past five years. She taught me what it means to think sociologically and showed me the significance and profundity of studying the lived experience. She also helped me immensely in my professional development, as she always kept me focused on my ultimate objectives and constantly encouraged me to never sell myself short. My “unofficial” mentor, Dr. Robert E. Jones, also played a pivotal role in both the dissertation and my professional development. His genuine interest in my research and his expert knowledge of survey design provided me with the motivation and training necessary for conducting my research. Furthermore, his constant encouragement and contagious enthusiasm kept me going when times were tough. To Dr. Thomas C. Hood, I appreciate immensely your willingness to serve on my committee; it was truly an honor. I have always admired your intellect and envied your career. To Dr. Houston, I thank you for serving on a committee of “crazy sociologists.” The training I received in your

class and the feedback you provided over the past two years were invaluable to the success of the dissertation, and your lighthearted professionalism was always refreshing.

I would also like to thank Dr. Scott Frey for supporting my development as both an educator and a scholar. I owe a special debt to Dr. Stephanie Bohon for her genuine commitment to my success while at the University of Georgia and the University of Tennessee and for the time she devoted to training me in methodology over the years. I would also like to express my appreciation to Dr. Harry Dahms for always taking interest in my progress throughout the program, being a strong advocate for me over the years, and providing me with the training and skill for understanding, developing, and applying theory – and for introducing me to the writings of Henri Lefebvre, whose work on the “Critique of Everyday Life” has profoundly inspired both my research and teaching.

The research for the dissertation was made possible by staff in the Office of Information Technology, most notably, Cary Springer. She provided me with access to the survey builder technology, the training necessary for conducting the survey, and the all-to-frequent technical support. Furthermore, I owe special thanks to the staff at the Black Culture Center and the International House for graciously allowing me to use their facilities for the focus group sessions and to Pam Hindle for her vital contribution to this study.

Last, but certainly not least, I would like to thank my parents and my brother, Michael, as well as all of my dear friends and colleagues who kindly let me ramble incessantly for hours about my research, who reassured me when I doubted myself, and who served as my sounding boards on the many occasion when I felt I was in over my head, especially Dr. Randall Adams, Dr. Jason “Jake” Milne, Dale Ewald, and Mikki Wilkerson. Your moral support helped me make it through this long and arduous journey, for that I am immeasurably grateful.

ABSTRACT

Cell phones and the Internet have become cornerstones in the daily lives of most Americans. Researchers have rigorously studied numerous dimensions of electronically mediated communication (EMC). Yet, very little research has explored the context and consequences of negotiating multiple forms of EMC within everyday life. The purpose of this study was to explore the impact of everyday forms of electronically mediated communication (EvEMC) – cell phone talk, text messages, instant messages, and email – on self-work, particularly within personal relationships. Results of OLS regression analyses of survey data collected from 617 college students and qualitative data analysis of three subsequent focus groups suggested that negotiating personal relationships with and within EvEMC produces a sense of interstitial copresence, which is an awareness of the convergence of perpetual copresence within a digital environment and presence or copresence within a physical environment.

The findings suggested that interstitial copresence is inherently Janus-faced. EvEMC provided people with a strong sense of freedom and control. However, negotiating personal relationships within interstitial copresence resulted in dissolution of relational boundaries. Consequently, deceptive tactics were commonly used to negotiate self-presentation within interstitial copresence, which had consequences for people's self-appraisals as well. Since important others were expected to be accessible virtually anytime and anywhere, people with a strong sense of interstitial copresence often had an adverse emotional reaction when important others did not answer their calls or quickly reply to their messages or call or send messages regularly. As personal relationships negotiated within interstitial copresence move toward totality, the consequences for both the self and the relationships become more pronounced.

Ultimately, the study concludes that self-work with and within interstitial copresence produces an interstitial self – a relational self that is, at all times, situated within a physical environment and a digital environment, yet never completely in either environment.

TABLE OF CONTENTS

Chapter 1: Introduction	1
Chapter 2: Literature Review and Theoretical Framework.....	5
2.1. Electronically Mediated Communication in U.S.....	5
2.2. Everyday Forms of Electronically Mediated Communications and Copresence	7
2.3. The Self and EvEMC	11
2.4. Identities, Mediated Copresence, and EvEMC	13
2.5. Self-Work and EvEMC	17
2.6. Theoretical Framework and Research Questions.....	20
2.6.1. Self-Work With and Within EvEMC	25
2.6.2. Negotiating Personal Relationships With and Within EvEMC.....	29
Chapter 3: Mixed-Methods Research Design: Quantitative Phase.....	33
3.1. Mixed-Methods Research Design	33
3.2. Quantitative Phase: Population and Sample.....	35
3.3. The Internet Survey	37
3.3.1. Survey Procedures	39
3.3.2. The Survey Instrument	40
3.4. Analytic Strategy.....	42
3.5. Dependent Variables.....	44
3.5.1. Interstitial Copresence	44
3.5.2. Self-Presentation: Clandestine Boundary Work and the Disruptiveness of EvEMC	49
3.5.3. Self-Conception: Eliciting Identity Support via EvEMC and the Effect of EvEMC on Self-Appraisal.....	51
3.5.4. Satisfaction with EvEMC in Personal Relationships.	53
3.6. Independent Variables	54
3.6.1. Heavy Use of EvEMC	55
3.6.2. Attachment to EvEMC	58
3.6.3. Relationship Maintenance via EvEMC	59
3.6.4. Interstitial Copresence, as Independent Variables.....	60
3.6.5. Relationship Strain due to EvEMC	62
3.7. Control Variables.....	63
Chapter 4: Mixed-Methods Research Design: Qualitative Phase	65
4.1. Qualitative Phase: The Focus Group Method.....	65
4.2. Focus Group Structure.....	66
4.3. Recruitment, Sampling, and Data	66
4.4. Discussion Guide	69
4.5. Analytic Strategy.....	70
Chapter 5: Interstitial Copresence and Everyday Forms of Electronically Mediated Communication	73
5.1. Introduction.....	73
5.2. Phase I: Quantitative Data Analysis	74
5.2.1. Hyper-Accessibility	77
5.2.2. Interstitial Byplays.....	80
5.2.3. Interstitial Side Involvements.....	84
5.3. Phase II: Qualitative Data Analysis	86
5.3.1. Sense of Hyper-Accessibility	88
5.3.2. Experiencing Interstitial Copresence.....	93
5.4. Discussion	99

Chapter 6: Self-Work With and Within EvEMC: Self-Presentation in Interstitial Copresence.....	103
6.1. Introduction.....	103
6.2. Phase I: Quantitative Data Analysis	103
6.3. Phase II: Qualitative Data Analysis	110
6.4. Discussion	117
Chapter 7: Self-Work With and Within EvEMC: Consequence of EvEMC for Self-Conception	121
7.1. Introduction.....	121
7.2. Phase I: Quantitative Data Analysis	121
7.3. Phase II: Qualitative Data Analysis	126
7.4. Discussion	131
Chapter 8: Negotiating Personal Relationships With and Within EvEMC	135
8.1. Introduction.....	135
8.2. Phase I: Quantitative Data Analysis	135
8.3. Phase II: Qualitative Data Analysis	140
8.3.1. Strategies for Relationship Maintenance.....	143
8.3.2. Deception, Double-Standards, and the Dissolution of Boundaries	148
8.4. Discussion	154
Chapter 9: Toward a Theory of Interstitial Selfhood.....	157
9.1. Summary and Discussion	157
9.1.1. Interstitial Copresence	157
9.1.2. Self-Work Within Interstitial Copresence	161
9.1.3. Negotiating Personal Relationships within Interstitial Copresence	166
9.2. Conclusions: Toward a Theory of Interstitial Selfhood	169
9.3. Limitations.....	172
9.4. Proposals for Future Research	173
List of References.....	177
Appendices.....	201
Appendix A: List of Terms.....	202
Appendix B: Descriptive Statistics of Dependent, Independent, and Control Variables.....	204
Appendix C: Tables of OLS Regression Coefficients, Predicted Values	208
Appendix D: OLS Regression Diagnostics	211
Appendix E: Descriptive Statistics for Focus Group Participants.....	213
Appendix F: Internet Survey	217
Early Notification Email.....	217
Initial Email Invitation	218
Reminder Email	219
The Internet Survey	220
Appendix G: The Focus Groups.....	228
Email Invitation Template.....	228
Reminder Email Template.....	229
Informed Consent Statement	230
Focus Group Discussion Guide	231
Appendix H: Internal Review Board, Human Subjects Approval.....	238
Vita	239

LIST OF TABLES

Table 3.1. Distribution of Survey Respondents	41
Table 4.1. General Description of the Focus Groups.....	68
Table 4.2. Means Comparison of Focus Group and Survey Participants. T-tests of Continuous Variables	69
Table 4.3. Survey Scores on the Survey for Focus Group Participants	71
Table 4.4. Research Chronology.....	72
Table 5.1. Reported Frequency of Use of EvEMC	74
Table 5.2. Descriptive Statistics of Landline Telephone Service Ownership and Use.....	75
Table 5.3. Descriptive Statistics for Sense of Attachment to EvEMC	76
Table 5.4. Reported Frequency of Use of EvEMC for Relationships Maintenance and Face-to-Face Interaction.....	76
Table 5.5. 2x2 Cross Tabulation of Perceptions of Hyper-Accessibility	77
Table 5.6. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Strength of the Sense of Hyper-Accessibility on Selected Independent Variables	79
Table 5.7. Reported Frequency of Interstitial Byplays.....	80
Table 5.8. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Strength of the Sense of Experiencing Interstitial Byplays on Selected Independent Variables	83
Table 5.9. Reported Frequency of Interstitial Side Involvements	84
Table 5.10. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Strength of the Sense of Experiencing Interstitial Side Involvements on Selected Independent Variables	86
Table 6.1. Descriptive Statistics for Remedial Work	104
Table 6.2. Descriptive Statistics for Disruptions due to EvEMC	104
Table 6.3. Descriptive Statistics for Clandestine Boundary Work	105
Table 6.4. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Perceived Use of Clandestine Boundary Work Tactics on Selected Independent Variables	108
Table 6.5. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Perceived Level of Disruptiveness of EvEMC for Self-Presentation on Selected Independent Variables	110
Table 6.6. Descriptive Statistics for Clandestine Boundary Work, Focus Group	112
Table 7.1. Descriptive Statistics for Identity Support via EvEMC.....	122
Table 7.2. Descriptive Statistics for Effects of EvEMC on Self-Appraisal.....	123
Table 7.3. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Use of EvEMC for Eliciting Identity Support on Selected Independent Variables	124
Table 7.4. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Effect of EvEMC on Self-Appraisal on Selected Independent Variables	125
Table 7.5. Descriptive Statistics for Effects of EvEMC on Self-Appraisal, Focus Groups	129
Table 8.1. Descriptive Statistics for the Satisfaction with EvEMC in Personal Relationships and Relationship Strain.....	137
Table 8.2. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Level of Satisfaction with EvEMC in Personal Relationships on Selected Independent Variables .	139

Table 8.3. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Effect of EvEMC on Self-Appraisal on Selected Independent Variables, with the Inclusion of Clandestine Boundary Work Tactics	153
Table B-1 Descriptive Statistics: Dependent Variables.....	204
Table B-2 Descriptive Statistics: Independent Variables	206
Table B-3 Descriptive Statistics: Control Variables.....	207
Table C-1 Predicted Values for the Average Sense of Hyper-Accessibility	208
Table C-2 Predicted Values for the Average Sense of Experiencing Interstitial Byplay	208
Table C-3 Predicted Values for the Average Sense of Experiencing Interstitial Side Involvement	208
Table C-4 Predicted Values for the Average Use of Clandestine Boundary Work Tactics	209
Table C-5 Predicted Values for the Disruptiveness of EvEMC for Self-Presentations.....	209
Table C-6 Predicted Values for the Effect of EvEMC on Self-Appraisal	209
Table C-7 Predicted Values for the Average Level of Satisfaction of EvEMC in Personal Relationships.....	210
Table C-8 Predicted Values for the Effect of EvEMC on Self-Appraisal	210
Table D-1 Regression Diagnostics: Heteroskedasticity, Normality, and Multicollinearity	211
Table D-2 Correlation Matrix for Dependent, Independent, & Control Variables.....	211
Table E-1 Descriptive Statistics of Focus Group Participants, Interstitial Copresence.....	213
Table E-2 Descriptive Statistics of Focus Group Participants, Self-Presentation	214
Table E-3 Descriptive Statistics of Focus Group Participants, Self-Conception.....	215
Table E-4 Descriptive Statistics of Focus Group Participants, Satisfaction with EvEMC in Personal Relationships and Relationship Strain	216

LIST OF FIGURES

Figure 5.1. Model of Interstitial Copresence	100
--	-----

CHAPTER 1: INTRODUCTION

In January 2009, as Barack Obama transitioned into his position as Commander-in-Chief of arguably the most powerful country in the world, the news media pounced on the heated debate simmering since his election that suddenly boiled over into a near scandal. Gracing the national and international headlines of the largest print and television media was a topic best described by Internet bloggers as “BlackBerry-gate.” President Obama declared, “They’re going to [have to] pry it out of my hands.” Journalists and pundits alike were highly critical about the President’s determination to keep his BlackBerry. They believed, as one – among many – reporters stated, he is “the world's highest profile ‘Crackberry addict’” (Harwood 2009; Harvey 2008). In a lengthy statement that appeared in the *Los Angeles Times* on January 20, 2009, John Podesta, a co-chairman of Barack Obama's transition team, came to Obama’s defense:

I know that without his virtual connection to old friends and trusted confidants, he'd be like a caged lion padding restlessly around the West Wing, wondering what's happening on the other side of the iron bars that surround the People's House. An off-line Obama isn't just bad for Barack. It's bad for all of us. (Podesta 2009)

With the assistance of the National Security Agency and with the approval of the Secret Service, a special BlackBerry was designed and issued to the President, making him the first “connected” U.S. President in history (Gertz 2009).

The nearly month-long media coverage of President Obama’s Blackberry privileges illustrates the changing landscape of social life in the U.S. associated with the Internet and mobile phones. Some people’s sense of community is extended to a virtual environment. All of our relationships – professional and personal, familial and romantic, local and long distant – are increasingly being mediated through these technologies. Kenneth Gergen (2000:69) argues,

[These technologies] expose us to an enormous range of persons, new forms of relationship, unique circumstances and opportunities, and special intensities of feeling. One can scarcely remain unaffected by such exposure.

As our standing President declared in a television interview on the *Today* show, it simply helps him “stay in touch with the flow of everyday life” (Choney 2009).

Despite the numerous benefits of the Internet and cell phones, the ever-so-frequent news reports of public figures’ extra-marital affairs exposed through text messages (e.g., Tiger Woods’ mistresses), emails (e.g., South Carolina’s Governor Mark Sanford’s affair with his Argentine mistress), and instant messages (e.g., Florida Congressman Mark Foley’s sexually-explicit instant message conversations with his former congressional pages) and the thousands of car accidents each year associated with texting, emailing, or talking on the cell phone while driving remind us that the use of these technologies have negative effects as well. How, then, should we understand the impact of these devices on everyday social life? How have these devices affected the ways we experience self and personal relationships?

To answer these questions, exploration of how we manage identities and relationships with and within electronically mediated communication (EMC) is necessary. Researchers have explored the impact of EMC on the self (Brown, Green, and Harper 2002; Hardey 2002; Ling 2004; Ling and Pedersen 2005; Turkle 1995) and relationships (Kraut, Patterson, Lundmark, Kiesler, Mukopadyay, Scherlis 1998; Kraut, Kiesler, Boneva, Cummings, Helgeson, and Crawford 2002; Nie 2001; Nie and Erbring 2002). However, only a few researchers have theorized a self embedded within both a physical environment and a digital environment. In a study of the social consequences of the Personal Digital Assistant (PDA), Sherry Turkle (2008) theorized that the self is tethered to others through these “always-on/always-on-us” technologies. Similarly, Gergen (2000) claims that the self is spread thinly across multiple relations through

the “technologies of social saturation,” i.e., communicative technologies in general. Although theories such as these provided a theoretical foundation for this study, much of the research on EMC focused on negotiating self and personal relationships through a single medium (e.g., Internet chatrooms, text messages) or a single device (e.g., cell phone, computer). The compartmentalized focus of much of the empirical research on EMC does not capture the dynamics expressed in theories such as Turkle’s (2008) “tethered self” and Gergen’s (2000) “saturated self.” Yet, the lack of specificity and systematic empirical analyses raises questions about the dependability of these theories.

In this study, these theories as well as recent research on negotiating self and personal relationships through EMC were used as a basis for exploring self-work negotiated with and within various common forms of EMC, particularly through everyday forms of electronically mediated communication (EvEMC). EvEMC was conceptualized as the forms of EMC most commonly used by Americans, evidenced in various national surveys (see Hamptons, Sessions, Ja Her, and Raine 2009; Jones and Fox 2009; Lenhart, Jones, and Macgill 2009). The argument set forth here is that a mutual sense that important others are always available within a digital environment as multiple forms of EvEMC are used more often for managing personal relationships. The central argument is that this sense of digital copresence converges with the sense of corporal copresence, which produces a sense of “interstitial copresence.” Self-work occurs within this interstitial copresence.¹

Based upon previous research on EMC reviewed in chapter two, a concept for interstitial copresence was proposed and subsequently measured using the mixed-methods research design presented in chapters three and four. After exploring the concept of interstitial copresence in

¹ A list of terms is provided in Appendix A.

chapter five, self-work with and within EvEMC is examined in chapters six and seven. The focus of chapter six is on boundary work as self-presentation, whereas chapter seven explores the consequences of EvEMC on self-concept. In chapter eight, the effects of negotiating personal relationships with and within EvEMC are examined. The overarching research questions for this study were as follows:

1. How is the self negotiated with and within EvEMC?
2. What are the consequences of EvEMC on self-work?
3. How do EvEMC influence the context and dynamics of personal relationships?

The sequential quantitative-to-qualitative mixed-methods research design consisted of an Internet survey of 617 college students followed by three semi-structured focus group sessions with 26 of the survey participants. The cross-sectional survey data provided general information about and relationships between perceptions and uses of EvEMC, which informed the discussion guide for the focus groups. The focus groups were conducted to contextualize and verify the findings of the quantitative analysis. Once the qualitative data were transcribed and evaluated, the quantitative and qualitative data were triangulated.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1. Electronically Mediated Communication in U.S.

The Internet and cell phones have become communication cornerstones in American life (Hanson 2007; Locke, Bertschi, and Glotz 2005). According to the Central Intelligence Agency, around 60 percent of the world's population own mobile phones and around 30 percent have Internet access (CIA 2009). The U.S. is among the leaders in cell phone ownership and Internet access. It is ranked third for mobile phone ownership (2.7 million) and second for Internet users (2.3 million) (CIA 2009). Originally created in the late 1800s, the wired telephone became a standard feature in most households in the U.S. and Western Europe by the mid-1900s. The number of wired telephone users remained high through the rest of the 1900s, but has seen a steady decline in recent years due to the popularity of mobile phones (Hanson 2007). According to the U.S. Census Bureau, residential telephone ownership declined by five percent between 1998 and 2005, while cell phone ownership nearly doubled, from 36 percent to 71 percent of the population (Edwards 2009). The Centers for Disease Control reported nearly a 300 percent increase in U.S. wireless-only households from 2005 to 2008 (Blumberg and Luke 2009). Specifically, in 2005, 7.3 percent of households were wireless-only. By 2008, over 20 percent of households used cell phones as their primary telephones (Blumberg and Luke 2009). Cell phone ownership increased from 11 percent in 1995 to 89 percent in 2009 (CITA 2010).

The popularity of the Internet in the U.S. followed a similar pattern as cell phone ownership. Developed for the military in the 1960s, the Internet was not available to the public until the early 1990s. By 1995, only 14 percent of Americans were online (U.S. Census Bureau 2010). Just two years later, the percentage of Americans online nearly doubled to 22 percent

(Newburger 1997). By the turn of the century, more than 60 percent of Americans were online. From 2000 to 2008, the percentage of Americans online increased from 63 percent to 78 percent (Pew Internet 2010). The percentages are much higher for younger generations. From 1995 to 2009, the percentage of Americans between the ages of 18 and 29 who use the Internet increased from 21 percent to 93 percent (Pew Internet 2010; U.S. Census Bureau 2009). Among Americans between the ages of 30 and 49, the use of the Internet increased from 18 percent to 85 percent (Pew Internet 2010; U.S. Census Bureau 2008). Although the percentage among Americans over 50 years old who use the Internet is not as high as for other age groups, it still increased from 6 percent in 1995 to about 53 percent in 2009 (Pew Internet 2010; U.S. Census Bureau 2009).

Internet and cell phone usage have changed the landscape of everyday social life in America. With the innovations in cellular and Internet technology over the past decade, e.g., text messaging, mobile email and instant messaging, notebook and netbook computers, people began integrating multiple forms of EMC into their everyday lives and routine interactions. However, few researchers have studied the dynamics of negotiating relationships with and within multiple forms of technologies. Individuals do not exist in a mono-technology where they use only one form of EMC all of the time. In the U.S., most Internet users also own cell phones (Horrigan 2007) and most cell phone users either use or want to learn how to use the Internet on their cell phones (Rainie and Keeter 2006). People incorporate a variety of forms of EMC into their everyday lives (Gergen 2000; Shiu and Lenhart 2004), which suggests that they switch between different forms of EMC.

2.2. Everyday Forms of Electronically Mediated Communications and Copresence

According to recent national surveys, the most popular usages of EMC in the U.S. are cell phone talking, text messaging, instant messaging, and emailing, conceptualized here as *everyday forms of electronically mediated communication* (Hamptons et al. 2009; Jones and Fox 2009; Lenhart et al. 2009). Among Internet users in the U.S., 93 percent send and receive email and 46 percent send and receive instant messages (Rainie and Keeter 2006). Among Internet users between the ages of 18 and 32, 94 percent use email and almost 60 percent use instant messaging (Jones and Fox 2009). Next to instant messaging, 35 percent of Internet users access social networking websites, 23 percent play interactive games online, 11 percent post blogs, which constitute the third, fourth, and fifth most popular online social activities among Americans (Jones and Fox 2009; Lenhart, Jones, and Macgill 2008). Among cell phone owners, text messaging is the second most popular form of EMC next to cell phone talking. Although 58 percent of all cell phone users use text messages, 85 percent of cell phone users between the ages of 18 and 29 send and receive text messages (Horrigan 2009). Not only are email and instant messaging the most popular online activities among Internet users, but also they are the third and fourth most popular social activities via cell phones, with 19 percent of cell phone users accessing email and 17 percent using instant messages on their cell phones (Horrigan 2009).

Many studies attribute the consequences of EMC to the frequency of use (see Anderson and Tracey 2001; Butt and Phillips 2008; Nie 2001; Park 2003; Ramirez and Broneck 2009; Wellman, Haase, Witte, and Hampton 2001). The frequency of face-to-face interaction and mediated communication undoubtedly has social consequences. However, these consequences are likely coupled with the changing context of copresence (Turkle 2008). All forms of social interaction involve some form of copresence, which “renders persons uniquely accessible,

available, and subject to one another” (Goffman 1963:22). Copresence is a sense of reciprocal exchange of verbal and/or non-verbal symbols, i.e., communication, through social interaction among two or more people within an intersubjective space. It is socially and cognitively constructed in relation to the subjective experience of the interlocutors participating in situated interaction (Zhao 2002). Face-to-face interaction, e.g., lunch with a friend at the neighborhood deli, is a form of copresence, just as mediated communication, e.g., exchanging instant messages over the Internet with a friend on vacation in France, is a form of copresence. During the face-to-face interaction, interlocutors engage in synchronous communication within each other’s physical presence, which Zhao (2003:3) refers to as “corporal copresence.” In corporal copresence, the interlocutors collect information about each other through an exchange of verbal and non-verbal, intended and unintended cues about the other within a temporally and spatially located space. Goffman (1963:17) states “full copresence” is a condition in which people “sense that they are close enough to be perceived in whatever they are doing, including their experiencing of others, and close enough to be perceived in this sensing of being perceived.”

In EMC, although two or more people are engaged in interaction, sensory information is limited by the technological constraints of the electronic medium; therefore, the interlocutors are telecopresent (Zhao 2003). Zhao (2005:390) conceptualizes the “full conditions” of telecopresence as “a situation in which individuals, though not mutually present in the same physical locale, are in each other’s electronic proximity and capable of maintaining simultaneous contact with one another through the mediation of an electronic communications network.” To reformulate Goffman’s conception of the “full conditions” of copresence, telecopresence is the experience of being electronically close enough for the interlocutors to be *felt* in whatever they

are saying or writing to *feel* the sense of being perceived when the other responds, yet it is relatively disembodied and dislocated in comparison to corporeal copresence.

Variation in copresence is a matter of degree. All forms of mediated communication have what Zhao (2003) calls “interface parameters,” or structural characteristics of EMC based upon the technological design of the medium. The major interface parameters for EvEMC vary according to the level of embodiment, immediacy, and mobility (Zhao 2003).² The degree of embodiment and immediacy shapes the context of the interaction, whereas the degree of mobility shapes the physical location of each interlocutor as they participate in the digital interaction.

The full condition of copresence is experienced in face-to-face interaction because it is fully embodied and the exchange is immediately reciprocated. Embodiment is a state in which communication occurs through multiple human senses. It “enables us to instinctively and unreflectively interpret social context and norms” (Rettie 2007:24). Embodiment is measurable in terms of social and physical proximity. Total disembodiment would be a complete removal of human-human interaction. Many researchers refer to disembodiment as the absence of “the stable and locatable Cartesian body,” i.e., physical presence (Richardson and Harper 2002:23). Although the interlocutors are not physically present in EMC, the interaction is still embodied in the sensory content of the form of EMC, that is, the verbal and non-verbal cues available for exchange within the given medium. The degree to which EvEMC may be considered embodied varies. During a cell phone conversation, the interaction is embodied in speech and aural

² Zhao’s (2003) taxonomy of interface parameters also includes scale, which is the number of people the technology accommodates in a single interaction. Cell phones have the lowest scale as they are most commonly used for interaction between two people. Email and text messaging allow for greater scale of participation, e.g., bulk emails and text messaging. Similarly, many instant messaging services allow more than two participants to engage in interaction. However, all four forms of EvEMC are most commonly used for interactions between two people (Zhao 2003).

perceptions. In text-based EMC, e.g., text messages, email, and instant messages, the interaction is embodied solely within visual perceptions.

Immediacy is “the speed at which messages travel back and forth between copresent individuals” (Zhao 2003:450), which ranges from synchronous to asynchronous. Whereas cell phone talk is highly synchronous, email is asynchronous. In between these two forms are text messaging and instant messaging. Instant messaging is generally considered a synchronous form of EMC (Baron 2004), whereas text messaging can be semi-synchronous. That is, interaction through text messaging can occur with some degree of synchronicity.

Mobility is “the capacity of individuals to carry on interactions while in locomotion” (Zhao 2003:450). It is this feature that sets EvEMC apart from EMC via landline telephones. A landline telephone call occurs within a fixed locale. Similar to face-to-face interaction, the user of the landline telephone must be at the specific location associated with the phone number when the phone call comes in. Cell phone talking and text messaging are highly mobile, whereas emailing and instant messaging are most commonly accessed on computers that require a constant power source and authorized Internet access. However, with highly sophisticated mobile technology – e.g., iPhone or Blackberry – and computer technology – e.g., compact laptops, netbooks, or iPad – mobility must be considered in degrees rather than dichotomously. Although cell phones and PDAs provide greater mobility than laptop and desktop computers, email addresses, screen names, and cellular phone numbers are assigned to the individual rather than a location. People can communicate with others from virtually anywhere and at anytime with a mobile phone and emails and instant messages can be exchanged on any computer with Internet access.

2.3. The Self and EvEMC

Our cell phones and computers connect us with others regardless of geographical or temporal location. As long as a cell phone has service and a computer has access to the Internet, our close others are just a few clicks or a phone call away. Changes in the structure of communication may lead to changes in the way we relate to others, our environments, and ourselves. What, then, are the consequences of negotiating self and personal relationships within and within EvEMC?

For symbolic interactionists, the self is constantly negotiated and renegotiated through a continuous, fluid, and reflexive process of observing, interpreting, and reacting to the social world through social interaction.³ Mead (1934:135) claims,

The self is something which has a development; it is not initially there, at birth, but arises in the process of social experience and activity, that is, develops in the given individual as a result of his relations to that process as a whole and to other individuals within that process.

It is both the consequence of and condition for interaction with others, often expressed by social psychologists as an I-me dialectic. “Mes” are “merely the organized cognitive frames of reference in terms of which the mind appraises and evaluates and monitors the ongoing thought and action of its own person, the ‘I’” (McCall and Simmons 1966:56).

Over 30 years ago, Zurcher (1977) theorized a “mutable self” characterized by flexibility, tolerance, adaptability, and openness. The mutable self is able to flow rapidly and harmoniously between social roles and relationships. It adapts to the rapid changes in social life, in social roles,

³ Symbolic interactionists do not have a uniform definition for the self. The definition provided here emphasizes some of the commonalities. The major points of divergence are conceptualizing the self as a process, the self as structure, and the self as dramaturgical performance (Gergen 1971; Sandstrum, Martin, and Fine 2009). Furthermore, the nuances of the self theorized over the last century are too numerous to list here. For a chronological account of theories of the self please see Callero (2003), Gecas (1982), Meltzer, Petras, and Reynolds (1975), Plummer (2000), and Stryker (1980).

and relationships. Furthermore, new experiences and new relationships are welcomed and sought by a mutable self. Although Zurcher's (1977) mutable self has limitations, his theory paints a highly positive picture of the postmodern self that is able to cope with the fluidity of social life in an era of advanced technology and rapid social change. Zurcher (1977) believes the mutable selves are proponents of technologies and, by definition, are positioned to benefit most from such innovations. Citing Victor Ferkiss's "technological men," he claims that with new technologies, the mutable self could evolve into an even more complete self (Zurcher 1977). The mutable self has a capacity for adapting to the technologies of everyday life, yet the adaptive process is by no means uniform.

Over 20 years after Zurcher (1977) theorized the mutable self, Gergen (2000) argues that the self and the contemporary social world are not in harmony. For Gergen (2000:49), the self is "under siege," risking total obliteration in postmodern life. With the availability of communicative technologies, the constant bombardment of images and scripts regarding "who we ought to be," the jet-speed pace of social life and vast amount of roles and relationships negotiated on a daily basis, the self is at risk of total saturation. Unlike Zurcher, Gergen (2000:49) claims, "the technologies of social saturation are central to the contemporary erasure of individual self." In postmodern life, the saturation of self with a vast number of relationships is at odds with the capacity of the self to adapt to such saturation. The self, thus, suffers from multiphrenia, a syndrome reminiscent of shifts in consciousness: "one detects amid the hurly-burly of contemporary life a new constellation of feelings or sensibilities, a new pattern of self-consciousness" (Gergen 2000:73).

Gergen's (2000) theory of "multiphrenia" is in opposition to Zurcher's (1977) claim regarding the flexibility, tolerance, and adaptability of the mutable self. One could argue, and as

Gergen (2000) seems to imply, that multiphrenia could be the result of the attempts of mutable selves to use technologies to inform and adapt roles and relationships to the pace of postmodern life. Gergen (2000:74) claims,

[Multiphrenia] is partly an outcome of self-population, but partly a result of the populated self's efforts to exploit the potential of the technologies of relationship.... [A]s the technologies are further utilized, so do they add to the repertoire of potentials.

Whereas Zurcher (1977) believes that the emergence of new technologies coupled with the adaptability of the mutable self could give way to a more complete self, Gergen (2000) argues that technologies threaten the future existence of a holistic self.

The mutable self and saturated self represent extreme views of the self in postmodern social life. Turkle (2008:122) states, "I once described the rapid movements from physical to a multiplicity of digital selves through the metaphor of 'cycling-through.' With cell technology, rapid cycling stabilizes into a sense of continual co-presence." Traditionally, the self was grounded primarily in face-to-face communication, which Goffman (1964) argues is "where the action is." As the "action" is now also located within virtual communication as well, the changing nature of the self – or the "new state of self" (Turkle 2008) – is directly related to the structure of situations and the nature of the copresence within situations. Therefore, to understand the "new state of self," it is necessary to examine the new nature of copresence.

2.4. Identities, Mediated Copresence, and EvEMC

The self and identities are conceptually distinct yet inherently connected. Owens (2006:206) claims,

[T]he self is a process and organization born of self-reflection whereas identity is a tool (or in some cases perhaps a stratagem) by which individuals or groups categorize themselves and present themselves to the world.

Stets and Burke (2005:135) claim,

The overall self is organized into multiple parts (identities), each of which is tied to aspects of the social structure. One has an identity, an ‘internalized positional designation’ (Stryker 1980: 60), for each of the different positions or role relationships the person holds in society. The identities are the meanings one has as a group member, as a role-holder, or as a person.

Whereas the self is a reflexive dialectic of observation, interpretation, internal organization, and emotional and behavioral reaction, identities contribute to an enduring sense of self by locating persons in relation to others within social situations and relationships.

A *social situation* is a temporally and spatially located social environment in which people engage in interaction with one another (McCall and Simmons 1966). In every social situation, we negotiate multiple identities. Formally defined, an *identity* is a constructed category specifying who one is to oneself and in relation to others, i.e., “categories people use to specify who they are and to locate themselves relative to others within situations and relationships” (Owen 2003:207). Identities can be attached to the situation itself (situated identities) as well as specific personal relationships (relational identities). Situated identities are “the attributes that are made about participants in a particular setting as a consequence of their actions” (Alexander and Lauderdale 1977:225). They are imaginative views people have of themselves as they like to think of themselves being and acting as occupants of positions, or roles, in relation to others within the situated institutional or group contexts (McCall and Simmons 1966). They are performed and evaluated in accordance to the external role expectations associated with one’s position within the institution or group as well as the idiosyncratic aspects of the performance

based upon how the actor imagined herself or himself enacting an identity. The self is a product of and condition for the negotiation of situated and relational identities.⁴

Relational identities are anchored in relationships with important others. Unlike situated identities, they cut across institutional or situational contexts (Blumstein and Kollock 1988). A relationship is a series of repeated interactions between two people in which the behaviors of one affect the behaviors of the other over the course of time. A personal relationship is a series of frequently recurring, enduring, and intimate interactions between two interdependent people developed over a period of time in which specific and unique identities develop through, and, thus, become dependent upon, the continuance of interactions (Blumstein and Kollock 1988).

Others are central to one's identities. Berger (1967:100) states, "One cannot be human all by oneself and, apparently, one cannot hold on to any particular identity all by oneself." The situated and relational identities we negotiate are the parts that make up the self. McCall and Simmons (1966:168,170) claim,

Identity must be won and won continually. Audiences are fickle, and we must continually induce them anew to support our role and legitimate our claims to particular identities.... People seek one another out repeatedly, in order to 'use' one another as dependable sources of... support for prominent identities.

Relationships ideally provide dependable and consistent sources of support for identities.

Identities and relationships are managed through "social encounters" within situations (Goffman 1963). A social encounter is a focused interaction between two or more people engaged in focused interaction (Goffman 1963). Encounters within any environment require "situational involvement," which "refer[s] to the way the individual handles his situated

⁴ The self or any derivative of the self (e.g., selfhood, self-concept, self-work) refers to process and organization the sum of all identities. Identity or any derivative of identity (e.g., identity support, identity maintenance, disrupted identity) refers to the relational identity associated with a particular personal relationship or, where noted, the situated identity within a specific encounter.

activities” (Goffman 1963:37). Maintaining situational involvements requires direct allocation of mental attention. Goffman (1963:37) suggests, “The involvement that an individual sustains within a particular situation is a matter of inward feeling.” That is, involvement is only maintained to the extent that the participants in the situation maintain it cognitively and through an exchange of body idioms, which suggests that involvement is not directly verifiable (Goffman 1963), as the actual involvement is less significant than the inference of involvement. Involvements could be of two sorts: main involvements and side involvements. Every encounter consists of a “main involvement,” which Goffman (1963:43) defines as an involvement “that absorbs the major part of an individual’s attention and interest, visibly forming the principal current determinant of his actions.” In face-to-face interaction, the main involvement occurs in a physical space and the exchange of information occurs within the range of human senses. In digital encounters, the information exchanged is limited and generally constrained to verbal or textual communication and they may not engage the major part of the person’s attention, yet are situations within which main involvements may take place.

However, situations could also include encounters in which people engage in byplays, which Goffman (1981:184) defines as “subordinated communication among a subset of ratified participants.” Byplays could require an interlocutor to manage the main involvement while also managing interactions with others. Goffman (1963) suggests that byplay is most likely to occur during a “boundary collision” -- an encounter involving three or more active participants. When boundary collision occurs in corporeal copresence, all of the participants are aware of the collision.

Encounters also often include “side involvements,” which Goffman (1963:43) defines as activities “an individual can carry on in an abstracted fashion without threatening or confusing

simultaneous maintenance of a main involvement.” Attention is rarely entirely focused on the main involvement. Side involvements could be activities such as eating dinner, smoking a cigarette, or washing dishes while maintaining the conversation with the other participant(s), i.e., sustaining the main involvement. To sustain a main involvement, side involvement(s) should be subtle and innocuous.

2.5. Self-Work and EvEMC

McCall and Simmons (1966:42) argue that reality is “not a hard, immutable thing but is fragile and adjudicated – a thing to be debated, compromised, and legislated.” The self is no different. Identities are constantly negotiated, modified, and defended. As social beings reliant on others for support regarding our identities, we must engage in self-work. Whereas self-concept is a theory of oneself based upon the appraisal of one’s performance, self-presentation is a situated, social performance based upon a vicarious, ideal performance – an imaginative performance – occurring within the inner forum of the individual.

Self-presentation is the performative dimension of the self, the performance of one’s ideal image of self relative to one’s identities and situated interactions (Gergen 1971; Goffman 1959; McCall and Simmons 1966). Within social interactions, people actively engage in self-presentation in a manner they perceive most beneficial to their image of themselves. Similar to the stage play, a social situation has a front stage and back stage region. The front stage is,

... that part of the individual’s performance which regularly functions in a general and fixed fashion to define the situation for those who observe the performance.... [It] is the expressive equipment of a standard kind intentionally or unwittingly employed by the individual during his performance. (Goffman 1959:22)

The backstage region is the place where the front stage performance is constructed and rehearsed and where “the performer can relax; he can drop his front, forgo speaking his lines, and step out of character” (Goffman 1959:112).⁵ As in a stage play, boundaries serve to block the audience completely from the back stage. The dramaturgical model assumes social performances have regions demarcated by socially constructed boundaries. Goffman (1959:113) contends that the front region and back region of a stage play are commonly demarcated by “a partition and guarded passageways.”

Self-presentation is shaped by, as well as shapes, self-concept. Self-concept is a theory people have of themselves based upon the sum total of their appraisals of their identity performances. It “refers to the continuity -- however imperfect -- of an individual’s experience of himself in a variety of situations” (Turner 1976:990). It is based on the evaluation of the congruence between our imaginative performance and actual performance of our identities. Stets and Burke (2005:5) define self-concept as,

[T]he set of meanings we hold for ourselves when we look at ourselves. It is based on our observations of ourselves, our inferences about who we are, based on how others act toward us, our wishes and desires, and our evaluations’ of ourselves.

Accordingly, although core beliefs about ourselves are relatively stable, we constantly revise our self-concept based upon our interpretations of others’ reactions to us. That is, we evaluate our actual performance based upon our internalized, ideal performances of identities. Therefore, self-concept is in a state of flux.

⁵ Although Goffman (1959) did not mention the improvisational theater, the social performance is most similar to improvisational theater, where the actors have a general understanding of their roles before the performance, but do not follow clearly defined scripts; rather, they ad-lib once the performance begins. In social interaction, the interlocutors attempt to define the situation in order to ad-lib their role performance in a manner that supports the impression they would like to give (See Messinger, Sampson, and Towne 1962).

Identities are dynamic and performative and, thus, volatile. As people enact identities in accordance with their take on their specific roles in specific situations, they seek information from the audience to evaluate their performance. Every identity we hold is legitimate only to the extent that we *interpret* others' actions and cues as confirming its legitimacy. Regardless if the actor is explicitly aware of the evaluations from others, i.e., self-conscious, or if the other is only tacitly aware of the actor's need for identity confirmation, identities nonetheless must be confirmed by others. People constantly seek *identity support*, which is the expressed support granted by an audience that validates one's claims regarding one's identity (McCall and Simmons 1966).

Self-appraisal is the "cognitive and evaluative references regarding an individual's performances, states, or attributes.... [It] refers to judgments that the individual makes regarding self" (Lundgren 2004:269); it is an evaluative process in which a self-view is gained from one's direct experience as well as from interpreting the reflected appraisals of others within social interaction. It is through the self-appraisal process that self-concept arises (Gecas and Burke 1995). It is the process of interpreting the reactions of others to one's performance. An internal calculus of the reactions of others as legitimating or delegitimizing one's identity in reference to one's ideal performance produces an emotional reaction and subsequent reevaluation of one's self-concept or rejection of the appraisers. Self-appraisal is only an estimation of one's social performances, as this evaluation is based upon the person's interpretation of the verbal and non-verbal feedback gleaned explicitly or implicitly from the audiences of the performances. If the actor interprets an array of explicit and implicit reactions as identity support, the self-appraisal could be quite positive; however, if identity support is unavailable – or at least interpreted as lacking – the actor could have a negative self-appraisal.

2.6. Theoretical Framework and Research Questions

If “the new state of self” must be understood within the context of a continual copresence, the nature of this continual copresence must be explored (Turkle 2008). Turkle (2008:122) claims, “The self... occupies a liminal space between the physical real and its digital lives.” She refers to liminal space as “not entirely public, not entirely private” (Turkle 2008:122). Although this is an astute observation, this public-private convergence seems only to be a signifier a much more existential convergence. The blending of public and private spaces occurs on the level of one’s cognitive gaze, as the person is “transferred” to another space through EvEMC (Turkle 2008). This shifting cognitive gaze represents a sense of “continual copresence” in which the self is spread across the physical and digital environments and self-work is negotiated sequentially or simultaneously within both. In this sense, negotiating social life with and within EvEMC produces an *interstitial copresence*, which is a mutual sense of perpetual copresence located socially and cognitively within the physical space and digital space. Plant’s (2002:50) notion of “a kind of bypsyche” among mobile phone users captures a similar idea:

Many mobile users have become adept at operating as though in two worlds in these psychological senses, and in more physical ways as well; in a way the mobile has created a new mode in which the human mind can operate...

As IJsselsteijn (2002:1) argues, “In a sense, all reality is virtual. It is constructed through our sense organs and cognitive apparatus. Reality is not ‘out there,’ it is what we take to be ‘out there.’” Interstitial copresence is feeling close enough to be felt in whatever important others are doing, and close enough to experience the feeling of being felt by them in a perpetual digital copresence. It is characterized by a sense of meaning and a sense of action. Some have associated excessive mobile phone and Internet use to psychological addiction or compulsive behavior (Grohol 1999; Park 2003; Igarashi, Motoyoshi, Takai, and Yoshida 2008; Young

2008); however, much of the sociological research on EvEMC seems to suggest that much of these seemingly additive or compulsive behaviors are related to a sense of interstitial copresence.

The first characteristic of interstitial copresence – the sense of feeling close enough to be felt in whatever others are doing – is conceptualized as a sense of *hyper-accessibility*, a sense of constant digital copresence. The unique configurations of the interface parameters of EvEMC as well as the increasing technological integration of these forms of EMC into single devices could produce a sense of hyper-accessibility. Numerous studies suggest that people feel perpetual accessibility through cell phones (Hadden 1998; Ito 2005; Horstmanshof and Power 2005; Turkle 2008; Plant 2002), email (Ceaser 2005; Stafford, Kline, and Dimmick 1999; Wellman 2001), and instant messaging programs (Licoppe 2004; Kim, Park, and Rice. 2007; Rettie 2005; Nardi, Whittiker and Bradner 2000). Turkle (2008) argues that the self is tethered to others through mobile devices. While these devices provide perpetual contact, Baron, Squires, Tench, and Thompson (2005) suggest that the ability to ignore calls or text messages provides a sense of freedom rather than constraint. Yet, they also argue that instant messaging and email have a tethering effect because they limit users' mobility, as messages accumulate when they are not at the computer (Baron et al. 2005). Underlying the feelings of being tethered or mobile is a sense of hyper-accessibility. Computer-mediated communication has a strong tethering effect, as it requires the interlocutors to be located in front of a screen in a physical space in order to send or receive messages – instant or email (Baron et al. 2005). With cell phones, relationships could be maintained virtually anywhere. The feeling of hyper-accessibility, then, would be strongest for those who regularly negotiate personal relationships by cycling or switching between face-to-face interactions, computer-mediated communication, and electronically mediated communication through mobile phones.

This sense of constant digital copresence is more than simply a potential for digital copresence, as others and oneself are assumed to be copresent even when not engaging in an encounter. Similar to Baudrillard's (1983) concept of hyperreality, in which the "simulations... stand in for reality," hyper-accessibility replaces the empirically real with an imagined realness. Zhao (2005) argues that "telecopresence" is partially "de-regionalized," as the front stage performances can be managed from a backstage. However, through social interactions within interstitial copresence, in which digital and physical front stages overlap, a sense of a perpetual digital front stage performance, with infrequent intermissions, is constructed. In face-to-face interaction as well as electronically mediated interaction, our sense of self is developed from what we *think* others think about us, not what they *actually* think about us (Zhao 2005). Just as a hyper-reality exists only to the extent that people identify internalize it as real, hyper-accessibility is empirically real to the extent that people construct it as such. Therefore, the sense of hyper-accessibility is based upon how strongly we *believe* others expect us (and we expect others) to be available, not on how much they *actually* expect us to be available or how accessible they *actually* are to us.

Interstitial copresence is also characterized by a sense of action or participation— feeling close enough to experience the feeling of experiencing others. Based upon previous research on different forms of EMC, the experience of interstitial copresence with EvEMC is expressed in the simultaneous or sequential management of multiple different encounters. Palen, Salzmen, and Young (2000:209) describe the sense of experiencing interstitial copresence in cell phone calls:

[T]alking on a mobile phone in a public place is in part a matter of a conflict of social spaces in which people assume different faces... When mobile phone users are on the phone, they are simultaneously in two spaces: the space they physically

occupy, and the virtual space of the conversation... When a phone call comes in... the user decides... what face takes precedence.

The singular act of managing a cell phone call in public constitutes a simultaneous involvement in two spaces. However, the sense of experiencing interstitial copresence arises through the routinized behaviors of negotiating different spaces through EvEMC. Such behaviors are well documented in the current literature on EMC (see Brown, Green, and Harper 2002; Hanson 2007; Ling 2004; Ling and Pedersen 2005; Plant 2002; Turkle 1995).

The actions associated with the sense of experiencing interstitial copresence can be divided into at least two categories: (1) interstitial byplays and (2) interstitial side involvements. *Interstitial byplay* is conceptualized as simultaneous or sequential negotiation of main involvements within two or more different encounters. Examples of interstitial byplays documented in previous research are managing incoming phone calls while at dinner with friends (Geser 2004); exchanging text messages with friends in front of the teacher in class (Taylor 2002); participating in two chat rooms at the same time (Turtle 1995); exchanging instant messages while talking to someone else face-to-face (Nardi et al. 2005); and typing an email while talking on the phone (Gergen 2000).

Interstitial side involvements are activities people engage in a physical space while maintaining a main involvement in a digital environment. Maintaining the attention necessary for managing side involvements in physical environment without disrupting the main involvement in a digital environment is far more complex in interstitial copresence. Forms of interstitial side involvements that appear in previous research on EMC are talking on the cell phone while driving (Hanson 2007); exchanging instant messages while completing tasks at work (Nardi et al. 2005); talking on the cell phone while eating in a restaurant (Plant 2002); emailing friends while

touring museums (Turkle 2008); talking on the phone while trying on clothes in a fitting room (Weilenmann 2003); typing an email while watching television (Rettie 2005). Maintaining the attention necessary for managing side involvements in physical space without disrupting the main involvement in a virtual space is complex (Fortunati 2005).

Evidence of a sense of interstitial copresence can be found in the previous literature. The connection between the sense of hyper-accessibility and the sense of experiencing interstitial byplays and side involvements requires additional analyses. Furthermore, the relationship between the frequency of EvEMC and the sense of interstitial copresence must be explored further. In addition, since the literature suggests most of the consequences of EvEMC are observable on the level of personal relationships, the use of EvEMC within personal relationships is examined. Finally, with studies suggesting that Internet and mobile phone addiction, the relationship between addiction to EvEMC and interstitial copresence is explored. The analysis in chapter five focus on the following research questions:

R¹: Is the strength of the sense of hyper-accessibility influenced by the strength of experiencing interstitial byplays and side involvements?

R²: Is the strength of the sense of experiencing interstitial byplay and side involvement influenced by the strength of the sense of hyper-accessibility?

R³: Is the sense of interstitial copresence stronger among heavy users of EvEMC than light users of EvEMC?

R⁴: Is the sense of interstitial copresence stronger among those who use EvEMC most often for managing personal relationships?

R⁵: Does the sense of attachment to EvEMC influence the strength of the sense of interstitial copresence?

2.6.1. Self-Work With and Within EvEMC

How does the strength of interstitial copresence influence self-work via EvEMC? Many researchers argue that the self is profoundly influenced by the sense of copresence (Hardey 2002; Rettie 2007; Turkle 2008; Zhao 2005; Waskul and Douglass 1997). To explore the influence of the sense of interstitial copresence on negotiating self, ways in which people engage in certain forms of self-presentation with and within EvEMC and the consequences of EvEMC for one's self-appraisal are explored. Zhao (2005:402) argues, "[A] good understanding of the self-construction process requires knowledge of both self-conception and self-presentation."

Self-presentation via EMC is a widely researched phenomenon (see Hanson 2007; Ling 2004; Ling and Perdersen 2005; Zhao 2005; Wynn and Katz 1997; Taylor and Harper 2003). In computer-mediated communication, self-presentations, as a front stage performance, can be managed from the back stage:

... individuals interact with one another face to device from place to place, which enables them to be 'simultaneously linked to and buffered from one another'... This unique simultaneous linking and buffering capacity 'deregionalizes' face-to-device interaction, making it possible for an individual to be in the front and back regions at the same time. (Zhao 2005:391).

In public, communication mediated through mobile devices requires the user to switch between front and back regions (Hulme 2004). Although self-presentation within mediated encounters are managed from a physical back stage, the interlocutors must also negotiate the physical space regardless if others are corporally copresent.

As self-presentation requires managing all of the claims regarding one's identity, controlling the amount of information about oneself is critical (Goffman 1959; McCall and Simmons 1966). Furthermore, managing all of one's situated and relational identities requires agenda coordination (McCall and Simmons 1966). Researchers have found that EMC is often

used to coordinate one's relationships, but also can cause disruptions to one's performances.

Townsend (2000:9) claims that with cell phones,

The old schedule of minutes, hours, days, and weeks becomes shattered into a constant stream of negotiations, reconfigurations, and rescheduling. One can be interrupted or interrupt friends and colleagues at any time.

Ling (2004) finds that cell phones are often used for micro-coordination of time and relationships. Similarly, instant messaging (Nardi et al.), emailing (Ledbetter 2008), and text messaging are used to coordinated relationships. A central aspect of coordinating relationships through EMC is the maintenance of relational boundaries. Nippert-Eng (1996) argues that people engage in multiple forms of boundary work to separate private life from work. Similarly, Baron et al. (2005) claims that the away message is used to maintain a boundary between potential digital encounters through instant messaging services and other physical or digital spaces. Plant (2002) also observes a number of body idioms people use to create boundaries between a private mobile phone conversation and the public environment. The "out-of-the-office" auto-reply email is a boundary maintenance strategy (Laurier 2002). Screening calls or purposely directing calls to voicemail are also common forms of electronic boundary work (Hadden 2005; Ling 2004; Laurier 2002).

EMC is thought to provide greater control over one's availability (Licoppe and Heurtin 2002). One regularly cited strategy for controlling one's availability is the use of deception (Hancock, Thom-Santelli, and Ritchie 2004). Hancock et al. (2004) reported people often lied about their locations or other actions via emails, instant messages, and telephone. Horstmanshof and Power (2005) find that people avoided phone calls or did not reply to text messages from important others, but later provided "face-saving" claims such as the mobile phone's battery died. Deception is often used for the good of the relationship, as Turkle (2008:126) claims, "in this

social contract, one needs good reason to claim time ‘offline.’” Evidence that people engage in relational boundary work from research on different forms of EMC suggests that relational boundary work is a central strategy for negotiating relationships with and within multiple forms of EvEMC within daily life. Controlling one’s availability is not only a form of boundary work, the use of deception when accounting for missed calls or unreciprocated messages appear as a critical form of self-presentation with and within EvEMC. Such secretive, subtle avoidance tactics for managing one’s availability are conceptualized as clandestine boundary work tactics. In chapter six, the motivation for using some of these tactics is examined. Furthermore, the influence of the sense of interstitial copresence on the use of clandestine boundary work tactics is explored:

R⁶: Why do people use clandestine boundary work tactics?

R⁷: Do these tactics provide greater control over their self-presentation?

R⁸: Do people who experience a stronger sense of interstitial copresence engage in clandestine boundary work tactics more often?

EMC also affects self-concept. Specifically, some of the uses of EMC reported in the literature suggest that EMC are used as sources for eliciting identity support. Text messages are regularly exchanged as “gifts” from friends (Taylor and Harper 2003), which provide others with identity support. The brief “goodnight,” “I love you,” and “see you tomorrow” text messages reinforce the recipient’s identity as a friend or loved one (Horstmanshof and Power 2005). Turkle (2008) also suggests that mobile phones are used for immediate validation. Similarly, Flanagin (2005) find that people used email and instant messages to feel less lonely and gain insights about themselves.

However, if the communication is not reciprocated, it could have a negative effect on self-appraisal. All forms of social interaction have norm for reciprocity. Gouldner (1960:174) states, “The norm of reciprocity is a concrete and special mechanism involved in the maintenance of any stable social system.” In EMC, the length of time between the initiation and the acknowledgment from the other person depends upon the interface parameters of the particular medium. If important others violate the norm of reciprocity, it could have negative consequences on the initiator’s self-appraisal. Murtagh (2002:87) argues that the missed phone call is “an infraction of the ‘conditional relevance’ of the initial summons through the ringing phone.” Taylor and Harper (2003:281) claim, “The receipt of very few or no messages over the course of a day can lead to breaches in the underlying agreements between friends, causing either giver or recipient to feel rejected or excluded from their social networks.” If people perceive violations in the social expectations regarding reciprocity, they may feel ignored, rejected, or even ostracized. In controlled experiments, Williams, Cheung, and Choi (2000:750) find that people felt a sense of cyberostracism, which is, “[A]ny intended or perceived ostracism in communication modes other than face-to-face. This includes, but is not limited to, failing to receive a reply in the mail, a phone call, or in the present case, being ignored over the Internet.” In a similar experiment with text messaging, Smith and Williams (2004:298) find,

[P]articipants felt the effects of ostracism even though they had no direct evidence that they were being deliberately ostracized or that the others continued interacting with each other.... [They] were provided with little information to help them make sense of their situation. But the pain associated with ostracism was not alleviated, even for those who did have an explanation for their ostracism.

In a study involving focus group interviews, Taylor and Harper (2003:382) note,

[Two girls] describe how they feel depressed or upset when they do not hear from their friends. Both girls, it seems, expect their friends to continue... the cycle of reciprocity. When they fear the cycle to be broken, they feel there is something

amiss – something “wrong with the world” – and that their peers must have turned against them.

These studies suggest that violating the norm of reciprocity within EMC could affect self-appraisal in a similar way as violating this norm in face-to-face interaction.

Ultimately, the question remains as to what extent EvEMC affect one’s self-concept. In chapter seven, the following questions are explored:

R⁹: To what extent do EvEMC affect how people evaluate themselves? Are EvEMC significant media for eliciting identity support? What effect do they have on self-appraisal?

R¹⁰: Are the effects of EvEMC on identity support and self-appraisal more pronounced among those who have a strong sense of interstitial copresence?

2.6.2. Negotiating Personal Relationships With and Within EvEMC

Central to the self and self-work are personal relationships (McCall and Simmons 1966; Gergen 2002). EvEMC are most often used for managing personal relationships (Horstmanshof and Power 2005; Tillema, Dijst, and Schwanen 2007; Turkle 2008). Gergen (2000) argues that the displacement of space and time created by mobile technologies erodes the depth of personal relationships. On the other hand, numerous researchers argue that the ability to move beyond spatial-temporal locations actually expands the repertoire of tools for managing self and relationships (Fortunati 2005; Geser 2004; Ling 2004; Rettie 2007; Taylor and Harper 2003). Mobility itself is liberating and the opportunity for immediate interaction is self-gratifying (Geser 2002). Furthermore, Horstmanshof and Power (2005) find that exchanging instant messages and text messages provides additional resources for managing personal relationships.

A wealth of research suggests that people use different forms of EMC for managing personal relationships. Plant (2002) argues that the mobile self is conditioned to accept that

important others are only a phone call or text message away. In many cases, people use cell phones and the Internet strategically to manage certain relationships under varying circumstances (Johnson, Haigh, Becker, Craig, and Wigley 2008). In a study of college students, Baym, Zang, and Lin (2004) find that students use the Internet and landline telephones to supplement face-to-face interactions in long-distant relationships. A similar study among college students in South Korea found that students use cell phones more often to maintain close relationships and instant messaging to expand or build upon weaker relationships (Kim et al. 2007). In Baym's et al. (2004), students report that the quality of face-to-face communication was rated the same as telephone communication and only slightly higher than the quality of interaction via the Internet. According to a report by Madden and Lenhart (2006), the majority of Internet users believe that the Internet and email have had a positive impact on their relationships. Boase, Horrigan, Wellman, and Rainie (2006) also report that people feel that email strengthens their close relationships and helps maintain their long distance relationships. According to Hu, Wood, Smith, and Westbrook (2004), exchanging instant messages with important others provides an additional level of affirmation and intimacy in one's personal relationships.

The findings of these studies suggest that using EMC for managing relationships have both positive and negative effects on the quality of the relationships. To understand why EMC has such various effects on the quality of personal relationships, it is necessary to examine relationship maintenance as relational self-work. In personal relationships, self-presentation takes the form of *relationship maintenance*, which is the frequent, routine, and meaningful interactions within the normal course of the personal relationship that contribute to the maintenance of relational boundary rules.

Relational boundary rules are norms that protect, or effectuate, the relational identities within personal relationships (McCall, M. 1970). Michal McCall (1970) suggests four types of boundary rules: (1) inhibitory rules, (2) facilitating rules, (3) transformation rules, and (4) rules of privacy. Inhibitory rules keep out any information that could discredit one's relational identity. Facilitating rules ensure that all the elements necessary to support one's relational identity and to provide the other with identity support are both available and utilized. Transformation rules allow certain elements and information to be harmlessly introduced to the relationship in certain situations yet kept out of other situations. The rules of privacy deal with the sharing of selves with others external to the relationship as well as the sharing of selves with each other (McCall, M. 1970). The introduction of damaging or discrediting information in a personal relationship could occur if relational boundary rules are breached. Such boundary work tactics are subtle forms of self-presentation and highly contingent upon managing information about one's history.

It is also through proper relationship maintenance that identity support is reciprocated. McCall and Simmons (1966:187) argue that each person must constantly work toward minimizing two logistical problems: "first, to juggle the claims of all one's relationships in such a manner that one's personal ends are furthered (or at least not entirely jeopardized) and, second, to manage events pertinent to any given relationship in such a way as to preserve and cultivate it." Relationship maintenance has both self-expectations, i.e., imaginary performance, and social expectations, i.e., other's expectation based upon the person's identity that has been established throughout the course of the relationship. If one person does not feel the other is providing the identity support that has come to be expected, the relationship could face an uncertain future. Relationship maintenance is difficult to maintain because relationships have a totalizing effect;

that is, they have a tendency to encapsulate more and more of one's other situated and relational identities (McCall and Simmons 1966). If the relationship does receive the necessary maintenance, it could deteriorate or simply end.

In chapter eight, the context of self-work within personal relationship, i.e., relationship maintenance, is examined. Specifically, people's perceptions of the effect of EvEMC on their personal relationships and their perceptions of their ability to manage their relationships as well as the impact of the strength of interstitial copresence on their personal relationships are explored:

R¹¹: How do people feel EvEMC affect their personal relationships?

R¹²: Does their sense of interstitial copresence influence their experience with EvEMC in their personal relationships?

To understand better the effects of EvEMC the self, this study explores the nature of self-work and relationship maintenance within interstitial copresence.

CHAPTER 3: MIXED-METHODS RESEARCH DESIGN: QUANTITATIVE PHASE

3.1. Mixed-Methods Research Design

As an exploratory study, a mixed-methods research design was used to explore and explain some of the dimensions of managing self and personal relationships with and within EvEMC. In the previous chapter, the concept of interstitial copresence and concepts for interstitial self-work were proposed. These concepts were empirically examined using an Internet-based survey and three post-survey focus group sessions.

Like most mixed-methods research designs the central premise is that “the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone” (Creswall and Piano-Clark 2006:05). The rationale for this sequential mixed-methods design is that the analysis of Internet survey data could provide a general understanding of the beliefs and behaviors associated with negotiating self and others through EvEMC. The focus group data clarifies and expands upon the findings of the quantitative data analysis.

From a pragmatic perspective, the methods a researcher employs should be a logical representation of the theory put forth. The methods, then, are, or at least should be, justified *de facto* in the theoretical framework of the study at hand, and are in no way bound by the academic separatists arguing for the “the better method.” For the pragmatist, “the current meaning or instrumental or provisional truth value... of an expression... is to be determined by the experiences or practical consequences of belief in or use of the expression in the world” (Onwuegbuzie and Johnson 2004:16). The worth of a research method should not be judged on the assumed value of a research method, but rather on the use of that method, or those methods,

for addressing the empirically observable consequences associated with the research questions.

Empirical research can only constitute an examination of consequences.

Creswall and Piano-Clark (2006:5) define mixed methods research as

...a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies.

As a methodology, this study begins with a quantitative analysis, not with the intent of testing hypotheses, but rather to establish a framework for qualitative analysis. The objective of the survey is to explore a number of exploratory concepts that “provide starting points for building analysis, not ending points for evading it” (Charmaz 2003:16). They could be most useful here as guides for the qualitative analysis.

The assumptions underlying the quantitative data are that people act in general patterns. A series of precise questions can measure some of these patterns, and, assuming the answers to the survey questions generally represent certain behaviors and/or feeling, these behaviors and/or feelings can be quantified and measured statistically. The primary assumptions underlying the focus groups are that individuals have their own stories that the quantitative analysis misses, and the data from reports of these interactions could be used to contextualize the quantitative analysis. This study places equal weight on the quantitative and qualitative data, both of which have inherent limitations yet tremendous merit; combined, the two types of data provide a holistic picture of the perceived dynamics of negotiating the self through EvEMC.

Rather than adhering to a strictly sequential method presented in mixed methods textbooks (e.g., Creswell and Piano-Clark 2006) – the “*QUAN to qual method*” – this study was

a triangulated study, which was a method similar to the grounded theoretical approach of Glaser and Strauss (1967). Although a sequential method was used, in the convergence stage, once the qualitative data were transcribed and interpreted, the insights from the qualitative data were used to reevaluate the quantitative data. Might we keep in mind that, as Wolff, Knodel, and Sittitrai (1993:134) claim,

The more conventional path to advancing theory is through repeated measurement over time, incorporating the findings from one study into the design of those that follow. Mixed-method approaches simply concentrate and accelerate the process.

The quantitative data informed the qualitative analysis; however, once the qualitative data were evaluated, the quantitative data were also reevaluated. The methods used for collecting and analyzing the quantitative data in the first phase of the study is discussed in this chapter and the methods used in the qualitative phase of the study are presented in the next chapter.

3.2. Quantitative Phase: Population and Sample

The data for the quantitative phase of the study were collected through an Internet survey of undergraduate students between the ages of 19 and 29 at a large, southeastern university. Although this sample did not, nor could not, represent all Americans or, for that matter, even all college students in America, previous survey research does strongly suggest that this sample is representative of the demographic of greatest interest here: the most “connected” demographic in America. That is, nearly 100 percent of college students own and use cell phones and the Internet. (Horrigan 2007; Jones, Johnson-Yale, Pérez and Schuler 2007; Lenhart, Simon, and Graziano 2001; Oblinger 2004).

In 2008, 78 percent of Americans went online daily (Horrigan 2009) and 89 percent of Americans owned cell phones (CITA 2010). However, there is a clear generation gap in the use

of EvEMC and ownership of devices for EvEMC, and, unsurprisingly, young adults have the highest rate of use and ownership. Most young adults have been using cell phones and the Internet since childhood and are accustomed to social interaction through EMC (Jones and Fox 2009). In fact, in 2009, 93 percent of young adults went online daily compared to 83 percent of adults between the ages of 30 and 49, 77 percent of Americans between the ages of 50 and 64, and 43 percent of those over the age of 65 (Rainie 2010). Furthermore, about 93 percent of young adults own cell phones compared to just under 90 percent of adults between the ages of 30 and 49, 81 percent among those between the ages of 50 and 64, and just over 66 percent of adults over the age of 65 (Rainie 2010). College students, who are disproportionally represented in the 19 to 29 years old, have even higher percentages of Internet use and cell phone ownership. Jones, Johnson-Yale, Pérez, and Schuler's (2007) study reports that 100 percent of college students use the Internet, regardless of whether they own a computer. Similarly, studies report between 90 percent (Student Monitor 2002) and 99.7 percent of college students own cell phones (Hanley 2009). Hanley (2009) reports less than a four percent difference in ownership between 2006 and 2009. To study and understand the effects of EvEMC on social interaction and self-work, it is certainly beneficial to begin by studying such a connected demographic.

Conducting this study among students at a single university could certainly be criticized for its lack of generalizability. Similar to numerous studies of mediated communication among college students (e.g., Aoki and Downes 2003; Horstmanshof and Power 2005; Trice 2002; O'Sullivan 2000; Bonebrake 2000; Nastri, Pena, and Hancock 2006), by exploring a sample of college students at a single university, the researcher has a greater opportunity for exploring the qualitative dimensions of the study than with surveys conducted on multiple universities in multiple states. Furthermore, studies of multiple colleges or universities found very little

compelling evidence for regional variation in Internet or cell phone use among college students (Jones 2002; Odell, Korgen, Schumacher, and DeLucchi 2000). Although the current study has limited external validity with regards to its application to the larger U.S. population, it certainly provides a highly detailed analysis unattainable by any single nation-wide survey and insightful results that lend themselves to replication in other environments and for other populations throughout the U.S.

3.3. The Internet Survey

An Internet survey was the most efficient means for conducting the quantitative phase of the study. Although Internet surveys are susceptible to high rates of coverage error, every university college student is assigned a university email address. Each student is required to check regularly, and, since this study is primarily interested in those who use technology frequently, the likelihood of coverage error is slim to none (Carini, Hayek, Kuh, Kennedy and Ouimet 2003; Layne, DeCristoforo, and McGinty 1999). Furthermore, in comparison to mail surveys, a number of studies of college students found very little variation in response rates and answers between Internet surveys and paper surveys (Carini et al. 2002; Layne et al. 1999). Thus, the risk of coverage error in this study is minimal.

The sampling frame for the Internet survey was a master database of email addresses for all students attending the university during the fall semester of 2008. University email addresses for all students are public information available through the university website. To increase the likelihood for a representative sample, a request for a random sample of email addresses for 3500 students was submitted to the University Registrar. Honoring the request, the University Registrar used a random-number generator to develop an electronic file of 3500 randomly

selected email addresses, which was pre-delimited to undergraduate students between the ages of 19 and 29 who were currently attending classes. The University's Office of Information Technology provided a listserve for the random sample of email addresses.

The data file of email addresses was entered into a survey-builder program (mrInterview, a survey technology platform developed by SPSS Inc.), in which each email address was attached to a unique identification and secure access point to the survey through a website generated through the Dimensions platform. The survey-builder program also provided a direct interface with a statistical analysis program, SPSS 17. Therefore, each survey was immediately, and automatically, translated into corresponding variables in the data analysis program, which eliminated the possibility of measurement error during the data conversion process.

The requested number of email addresses, 3500, was based upon a calculus of estimations for expected response rates and the minimum number of surveys necessary to have a representative sample. This study is not intended to represent all college students or all Americans; however, it is claiming to represent the general perspectives among college students at a large state university in the southeast. The survey is intended to represent the approximately 20 thousand active undergraduate students between the ages of 19 and 29. The minimum projected sample size needed for a representative sample with a 95 percent confidence interval with a +/-5 percent sampling error with a 50/50 split is 378 completed surveys (Salant and Dillman 1994). The likelihood of human error in producing the sample corresponding to the target population was minimal. The university registrar provided a random sample for this project from the current database of email addresses (i.e., the sampling frame). Therefore, 90 percent of the sample was predicted to be eligible for the study. Since most surveys conducted among college students report relatively low response rates (Carini et al. 2002; Layne et al.

1999), an estimated 20 percent of the students invited to participate in the survey were predicted to respond to this survey. Given the non-threatening, non-intrusive nature of the survey, it was predicted that 60 percent of those invited would complete the entire survey. Furthermore, the survey builder software provided an internal preventative measure that disallows multiple answers to a single-answer question and the open-ended questions within the survey had strict parameters for possible answers, which, thus, eliminated the possibility of unclear, confusing, or unusable responses. Based upon Neuman (2003), the following equation was used for accessing the estimated number of surveys necessary to reach or exceed the target sample size of 378:

$$\frac{(\# \text{ of completed surveys } \pm 5\%, 95\% \text{ c.i.}) / \text{Estimated \% of eligible respondents} / \text{Estimated raw response rate}}{\text{Estimate of completed surveys}} = \frac{(378/.90)/.20}{.60} = 3500$$

The final sample of completed surveys exceeded the predicted minimum necessary for a representative sample by over 200 completed surveys. Of the 3500 email addresses, only 16 (.5 percent) emails were returned as undeliverable. At the conclusion of the survey, 689 surveys were attempted. Only 617 surveys were completed. Of the incomplete surveys, 26 surveys timed out (i.e., the survey was abandoned by closing the Internet browser window before completing the survey) and 46 were stopped by the respondent (i.e., the respondent signed out but never signed back in to complete the survey). To avoid any unnecessary concerns with missing data during the data analysis, only the 617 completed surveys were used for the study. The survey yielded a 19.7 percent response rate and a 17.6 percent completion response rate.

3.3.1. Survey Procedures

The month before the survey was sent to the sample, a pilot study was conducted among 30 volunteers who were not included in the sampling frame. Of the 30 completed surveys, 14 of

the participants were selected for an informal follow-up interview. Based upon the feedback from the pilot survey, the survey instrument was refined. On September 30, 2008, after making the necessary revisions to the survey, an early notification email was sent to the sample of 3500 students (see Appendix F). The email included the purpose of the study, the importance of the study, the value of their participation in the study, the date that an email with a link to the survey should arrive, the researchers' contact information, as well as an explanation of the incentive for completing the survey, which, with the approval of an Internal Review Board (see Appendix H), was the chance to receive one of four 1GB Apple iPod Shuffle and i.Sound Audio bundles. The only stipulation for entrance into the drawing for the incentive was that they had to complete the entire survey. On October 7, 2008, the formal invitation was sent to the sample via email. The email invitation included the aforementioned information, as well as instructions for accessing the survey and a hyperlink to the survey. The survey circulated for exactly 21 days. Reminder emails were sent on October 13, 2008 and October 20, 2008, and a final notice was sent on October 27, 2008, 48 hours before the October 28, 2008 deadline. The drawing for the incentive was conducted on November 28 and the bundles were distributed to the four participants on December 2, 2008.

3.3.2. The Survey Instrument

The survey consisted of 149 multiple-choice questions and one open-ended question. Most of the questions were based upon the 2006 Annual Gadget Survey and the 2006 Cellular Phone Use Survey conducted by Pew Internet and American Life Project, Aoki and Downes (2003), Park (2005), and Wei and Lo (2006). The majority of the questions appeared in Likert scales with options of three sorts: relative frequency, strength of agreement or disagreement, and

dichotomous (yes/no). Once the student clicked on the hyperlink for the survey, a webpage opened with a letter of consent. If the students agreed with the conditions of the consent form, they were prompted to enter their university identifications and begin the survey. During the survey, the participants were required to select a response before they could continue to the next question. Backtracking also was not allowed. They were allowed to logout and reenter the survey an unlimited number of times until either they finished the survey or the deadline for completing the survey passed. The next to the last question on the survey asked if they would be willing to participate in a focus group to further discuss the questions they answered in the survey. The last question was an open-ended question, which asked for their feedback (see Appendix F).

Of the 617 respondents who completed the survey, 387 were female and 230 were male. The sample consisted of 346 respondents who were either 19 or 20 years old and 271 respondents between the ages of 21 and 29. With regards to the race of the respondents, 553 students were white, 32 black, 24 Asian, five Hispanic, and three American Indian. Only two respondents did not own a cell phone and three respondents did not own a computer. However, all of the respondents owned either a cell phone or a computer (see Table 3.1).

Table 3.1. Distribution of Survey Respondents (N=617)

		Count	Percentage
Gender:	Female	387	62.7%
	Male	230	37.3
Age:	19-20	346	56.1
	21-29	271	43.9
Race:	American Indian	3	.5
	Asian	24	3.9
	Black	32	5.2
	Hispanic	5	.8
	White	553	89.6
Own Mobile Phone:	Yes	615	99.7
	No	2	.3
Own Computer:	Yes	614	99.5
	No	3	.5
Owns Cell or Computer:	Yes	617	100

3.4. Analytic Strategy

Ordinary least-squares (OLS) regression models were used to examine the linear relationships between the strength of the sense of interstitial copresence, self-work with and within EvEMC, heavy use of EvEMC, attachment to EvEMC, and the use of EvEMC for relationship maintenance among the survey respondents. The SPSS data file with survey results was converted through Stat Transfer into a Stata format. Once the data were converted, all of the regression analyses were run in Stata 9. A number of diagnostic test were also conducted to ensure that the analyses met the assumptions of OLS regression. Specifically, tests for multicollinearity, heteroskedasticity, and normality were conducted on each model. All models generally met the assumptions. The results of the regression diagnostics for each model in the study are provided in Appendix D.

The concept of interstitial copresence was constructed deductively from previous research on EMC, yet the nature of the analyses is necessarily exploratory. That is, interstitial copresence was characterized as (1) a sense or feeling of hyper-accessibility and (2) a sense of experience of simultaneous or sequential negotiation of physical presence and copresence and digital copresence. The sense of hyper-accessibility was conceptualized as feeling perpetually available to others and feeling that others are constantly available. A sense of experiencing interstitial copresence was conceptualized as an awareness of one's participation in (a) interstitial byplays and (b) interstitial side involvements. The concept of interstitial byplay was conceptualized as the strength of the sense of simultaneously or sequentially negotiating two or more encounters within at least two different situations (physical-digital or digital-digital). The concept of interstitial side involvement was conceptualized as the strength of the sense of simultaneously or sequentially negotiating side involvements in a physical space and a main

involvement in a digital encounter. The three components were constructed as exploratory concepts. In chapter five, the objective was to explore the relationship between hyper-accessibility and experiencing interstitial copresence and the relationship between these concepts and heavy use of EvEMC, attachment to EvEMC, and the use of EvEMC for relationship maintenance. The concepts were based upon the following assumptions:

- (1) Heavy users of EvEMC would have a stronger sense of interstitial copresence than light users of EvEMC. Stated simply, people who use EvEMC more often are likely to exhibit a sense of interstitial copresence.
- (2) The more people use EvEMC for relationship maintenance, the stronger sense of interstitial copresence. The sense of interstitial copresence strengthens as EvEMC become central to managing personal relationships.

The sense of attachment was examined to explore its general association to a sense of interstitial copresence.

Once the concept of interstitial copresence was explored, OLS regression analyses were conducted to examine the relationship between indices for self-work and the sense of interstitial copresence. The exploratory concepts for self-presentation in EvEMC were clandestine boundary work tactics and a sense of disrupted performance caused by EvEMC. The use of EvEMC for eliciting identity support and the consequences of EvEMC for self-appraisals were the exploratory concepts for exploring the context of negotiating self-concept in interstitial copresence. Each index was regressed on the strength of interstitial copresence, heavy use of EvEMC, attachment to EvEMC, and the use of EvEMC for relationship maintenance were explored. For these analyses, the two indices for interstitial copresence were combined into a single index to measure the sense of experiencing interstitial copresence, whereas the index for hyper-accessibility was unchanged.

Finally, OLS regression analyses were conducted to explore the relationship between the perceived effect of EvEMC on important relationships and the sense of interstitial copresence, as well as the heavy use and attachment to EvEMC and the use of EvEMC for relationship maintenance. Moreover, the effect of EvEMC on personal relationships was also regressed on relationship strain caused by EvEMC, which was operationalized into two indices: (1) a sense of excessive demand from important others and (2) a sense of inability to manage one's important relationships.

3.5. Dependent Variables

To be clear, the dependent variables in chapter five were (1) the sense of hyper-accessibility, (2) the sense of experiencing in interstitial byplays, and (3) the sense of experiencing interstitial side involvements. In chapter six, they were (1) the perceived use of clandestine boundary work tactics and (2) disruptiveness of EvEMC to self-presentation. In chapter seven, they were (1) the perception of use of EvEMC for eliciting identity support and (2) the effect of EvEMC on self-appraisal. Finally, the perceived impact of EvEMC on personal relationships was the dependent variable in chapter eight. The descriptive statistics for the dependent variables are presented in Table B-1 in Appendix B.

3.5.1. Interstitial Copresence

Interstitial copresence is a state of copresence related to a particular way of experiencing and interacting with the world through communicative technologies. It involves a sense of hyper-accessibility and a sense of one's simultaneous or sequential participation in a physical environment and one or more digital encounters within EvEMC, expressed through interstitial

byplays and interstitial side involvements. To measure interstitial copresence, three means indices were constructed: (1) an index for the strength of the sense of hyper-accessibility, (2) an index for the strength of experiencing interstitial byplays, and (3) an index for the strength of experiencing interstitial side involvements.⁶

The first characteristic of interstitial copresence, a *sense of hyper-accessibility*, was measured using a means index consisting of two Likert scale items from the survey. The questions appeared on the survey as follows:

Thinking about all of the media you use, please describe your level of agreement with the following statements: (1) The Internet and my cell phone allow me immediate access to others anywhere anytime. (2) I feel like I am always accessible to anyone no matter where I am.⁷

Whereas the first question addresses the respondents' perception of others' availability due to the Internet and cell phones, the second question addresses the respondents' sense of their own availability. The response options ranged were "strongly disagree," "somewhat disagree," "somewhat agree," and "strongly agree," which were coded from zero to three.

Constructing the index based upon the means of the two items not only retained the original coding of the items, 0 to 3, but also provided a more meaningful measure of strength. To reduce confusion, I interpreted a change in the means score of hyper-accessibility as an increase or decrease in the strength of the sense of hyper-accessibility. Specifically, a means score of 0

⁶ Means indices were preferred over additive indices because they allow for interpretations that are more meaningful. That is, averaging rather than the summing the items in each index retains the original coding of the items, which allowed for clear conceptual reference points when interpreting the findings (Langbein and Felbinger 2006). For example, the two Likert scale items for hyper-accessibility were measured from 0 to 3, where 0 represents "strongly disagree" and 3 represents "strongly agree." Whereas the additive index would range from 0 to 6, the means index ranges from 0 to 3, which suggests 2 to 3 represents "agree." For indices that include more items, using the means becomes even more important for the interpretations. The means index for interstitial side involvement, for example, averaged seven Likert scale items. The means index ranged from 0 to 4, which mirrored the original coding of each item where 0 represented "never" and 4 represented "very often." Conversely, an additive index of the seven items would range from 0 to 28, which would have been far more difficult to interpret.

⁷ The two items were adapted from Wei and Lo's (2006) "gratification measure" for accessibility.

represented an absence of the sense of hyper-accessibility whereas a means score of 3 represented a very strong sense of hyper-accessibility. Furthermore, responses of 1.5 or higher represented a strong sense of hyper-accessibility. A means score of 1.5 constituted a polarized sense of hyper-accessibility, as the respondent answered “strongly agree” to one question and “strongly disagree” to the other question. Although these respondents strongly disagreed with one question, they still expressed a sense of hyper-accessibility in their responses to the other question, regardless if it is interpreted as feeling that they are constantly accessible to others or feeling that others are constantly accessible to them. A score of 2 represents “somewhat agree” responses to both questions and a score of 3 represents “strongly agree” responses to both questions.⁸

⁸ The use of only two items was neither advisable nor preferred here. Eight items were included in the survey to measure hyper-accessibility. However, following the survey, conceptual as well as operational problems arose as the survey data was being cleaned. The first Likert scale appeared as follows:

How often do you... (1) Turn off your cell phone during the average week? (2) Leave your instant messenger on just in case someone wants to contact you; (3) Send a text message, instant message, or email to someone if you can't get in touch with her or him on the phone? (4) Leave a meeting or class lecture to accept a phone call?

The response options ranged from never (0) to very often (5). First, the Cronbach's alpha reliability coefficient for the four items was .36, which suggested the items were not measuring a similar phenomenon. One likely cause for the low reliability coefficient was that nearly 60 percent of respondents seldom or never turned their cell phones off in the average week and only 23 percent of them reported leaving their instant messenger on. The focus group data revealed that the only times most students turned off their cell phones were during important events (e.g., church service, exams, first dates) or when the battery dies. Furthermore, it suggested that Facebook Chat was the most common instant message program used, which, among other consequences that I explain in chapter five, allow people to be continuously logged into Facebook and receive text message or email updates when someone sends them a message. Therefore, my suspicion is that the out-dated language of the question resulted in the low percentage of respondents reporting that they were always logged into an instant messenger. That is, with a software program such as AIM or Yahoo Chat, the software must be opened through a local software program, whereas Facebook Chat is Internet-based and notifications can be sent to other instant messaging programs, an email address, and to a cell phone via text messaging. Therefore, it is no longer necessary to physically login to the system or even be in front of a computer to receive a message from someone.

In addition, based upon the focus group data, one possible explanation for over 90 percent of respondents reporting that they never leave class or a meeting to answer a call was that they could covertly send a text message to let the caller know that they were in class. However, some focus group participants explained that they simply called after the class or meeting and provided an excuse for the missing the call.

The second Likert scale had four questions, but was measured from strongly disagree (0) to strongly agree (3):

Thinking about all of the media you use, please describe your level of agreement with the following statements: (1) The Internet and my cell phone allow me immediate access to others anywhere anytime. (2) I feel like I am always accessible to anyone no matter where I am. (3) People get upset with me when I don't answer their phone calls, text messages, instant messages, or emails. (4) I feel like too many people try to get in touch with me because they know I have my cell phone on me.

The two-item means index had an internal reliability of 66 percent ($\alpha=.66$). Although 70 percent is generally the accepted cutoff in the social sciences (George and Mallery 2003), a Cronbach's alpha over .60 is generally acceptable for exploratory research (Nunnally 1964). Furthermore, since the number of items included in the calculation affects the coefficient score, .66 was not especially problematic for a two-item index (Nunnally 1964).

The second and third indices for interstitial copresence were (1) the strength of experiencing interstitial byplays and (2) the strength of experiencing interstitial side-involvements. Means indices were constructed to measure both characteristics.

The means index for the strength of the sense of *experiencing interstitial byplays* measured the strength of the respondents' perceptions of their frequency of engaging in behaviors involving simultaneous or sequential management of main involvements within separate encounters through EvEMC. The index was based upon averaging the scores for six Likert scale items from the survey:

How often do you... (1) Send or read text messages, instant messages, or emails while also talking to someone else face-to-face? (2) Exchange text messages, instant messages, or emails while talking to the same person face-to-face? (3) Write or reply to emails while talking on your cell phone or text messaging? (4) Call or answer a cell phone call during a face-to-face conversation? (5) Exchange instant messages or text messages with more than one person at a time? (6) Write or reply to an email from one person while exchanging instant messages with another person?

The index had a Cronbach's alpha reliability of .81, which suggested the items were measuring a similar concept. These questions only addressed a few general behaviors among numerous

The Cronbach reliability coefficient for the four items was .54, which suggested that the items were only weakly measuring the similar. However, when items 3 and 4 were removed, the alpha coefficient increased to .66, which, as explained, is generally acceptable for exploratory research. Furthermore, items 1 and 2 most explicitly addressed the sense of hyper-accessibility. Therefore, although more than two items would be preferred, this was the most reliable measure of hyper-accessibility available. In future research, a measure for hyper-accessibility should take into account the aforementioned information regarding cell phones, instant messages, Facebook, and the management behaviors acquired from the focus group data.

possible behaviors. Since the index was based upon the average of the six items, the range of the index mirrored the range of the response options of the six items, which was 0 to 4. Therefore, changes in the means score of the index were interpreted as an increase or decrease in the strength of the sense of experiencing interstitial byplays. Furthermore, the mid-point of the index was a means score of 2, which was generally comparable to “sometimes,” based upon the response option for each of the items included in the index. Accordingly, any mean scores at or greater than the mid-point of the index was interpreted as a strong sense of experiencing interstitial byplay and a means scores above 0 but below 2 was interpreted as a moderate sense of experiencing interstitial byplays.

The means index for the sense of *experiencing interstitial side involvements* measured the strength of the perceptions of engaging in complex multitasking during encounters using EvEMC, i.e., tasks or actions unassociated with, and ideally undistruptive to, a main involvement occurring within EvEMC. Similar to interstitial byplay, it would be impossible to account for the numerous configurations of interstitial side involvements. The objective of this index was to inquire generally about a few common behaviors representative of interstitial side involvements. The index was constructed by averaging scores of the following seven Likert scale survey questions:

How often do you: (1) Talk on your cell phone while in a crowd of people? (2) Talk on your cell phone while you’re driving? (3) Talk on your cell phone or type text messages while you’re at a checkout counter? (4) Send or read text messages, instant messages, or emails during a class lecture, meeting, or presentation you’re attending? (5) Call, text, instant message, or email a friend or family member on your way to or from school or between classes? (6) Do other things online while instant messaging (e.g., play games, browse the Internet, or look up information)? (7) Do other things offline while instant messaging (e.g., watch TV or study)?

The alpha reliability coefficient for this index was .77, which confirmed that the seven items were sufficiently correlated. Similar to the response options for each of the included survey items, the means scores on the index ranged from 0 to 4. An increase or decrease in the means score on the index was interpreted as an increase or decrease in the strength of experiencing interstitial side involvements. A mean score at or above the midpoint of the index represented a strong sense of experiencing interstitial side involvements and a mean score above 0 but below 2 reflected a moderate sense of experiencing interstitial side involvements.

3.5.2. Self-Presentation: Clandestine Boundary Work and the Disruptiveness of EvEMC

The two aspects of self-presentation explored in this study were the perceived use of *clandestine boundary work tactics* and the perceived *disruptiveness of EvEMC for self-presentation*. To measure the perceived use of clandestine boundary work tactics, a means index was constructed by averaging nine Likert scale survey items addressing the frequency of engaging in deceptive tactics for managing one's availability within EvEMC:

How often have you...(1) Read an email from a friend, family member, or romantic partner but told them that you never received it or that you haven't checked your email lately because you didn't feel like replying? (2) Received an email from a friend, family member, or romantic partner and tell them that you replied but you don't know why they didn't receive it? (3) Purposely avoided a friend's, family member's, or romantic partner's phone call and blamed it on your cell phone battery dying? (4) Purposely avoided a friend's, family member's, or romantic partner's phone call, but told them later that you didn't have cell phone service? (5) Purposely avoided a friend's, family member's, or romantic partner's phone call but told them that you didn't hear the phone because the phone was on vibrate or the ringer was on silent? (6) Purposely avoided a friend's, family member's, or romantic partner's text messages and told them you didn't realize you had received the text message? (7) Set your instant messenger to 'appear offline' because you don't want certain friends or a romantic partner to see that you're online and possibly send you an instant message? (8) Set an away message on your instant messenger just so you don't have to acknowledge anyone who sends you an instant message? (9) Purposely ignored a friend's, family member's,

or romantic partner's phone call but sent them a text message to let them know you'll call them later?

The questions were generally based upon common tactics reported in previous research on EMC (see Iachello, Smith, Consolvo, Chen, and Abowd 2005; Hancock, Thom-Santelli, and Ritchie 2004; Horstmanshof and Powers 2005; Licoppe and Heurtin 2001) The response options for each question were "very often," "often," "sometimes," "seldom," and "never," which were coded 0 (never) to 4 (very often). The Cronbach's alpha for this index was .87.

Since the index was based on the mean scores for the nine items, change in the means scores were interpreted as an increase or decrease in the perceived use of clandestine boundary work tactics. As the mean scores on the index ranged from 0 to 4, mean scores between 1.5 and 2.9 generally represented "moderate" use and scores equal to or greater than 3 represented "heavy" use of clandestine boundary work tactics.

To measure the perceived *disruptiveness of EvEMC for self-presentation*, an index was constructed by summing eight dichotomous survey items that addressed whether the respondents had experienced a variety of common situations in which EvEMC directly compromised an identity or identities. The eight items appeared in the survey as follows:

Have you ever... (1) Accidentally sent a personal text message, instant message, or email to the wrong person? (2) Received an unexpected phone call that disrupted a class or meeting? (3) Had an unexpected cell phone call, text message, instant message, or email result in personal embarrassment? (4) Had an unexpected cell phone call, text message, instant message, or email result in an argument with a friend or family member? (5) Had a cell phone call, text message, instant message, or email get you in trouble? (6) Had a cell phone call, text message, instant message, or email affect the way people perceive you? (7) Done something absentminded in public because you were involved in a cell phone conversation or typing or reading a text message, instant message, or

email? (8) Drawn criticism or dirty looks because of the way you use your cell phone in a public setting?⁹

The eight items were adapted from the 2006 Annual Gadgets Survey conducted by Pew Internet and American Life Project and developed from previous research on public disruptions caused by EMC particularly relevant for identity work (see Fortunati 2005; Horstmanshof and Powers 2005; Krishan 2008; Plant 2002). The response options for each item were coded 0 (no) and 1 (yes). Since the additive index measured the perceived disruptiveness of EvEMC to one's identities from 0 to 8, a score of 0 was interpreted as undisruptive to identities and a score of 8 was interpreted as highly disruptive to identities. Mean scores over 4 were interpreted as highly disruptive. The Cronbach's alpha reliability coefficient for this index was .64, which was lower than the general rule-of-thumb cutoff of .70. However, since the concept was exploratory, the coefficient was determined to be acceptable. It was rigorously scrutinized during the qualitative phase of the study.

3.5.3. Self-Conception: Eliciting Identity Support via EvEMC and the Effect of EvEMC on Self-Appraisal

The two indices associated with self-conception measured the *perceived use of EvEMC for eliciting identity support*, and perceived effects of EvEMC on self-appraisal. First, identity support was conceptualized as "the expressed support accorded to an actor by his audience for his claims concerning his role-identities" (McCall and Simmons 1966:72). A means index was constructed for the perceived use of EvEMC for eliciting identity support by averaging ten Likert

⁹Question 3 was modified from Aoki and Downes's (2003) survey of young people's uses of and attitudes toward cell phones. Question 8 was directly adapted from the "Survey of Cellular Phone Users" conducted by Pew Internet and American Life Project (2006).

scale survey items addressing how often the respondents use EvEMC for different forms of identity support:

How often do you call, text, instant message, or email close friends or family... (1) To elicit character support (e.g., “You have a great personality,” “No, nobody thinks you’re mean or weird”)? (2) For reassurance of your abilities? (3) To talk about an embarrassing situation (e.g., “I can’t believe I lost my train of thought during my presentation”)? (4) For support after you said or did something you regretted (e.g., “I got upset, told him off, and just left”)? (5) To get their opinion about how others perceive you (e.g., “did everybody think I was a jerk for just abruptly leaving last night”)? (6) Just to hear a familiar voice? (7) To feel better about yourself? (8) Just to communicate with someone who knows the ‘real you’? (9) To get their perspective about the way you acted or something you did in a situation? (10) To remind you of whom you really are?

These questions were generally informed by previous research on self-conception and EMC (see Hampton et al. 2009; Harper and Taylor 2003; Hu et al. 2004; Turkle 2008; Walsh and White 2007; Wei and Lo 2006). The response options for each item were “very often,” “often,” “sometimes,” “seldom,” and “never,” which were coded 0 (never) to 4 (very often). The mean index for the sense of eliciting identity support via EvEMC retained the original scoring of items. The mid-point for the index was a mean score of 2, which was generally associated with using EvEMC for eliciting identity support “sometimes,” based upon the response options for the ten items. Therefore, a means score of 2 or higher was conceptualized as heavy use of EvEMC for eliciting identity support. The index had an alpha reliability coefficient of .92, which strongly suggested that the items were measuring a similar phenomenon.

The second index associated with self-conception measured the *strength of the effect of EvEMC on self-appraisal*. A means index was constructed for measuring the strength of the effect of EvEMC on self-appraisal by averaging four Likert scale survey items that asked for the respondents’ level of agreement with the following statements:

(1) I feel good about who I am as a person when friends and family call, text message, instant message, or email me regularly, but feel bad about myself when they stop calling, texting, instant messaging, or emailing as often. (2) I get lonely when no one calls, sends text messages, instant messages, or emails for a while. (3) I eventually feel rejected when friends do not respond to my phone calls, text messages, instant messages, or emails for a while. (4) I feel excluded when my friends call, text, instant message, or email each other but not me.

The development of the four questions was informed by previous research on EMC and self-appraisal (see Smith and Williams 2004; Turkle 2008; Walsh and White 2007). With a Cronbach's alpha of .87, the index had high internal reliability. The response options for each item were "strongly agree," "somewhat agree," "somewhat disagree," or "strongly disagree," which were coded from 0 (strongly disagree) to 3 (strongly agree). Similarly, the mean scores for the index ranged from 0 to 3, which was interpreted as the strength, from weak to strong, of the effect of EvEMC on self-appraisal. Since the mid-point of 1.5 reflected agreement with at least half of the items, any responses equal to or greater than the mid-point was interpreted as a strong negative effect of EvEMC on self-appraisal.

3.5.4. Satisfaction with EvEMC in Personal Relationships.

Satisfaction with EvEMC was conceptualized as the respondents' perceptions of the positive effects of EvEMC on their personal relationships. A mean index was constructed by averaging six Likert scale survey items addressing the respondents' level of agreement with the following statements:

(1) I feel my relationships with my family and friends are stronger now because I own a cell phone. (2) Text messaging has strengthened my relationships with my family and friends significantly. (3) Instant messaging has strengthened my relationships with my family and friends. (4) I feel my relationships with my family and friends are stronger now because of email. (5) Because of email I can keep in touch with my family without having to spend as much time talking to

them. (6) Because of text messaging I can keep in touch with my family without having to spend as much time talking to them.

These items were developed from previous research on relationship and EMC (see Johnson et al. 2007; Leung 2007; Leung and Wei 2000; Rabby 2007; Wei and Lo 2006). The Cronbach's alpha reliability coefficient for these items was .78, which suggests they generally measure a similar phenomenon. The response options for each item were "strongly agree," "somewhat agree," "somewhat disagree," or "strongly disagree," which were coded from 0 (strongly disagree) to 3 (strongly agree). The mean scores on the index, too, ranged from 0 to 3, with 0 representing least satisfied and 3 representing most satisfied. Since EvEMC might not have an effect on the strength of one's relationships, scores of 0 do not mean that EvEMC have a negative effect on the respondents' relationships. Rather, lower scores simply suggest that the respondents do not believe EvEMC have an especially positive effect on their relationships. A strong positive effect of EvEMC on personal relationships was operationalized as a mean score of 1.5 or higher, which constitutes an average response to the six between "somewhat agree" and "somewhat disagree."

3.6. Independent Variables

Independent variables were constructed to measure *heavy use*, *attached*, and *relational maintenance via EvEMC*. First, a variable for *heavy use* was constructed to measure the respondents' perception of their use of EvEMC. Frequency of use is the most common variable in quantitative research on Internet and cell phone use (Kraut et al. 1998; Kraut et al. 2002; Nie, 2001; Nie and Erbring, 2002). However, rather than measuring use in minutes or hours, this variable compared heavy users and light users of EvEMC. Second, a variable for the strength of attachment to EvEMC was constructed. It was based upon questions used in a number of Pew

Internet and American Life Project's surveys that asked people how attached they felt about different technology (Fallows 2006; Rainie and Keeter 2006). Whereas use captures behaviors with EvEMC, measuring the strength of attachment to EvEMC captures personal feelings about EvEMC. Third, since people use cell phones and the Internet for many non-social or instrumental social activities (e.g., checking bank accounts, placing orders, online research), a variable for measuring the respondents' perceived use of EvEMC for relationship maintenance was created to delineate the use of EvEMC specifically for interacting with important others from all other uses of EvEMC.

The three aforementioned variables were used in all of the regression analyses. However, the influence of the strength of interstitial copresence on self-work was examined in chapters six and seven and on personal relationships in chapter eight. Since the indices for the strength of experiencing interstitial copresence were highly statistically correlated, an index combining the six items for interstitial byplay and seven items for interstitial side involvement were averaged to create an additional means index. Furthermore, to examine the relationship between satisfaction with EvEMC and relationship strain in chapter eight, two additional indices were constructed: (1) sense of excessive demands from important others and (2) sense of inability to meet the demands of important others. Descriptive statistics for the independent variables are presented in Table B-2 in Appendix B.

3.6.1. Heavy Use of EvEMC

Heavy use of EvEMC was operationalized as the use of cell phones, for talking and text messaging, emailing, and instant messaging "often" or "very often." The survey items from which this measure was constructed appeared in the survey as follows:

How often do you use... (1) A cell phone? (2) Text messaging? (3) Email? (4) Instant messaging? (e.g. AIM, Yahoo! Messenger, Goggle Talk, MySpace IM)

Each item was coded as (0) never, (1) seldom, (2) sometimes, (3) often, and (4) very often. The four items were calculated into a single dichotomous variable to compare (0) light use of EvEMC and (1) heavy use of EvEMC. In Stata 9, the following command was used to construct the dichotomous variable:

```
gen heavyuser = (use_cell>=3) & (use_txt>=3) & (use_email>=3) & (use_im>=3)
```

This command produced a variable in which all responses that are equal to or greater than 3 (“often”) were converted to 1 and all other responses (0 through 2) were automatically converted to 0. It is important to emphasize the conservative nature of this measure. By capturing the differences only between those who use all four forms of EvEMC, the variable provides a highly conservative measure for general use. Only respondents who reported using *all* four EvEMC “often” or “very often” were considered heavy users. Since all of the respondents used at least one EvEMC, 0 could accurately be conceptualized as light users – users who did not use *all* EvEMC at least “often.” The mean for the frequency of use of instant messaging (mean=1.5) was much lower than the means of the other three variables (cell, mean=3.8; text messaging, mean=3.5; emailing, mean=3.11). Therefore, the variable systematically removed users with high frequency of use of cell phones for talking or text messaging and emailing if the respondents did not also use instant messaging often or very often.

A measure based upon the respondents’ perceptions of their use of EvEMC rather than a reported amount of time spent in EvEMC per day or per week was preferred because it provided a measure more closely representative of social reality. Many quantitative studies measure Internet use in the minutes or hours of use during an average day or week (e.g., Anderson and Tracey 2001; Best and Krueger 2006; Cole and Robinson 2002; Nie and Erbring 2002; Zhao

2005). Many researchers use secondary data on Internet use from the General Social Survey to examine a range of social phenomena (e.g., Losh 2004; Neustadtl and Robinson 2002, 2003; Wasserman, Ira and Marie Richmond-Abbott 2005; Zhao 2005). In the General Social Survey, respondents were asked,

Not counting e-mail, about how many minutes or hours per week do you use the Web? (Include time you spend visiting regular web sites and time spent using interactive Internet services like chat rooms, Usenet groups, discussion forums, bulletin boards, and the like.) (National Opinion Research Center 2008: Q769 A & B)

After this question, they were also asked,

... About how many of those [minutes/hours] do you spend using chat rooms, news groups, bulletin boards, discussion forums, and other forms of on-line interaction with other Net users not just browsing on your own? (NORC 2008: Q770 A & B)

The highly subjective, unverifiable estimations from the respondents are often treated as objective measures of time spent online. As very few people keep accurate records of the amount of time they spend online, what these researchers are referring to as amount of hours or minutes spent online during an average week or day is more accurately perceptions of online activity. That is, the responses are based upon guesses related to feelings of connectedness, but many social scientists still use these substantively questionable, at best, yet presumptuously linear statistics as a measure of time.

The measure employed here accepts the subjective nature of the response as a reflection of the respondents' perception of their use of EvEMC. Asking respondents to answer questions pertaining to frequency of use on a scale from never to very often gauges the respondents' perception of how often they feel that they use EvEMC. Therefore, the respondents who answered "often" or "very often" to each of the four questions were heavy users of EvEMC.

Likewise, respondents who answered “never,” “seldom,” or “sometimes” to each of the four questions were light users of EvEMC. To maintain consistency with regards to what the response options for each item mean, general parameters for each option were provided after the initial question: “Very often would mean numerous times per day; often suggests once a day or once every other day; sometimes would mean every few days; and seldom would mean once per week or every few weeks.”

3.6.2. Attachment to EvEMC

The second independent variable was *reported attachment to EvEMC*, which was operationalized as the self-reported feelings of reliance on their cell phones, for talk and text messaging, email, and instant messaging programs. This variable was based upon a survey conducted by PEW Internet and American Life Project (2006): “Thinking about your cell phone, do you think you could live without it, is it something you would miss having but could probably do without, or something you can't imagine living without?” Rather than a three response categories, I reformulated the question into a four-item Likert scale in the survey. With the same equation used to develop the previous variable for heavy use of EvEMC, a dichotomous variable was constructed to compare those who felt attached to EvEMC (1) and those who did not feel attached to EvEMC (0). The variable was developed from four survey items pertaining to the respondents’ feelings about living without each form of EvEMC.

How hard would it be to give up...(1) Talking on your cell phone? (2) Sending/receiving text messages? (3) Sending/receiving emails? (4) Using your instant messenger?

The response options for each item were (0) not hard at all, (1) not too hard, (2) somewhat hard, and (3) very hard. The responses combined to create a dichotomous variable, in which responses

of “somewhat hard” or “very hard” for *all four* questions were recoded as (1) and responses of “not hard at all” and “not too hard” to one or more of the questions were coded as (0). The following command was used to construct the dichotomous variable in Stata 9:

```
gen attached = (attach_cell>=2) & (attach_txt>=2) & (attach_email>=2) & (attach_im>=2)
```

Again, this command function in Stata does not require coding specification. In the absence of a specified recode value, a dichotomous variable is automatically produced in which the values listed in the command. Therefore, all values of 2 or higher were automatically coded as 1 and all other values automatically coded as 0.

3.6.3. Relationship Maintenance via EvEMC

Relationship maintenance, the third independent variable, was conceptualized as frequent, routine, and meaningful interactions within the normal course of a personal relationship in which identity support is reflexive and reciprocal and boundary rules are maintained. It was operationalized as the perceived frequency of using EvEMC for interacting with important others. An index was constructed for relationship maintenance via EvEMC by averaging the scores for 12 survey items addressing the perceived frequency of interactions with three types of important others: (1) hometown friends, (2) friends at college, and (3) family. The survey items appeared as follows:

Thinking just about your 2 or 3 closest [friends from your hometown; friends from college; and family members], how often do you... (a) Talk to them on your cell phone? (b) Exchange text messages with them? (c) Exchange emails with them? (d) Exchange instant messages with them?

The response options for each item were (0) never, (1) a few times per year, (2) once or twice per month, (3) a few times per month, (4) a few times per week, (5) once per day, and (6) multiple times per day. The means index had a Cronbach’s alpha reliability coefficient of .74, which

suggests that the items were measuring similar concepts. The scores ranged from 0 to 6. Using the response options for the survey items as a general reference for the regularity of using EvEMC, light use of EvEMC for relationship maintenance was operationalized as a score between 0 and 2.4, which meant the average of the respondent's answers to the 12 questions were between "never" and "a few times per year." Moderate use of EvEMC for relationship maintenance was operationalized as a score between 2.5 and 3.4, which meant the average of the respondent's answers was in the range of "once or twice per month" to "a few times per month." Heavy use of EvEMC for relationship maintenance was conceptualized as a score between 3.5 and 6, which meant the average of the respondent's answers ranged between "a few times per week" and "multiple times per day."¹⁰

3.6.4. Interstitial Copresence, as Independent Variables

Interstitial copresence was characterized as (a) a sense of hyper-accessibility and (b) a sense of experience. The three dependent variables presented earlier in the chapter for interstitial copresence – the sense of hyper-accessibility, the sense of participation in interstitial byplays, and the sense of participation in interstitial side involvements – were converted to two independent variables.

First, a mean index for experiencing interstitial copresence was constructed by averaging the six items for interstitial byplay and seven items for interstitial side involvements. As anticipated, the sense of experiencing interstitial byplays and interstitial side involvements were

¹⁰ Since the index was developed as an exploratory measure, the parameters for light, moderate, and heavy use were based upon conceptual criteria rather than mathematical equations. Therefore, the parameters stated here should only be considered as an anecdotal, heuristic device for establishing a general picture of the phenomenon. The classification of a 2.4 or a 2.5 is less important than establishing a general sense that scores at or close to 4 means the respondents use EvEMC for relationship maintenance frequently, scores at or close to 2 means they use them for relationship maintenance sometimes, and scores at or around 1 means they seldom use EvEMC for relationship maintenance.

highly correlated (Pearson's correlation=.79; $p < .001$). To include two variables correlated at .80 or higher as independent variables in a regression analysis would violate the assumptions of OLS regression analysis regarding colinearity. The new 13-item means index had a Cronbach's alpha reliability coefficient of .88, which provides strong support that the items measure a similar phenomenon. Since the mean scores range from 0 to 4, the interpretation of the scores range from a weak sense to a strong sense of experiencing interstitial copresence. Mean scores of 2 or higher represent a strong sense of experiencing interstitial copresence.

The second index for interstitial copresence was hyper-accessibility. The mean index for the strength of a sense of *hyper-accessibility* was not modified from the dependent variable for hyper-accessibility. Although the variable for hyper-accessibility was not statistically correlated to the other two variables for experiencing interstitial copresence, it was still conceptually related. That is, the lack of statistical correlation was most likely due to the difference in unit of analysis as well as response options for the items. The variable for perceived hyper-accessibility measured feelings with four response options, whereas the variables for interstitial byplay and interstitial side involvement measured a sense of experience with five response options. Standardizing all of the items with a mean of zero and a standard deviation of 1 would have allowed for the construction of a standardized index that included the items for all three factors (i.e., 15 items) regardless of the differences in response categories with a reasonably high Cronbach's alpha reliability coefficient (.86). However, using an index for experience (i.e., combining the items for interstitial byplay and side involvement) and an index for hyper-accessibility allows for greater substantive clarity.

3.6.5. Relationship Strain due to EvEMC

Relationship strain caused by EvEMC was conceptualized as the respondents' perceptions of the negative consequences of EvEMC on their personal relationships. Two indices were constructed to measure relationship strain: (1) the strength of a sense of *excessive demand* from important others and (2) the strength of a sense of *inability to manage personal relationships*. The dependent variable in the analyses in chapter eight was an index measuring perceived positive consequences of EvEMC on personal relationships. At a later point in the survey, the respondents were asked about their level of agreement with 10 items related to a sense of excessive demands from important others and six items pertaining to a sense of inability to manage one's personal relationships. By averaging the following 10 items, a mean index was constructed to measure the strength of a sense of excessive demand related to EvEMC:

Please tell me how well each of the following statements describes you personally: (1) I feel that I'm constantly being pulled in multiple directions by friends and family who demand my attention. (2) I stress out when I receive numerous phone calls, text messages, instant messages, and/or emails but cannot respond to them immediately. (3) Life would be so much less stressful if I didn't have a cell phone. (4) Life would be much less stressful if I didn't use email. (5) Keeping up with all of the phone calls, text messages, instant messages, and emails I receive feels like a fulltime job. (6) I feel like my whole life revolves around my cell phone. (7) I often feel like I have to answer my cell phone even if it interrupts a meeting or a meal. (8) Cell phones, text messaging, instant messaging, and email have added to the stress in my family. (9) People get upset with me when I don't answer their phone calls, text messages, instant messages, or emails. (10) I feel like too many people try to get in touch with me because they know I have my cell phone on me.¹¹

A mean index for a sense of inability to manage one's personal relationships was constructed by averaging the following six items from the survey:

¹¹ Items 3 and 4 were generally based upon GAD7 on the 2006 Annual Gadget Survey conducted by Pew Internet and American Life Project. Items 7 and 10 were adapted from a April 2006 survey conducted by Pew Internet and American Life Project (Q3d,Q3h). Item 6 was modified from Park's (2005) Cell Phone Addiction Scale.

Please tell me how well each of the following statements describes you personally: (1) I don't feel I can provide my friends and family the attention I think they deserve. (2) I can't keep up with all of the demands of my friends and family. (3) I don't feel I can meet the expectations people have of me. (4) In trying to meet the expectations of one relationship, I feel like I let down other relationships. (5) I feel like my friends and family think I'm avoiding them when I'm unable to answer their phone calls, instant messages, text messages, or emails. (6) I feel like I alienate certain friends and family because I just can't find time to respond to their emails, phone calls, text messages, and instant messages.¹²

The response options for each of the item in both indices were (0) strongly disagree, (1) somewhat disagree, (2) somewhat agree, and (3) strongly agree. The items for the index for excessive demand had a Cronbach's alpha reliability coefficient of .83 and the items for the index for a sense of inadequacy had a Cronbach's alpha reliability coefficient of .89, which suggested that each set of items was strongly related to its respective concept. Since the indices were constructed by averaging the respective items, the mean scores for both indices ranged from 0 to 3. A strong sense of both demand and inadequacy were operationalized as mean scores of 1.5 or higher, which was interpreted as between "somewhat agree" and "somewhat disagree."

3.7. Control Variables

In each of the regression models, I controlled for *gender*, *race*, *age*, and *relationship status*. The variable for gender was coded (0) female and (1) male. For clarity, the variable was labeled as male. The categories of race were based upon the definition used by the university's Research and Development Department. The five categories of race were (1) American Indian, (2) Asian, (3) Black, (4) Hispanic, and (5) White. It was recoded into a dichotomous variable where zero represents white and one represents non-white. Age was based upon the year the respondent was born, not age at time of the survey. The variable was subsequently recoded into

¹² Item 6 was adapted from Park's (2005) Cell Phone Addiction Scale.

years, which ranged from 19 to 29. Relationship status had four categories: (0) single (never been married/divorced), (1) dating someone, (2) serious relationship but not engaged or married, and (3) engaged or married. In order to compare statuses using regression analysis, this categorical variable was recoded into three dichotomous variables: dating (1 = dating; 0 = not dating), serious relationship but not engaged or married (1 = serious relationship but not engaged or married; 0 = not in serious relationship but not engaged/married), and engaged or married (1 = engaged or married; 0 = not engaged or married). In the regression analyses, single was the comparison group, represented by the constant term. Descriptive statistics for the control variables are presented in Table B-3 in Appendix B.

CHAPTER 4: MIXED-METHODS RESEARCH DESIGN: QUALITATIVE PHASE

4.1. Qualitative Phase: The Focus Group Method

In mixing methods for social research, combining focus group methods with survey methods is one of the most common practices. The most common strategy for combining the two methods is to use the focus group to test the validity of the survey instrument, the “*qual to QUAN method*” (Creswell and Piano-Clark 2006). The second most common is to conduct the survey and use the focus groups to clarify the survey results, the “*QUAN to qual method*” (Basch 1987; Morgan 1996; Creswell and Piano-Clark 2006). Examples are Morgan’s (1989) research on the social support for recent widows and Harari and Beaty’s (1990) investigation of survey responses among black workers and white managers in South Africa (Morgan 1996). As mentioned in the previous chapter, this study employs a similar methods as the “*QUAN to qual method*,” yet, as the study progressed, it became clear that the qualitative data were of equal significance and, in fact, were used to reexamine the quantitative data.

The focus group method was chosen over other qualitative methods to allow for group-based discussions and observation of group dynamics. Generally, focus groups “allow participants to reveal their own perceptions and to provide a rich understanding of their appropriation of the technology and their relationship to it” (Horstmanshof and Power 2005:36). The focus groups not only provided detailed information about the participants’ perspectives on and behaviors with EvEMC; but also it provided a first-hand account of the self-work involved in managing these devices. That is, some of the nuances of self-work were documented as they interacted with each other.

4.2. Focus Group Structure

In order to account for the diversity of participants, three focus groups were conducted. To ensure that the data were not simply a reflection of the unique dynamic of a single group, Morgan (1988) suggests that more than one focus group is required. Most focus group studies use between three and six focus groups. For this study, three focus groups were conducted.

Similar to the number of groups, the number of participants in each group should be determined based upon the topic at hand. As a rule of thumb, Morgan (1996) recommends between six to 12 participants. The goal for each of the three groups was ten participants. Considering the positive feedback on the survey regarding the nature of the topic and, in fact, the expressed desire to participate in the focus groups, lively discussion of the topic was anticipated.

A phenomenological approach was employed in the semi-structured focus groups, which Calder (1977) argues is most concerned with the everyday knowledge from the shared perceptions of the particular respondents. The objective in the focus groups was primarily to understand the participants' experiences in their own words and observe whether there was group consensus. The moderator functioned primarily as an observer. The moderator's task was to subtly direct the conversation toward the next series of questions and keep the conversation on track as another person took notes and recorded the sessions. Although the moderator's discussion guide was structured, the actual dynamics of the group remained informal.

4.3. Recruitment, Sampling, and Data

The focus group participants were recruited from those who completed the online survey. The second to the last question on the survey had a brief explanation of the objectives, timeframe, and incentive for focus group participation followed by the question, "Would you be

willing to participate in a follow-up focus group during the spring semester for a \$25 cash incentive?” The answer options were either “Yes, I am willing to participate in a follow-up focus group during the spring semester for a \$25 cash incentive” or “No, I do not wish to participate in a follow-up focus group during the spring semester for a \$25 cash incentive.” Of the 617 survey participants, 316 answered “yes” to this question.

As gender was significant on nearly every regression model, the focus groups were stratified according to gender: one group of women, one group of men, and one group with both women and men. A stratified random sample of 35 women and 35 men was drawn from the list of 316 participants by using a random number chart. Email invitations were sent to these 70 candidates. A reminder email was sent every three days for two weeks until the potential candidate accepted or declined. By the end of the second week, 15 women and 15 men had agreed to participate in one of the three focus groups.

Although 10 students showed up to both focus group one and two, only six students attended focus group three due to inclement weather (four women and two men). All of the participants owned a computer. Only one student did not own a cell phone, which happened to be the one of the two survey participants who reported not owning a cell phone. His inclusion in the focus group was completely random and unintentional (see Table 4.1).

The focus groups participants generally represented the larger sample. To establish that the sample was representative of the larger survey sample, independent t-tests were conducted to compare the focus group to the rest of the survey sample (see Table 4.2). All of the continuous dependent variables were statistically insignificant, which confirms that the focus groups were generally representative of the survey participants.

Table 4.1. General Description of the Focus Groups

		Total		Group 1		Group 2		Group 3	
		N	%	N	%	N	%	N	%
Gender:	Women	14	53.9	10	100	0	0	4	66.7
	Men	12	46.2	0	0	10	100	2	23.3
Age:	19-20	7	26.9	2	20	4	40	1	17
	21-24	19	74.1	8	80	6	60	5	83
Race:	Black	5	19.2	2	20	3	30	0	0
	White	21	80.8	8	80	7	70	6	100
Own Mobile:	Yes	25	99.7	10	100	9	99.7	6	100
	No	1	.3	0	0	1	.3	0	0
Own Computer:	Yes	26	100	10	100	10	100	6	100
	No	0	0	0	0	0	0	0	0
Owns Cell or Comp: Yes		26	100	26	100	26	100	26	100
Total Number Attended		26		10		10		6	
Total Number Scheduled		30		10		10		10	

The focus groups were conducted on the university campus during the last week of January and first week of February in 2009. I moderated each of the focus groups, while an advanced doctoral student (female) took notes and managed the voice-recorder in each of the focus groups. The focus groups were conducted around a table with the moderator sitting near the end. In order to center the attention on the group, standard protocol is for the moderator to not sit in the middle or at the end of the table. Upon entering the room, the participants were greeted and given a consent statement to sign. At the end of the two-hour session, each participant was given an envelope with \$25, which was the incentive for participating in the focus group.

Table 4.2. Means Comparison of Focus Group and Survey Participants. T-tests of Continuous Variables (Focus Group=26; Sample=591)

	Sample	Focus Group	t	df
Characteristics of Interstitial Copresence:	2.41	2.46		
(1) Strength of Hyper-Accessibility ^a	(.60)	(.60)	-.40	615
(2) Strength of Experiencing Interstitial Byplay	1.81	1.93	-.64	615
	(.86)	(.73)		
(3) Strength of Experiencing Interstitial Side Involvement	2.35	2.32	.17	615
	(.80)	(.68)		
Strength of Experiencing Interstitial Copresence ^a	2.10	2.13	-.23	615
	(.03)	(.13)		
Relationship Maintenance via EvEMC	2.73	2.8	-.57	615
	(.83)	(.77)		
Clandestine Boundary Work Tactic	1.20	1.30	-.69	615
	(.74)	(.68)		
Identity Disruptiveness of EvEMC	4.10	3.65	1.17	615
	(.07)	(.33)		
Use of EvEMC for Eliciting Identity Support	2.00	2.19	-1.14	615
	(.91)	(.87)		
Effect of EvEMC on Self-Appraisal	1.54	1.84	-1.79	615
	(.81)	(.98)		
Satisfaction with EvEMC in Personal Relationship	1.33	1.47	-1.00	615
	(.66)	(.78)		
Relationship Strain:	.95	.94	.07	615
(1) Demand	(.55)	(.47)		
(2) Inadequacy	.97	1.19	-1.55	615
	(.15)	(.03)		

Note: Standard Errors are reported in parentheses

^a Independent variables for Interstitial Copresence.

*p<.05, **p<.01, ***p<.001

4.4. Discussion Guide

A discussion guide with eight sections was developed based upon the results of the quantitative analysis (see Appendix G). The first section was a brief introduction to the focus group and a review of the informed consent form that each of the participants signed upon entering the room. The second section asked general, warm-up questions. Specifically, the participants were asked if they owned a cell phone, if they had their phones with them, and if they turned them off or set them to vibrate when they entered the room. To clarify some of the unexpected findings in the survey data regarding instant messaging, the participants were asked if they used instant messaging and what they considered instant messaging to be. Finally, they were asked if they had more than one email account and, if so, did they use them for different things. The third section consisted of two general warm-up questions: (1) what do you love or

what do you hate about cell phones and text messaging? (2) What do you love or what do you hate about instant messaging and email? These questions were designed to allow the participants to begin talking amongst themselves. The fourth section of the guide addressed questions pertaining to the interstitial self. The questions inquired about their feelings about people who talk on their phones while driving or in a store and their behaviors with technologies in public places and with friends. The fifth section addressed identity support and self-appraisal. The sixth section addressed impression management and boundary work. The seventh section concentrated on the impact of EvEMC on their relationships. The eighth, and final, section solicited feedback from the participants and, subsequently, concluded the focus group. Although the discussion guide was intended to provide a general, consistent structure for each group, the participants were allowed to develop and discuss their responses in conversation among themselves. That is, the semi-structured focus group was designed to loosely maintain a consistent structure while maintaining a strong conversational dynamic among the participants. The three focus groups were not uniform with regards to the time spent on each section. Each session lasted two hours and was conducted on the university campus.

4.5. Analytic Strategy

In the second phase of the study, three focus groups were conducted. The questions in the discussion guide for the focus groups were based upon the findings of the quantitative data analysis. The objectives of the focus groups were to clarify and expound upon the findings from the quantitative phase of the study. Upon conclusion of the three focus groups, the written notes and the digital recordings of the sessions were transcribed, analyzed, and interpreted. The focus group data were then triangulated with the participants' survey responses. General descriptive

data from the focus group participants' survey responses are presented in Table 4.3 and a chronology of the study is presented in Table 4.4.

Table 4.3. Survey Scores on the Survey for Focus Group Participants (Sample = 591; Focus Group = 26)

Focus Grp #	Name ^a	Inter. Copresence Accessibility	Experience	Heavy Use	Attached	Relation. Main.	Race	Age	Marriage	Class Status
1	Velma	1	1.1	0	0	2.5	Wht	22	Single	Junior
1	Kim	3	3.5	1	1	2.7	Wht	23	Serious Relation.	Senior
1	Marla	2.5	2.7	0	0	2.1	Wht	20	Dating	Soph.
1	Anna	2	2.1	1	0	2.7	Wht	22	Single	Senior
1	Christy	1	1.8	1	0	2.4	Wht	21	Serious Relation.	Junior
1	Gina	2	2.5	1	1	2.3	Wht	24	Single	Senior
1	Jennifer	2	.7	1	0	2.4	Wht	21	Single	Junior
1	Mandy	2.5	1.7	1	0	2.2	Wht	22	Serious Relation.	Senior
1	Rachel	3	3.1	1	0	2.9	Blk	23	Dating	Senior
1	Kendra	3	2	1	0	2.6	Blk	20	Single	Soph.
2	Mark	3	1.5	1	1	2	Wht	23	Single	Senior
2	Luke	3	2.5	1	0	3.4	Asn	21	Dating	Soph.
2	Quincy	1.5	1.5	1	0	2.2	Wht	23	Engaged	Senior
2	Jason	3	2.3	1	1	1.8	Blk	22	Dating	Junior
2	Matthew	2.5	2.8	1	0	2.3	Wht	24	Serious Relation.	Senior
2	Ron	2	2.1	1	1	3.5	Wht	19	Single	Freshman
2	Rami	3	2.6	1	1	1.9	Wht	23	Single	Other
2	Seth ^b	1.5	1.8	0	0	1.3	Wht	20	Single	Freshman
2	Paul	3	2.6	0	0	2.9	Wht	20	Single	Junior
2	Saul	2	2.5	1	0	3.6	Blk	19	Single	Freshman
3	Jackie	2.5	1.1	0	0	3.3	Wht	21	Single	Junior
3	Summer	1	1.8	1	1	2.8	Wht	23	Single	Senior
3	Jeremy	3	2.4	1	0	2.6	Wht	19	Serious Relation.	Freshman
3	June	1.5	2.2	0	0	2.6	Wht	22	Single	Junior
3	Jenny	3	2.4	1	0	3.6	Wht	23	Serious Relation.	Junior
3	Brad	3	2.2	1	0	2.2	Wht	22	Single	Senior
Means	Group (Sample)	2.4 (2.4)	2.1 (2.1)	--	--	2.6 (2.7)	--	--	--	--
Min.		1	.7	0	0	1.3	--	19	--	--
Max.		3	3.5	1	1	3.6	--	24	--	--

^a. Names have been changed to ensure anonymity

^b. Seth was the only participant in the focus groups, and only one of two among the survey respondents, who did not own a cell phone.

Table 4.4. Research Chronology

Phases		Procedures
<i>I. QUANTITATIVE ANALYSIS</i>		
	Data Collection	➤ Developed Internet Survey ➤ Conducted Pilot Study ➤ Conducted Internet Survey (n = 617) ➤ Converted Survey Data from SPSS 17 to Stata 9
	Data Analysis	➤ Cleaned Survey Data ➤ Analyzed Descriptive Statistics ➤ Constructed Index and Recoded Data ➤ Conducted OLS Regression Analyses
	Connecting Quantitative & Qualitative Phases	➤ Evaluated and Interpreted Regression Models ➤ Developed the Focus Group Discussion Guide
<i>II. QUALITATIVE ANALYSIS</i>		
	Data Collection	➤ Recruited Participants for the Three Focus Groups ➤ Conducted Focus Groups (n=26)
	Data Analysis	➤ Transcribed Voice-Recordings ➤ Examined and Interpreted the Transcribed Voice-Recordings and Note-Taker's Written Notes
	Connecting Qualitative & Quantitative Phases	➤ Triangulated Focus Group Data with Focus Group Participants' Surveys ➤ Reported Findings

CHAPTER 5: INTERSTITIAL COPRESENCE AND EVERYDAY FORMS OF ELECTRONICALLY MEDIATED COMMUNICATION

5.1. Introduction

The objective of this chapter is to explore then nature of the relationship between the sense of hyper-accessibility and the sense of experiencing interstitial byplays and side involvements. Furthermore, the effects of heavy use, a sense of attachment, and use of EvEMC for relationship maintenance on the strength of the sense of interstitial copresence are examined. Specifically, the driving questions in this chapter are:

R¹: Is the strength of the sense of hyper-accessibility influenced by the strength of experiencing interstitial byplays and side involvements?

R²: Is the strength of the sense of experiencing interstitial byplay and side involvement influenced by the strength of the sense of hyper-accessibility?

R³: Is the sense of interstitial copresence stronger among heavy users of EvEMC than light users of EvEMC?

R⁴: Is the sense of interstitial copresence stronger among those who use EvEMC most often for managing personal relationships?

R⁵: Does the sense of attachment to EvEMC influence the strength of the sense of interstitial copresence?

The chapter begins by providing description of the survey respondents' patterns of use of EvEMC as well as their perceptions of attachment to EvEMC. Next, the results of the quantitative data analysis of each characteristic of interstitial copresence – the sense of hyper-accessibility, sense of experiencing interstitial byplays, and sense of experiencing interstitial side involvements – are presented individually. Finally, the findings from the qualitative data analysis

of interstitial copresence are discussed. The chapter concludes with a summary discussion of the findings.

5.2. Phase I: Quantitative Data Analysis

Generally, the majority of the respondents were heavy users of EvEMC and many of them felt attached to EvEMC. Over 96 percent of the students surveyed reported talking on their cell phones “often” or “very often” – or at least once per day. Over 87 percent of them reported exchanging text messages and about 80 percent of them reported exchanging emails at least once per day. Yet, only about 24 percent reported exchanging instant messages daily (see Table 5.1).

Most of the participants did not use landline telephone service. About 31 percent of the respondents reported having landline telephone service, but 97 percent of these respondents reported making most of their calls from their cell phones and fewer than seven percent of them ever had calls forwarded to their cell phones. Furthermore, of those who had landline service, 27 percent of them reported checking their voicemail or answering machine from their cell phone and two percent of them reported using the Internet to access their voicemail or checking for missed calls (see Table 5.2).

Table 5.1. Reported Frequency of Use of EvEMC (n=617)

How often do you:	Seldom/ Sometimes		Often/Very Often	
	Never	Sometimes	Often	Total
(1) Talk on your cell phone?	0%	3.7%	96.2%	100%
(2) Exchange text messages?	3.7	8.6	87.7	100
(3) Exchange emails?	7.6	12.5	79.9	100
(4) Exchange instant messages?	29.3	47.3	23.3	100

Table 5.2. Descriptive Statistics of Landline Telephone Service Ownership and Use

	No	Yes	Total
Do you have landline telephone service?	69.2% (427)	30.8% (190)	100% (617)
a. If so, have you ever programmed your home phone to forward calls to your cell phone?	93.1 (174)	6.9 (13)	100 (187)
b. Have you ever accessed your voicemail or answering machine using your cell phone?	49.9 (136)	50.1 (51)	100 (187)
c. Have you checked your voicemail or checked for missed calls using the Internet?	54.0 (183)	46.0 (4)	100 (187)
	Home	Cell	
Do you make most of your calls from your home phone or cell phone?	2.7 (5)	97.3 (182)	100 (187)

Note: The number of Respondents is presented in parentheses. The difference between the number of respondents who had landline service, 190, and the total number of respondents to the other questions, 187, was due to two respondents who did not own a cell phone and one respondent who only owned a PDA. The survey directed only those respondents who owned a cell phone to these questions.

Moreover, the majority of students surveyed also felt a sense of attachment to EvEMC. About 86 percent of them reported that it would be somewhat hard or very hard to give up talking on their cell phones. About 75 percent of them felt it would also be at least somewhat difficult to give up text messaging and around 65 percent of them would find it difficult to stop using email, but only about 13 percent of them would find it hard to stop using instant messages (see Table 5.3).

EvEMC were most commonly used for communicating with important others that they regularly see face-to-face and close family member rather than for maintaining long distant friendships. During the school year, over 46 percent of them call their two or three closest friends at school and about 60 percent exchange text messages, just over five percent exchange emails and about nine percent exchange instant messages with them at least once per day. In addition, about 60 percent of them see their two or three closest friends face-to-face at least once per day and another 30 percent reported seeing them at least once per week. Moreover, more people call and exchange text messages with parents or close family members more often than they call and exchange text messages with close friends from home. About 42 percent of them call their

Table 5.3. Descriptive Statistics for Sense of Attachment to EvEMC (n=617)

How difficult would it be to give up:	Not Difficult	Difficult	Total
(1) Talking on your cell phone.	17.3%	58.7%	100%
(2) Using text messages.	24.8	75.2	100
(3) Using Email.	34.7	65.3	100
(4) Using instant messages.	87.7	12.3	100

parents or other close relatives at least once per day. About 30 percent of them exchange text messages, six percent exchange emails, and less than one percent exchange instant messages with a parent or close relative daily. However, only about 12 percent of the participants reported talking on the phone with their two or three closest friends from home and about 21 percent exchanged text messages, less than two percent exchange emails, and about seven percent exchange instant messages with them at least once per day. Furthermore, only about seven percent of the respondents see their friends from home at least once per week and about 42 percent see them at least once per month (see Table 5.4).

Table 5.4. Reported Frequency of Use of EvEMC for Relationships Maintenance and Face-to-Face Interaction (n=617)

Thinking about your 2 or 3 closest _____, how often do you:	Never	Few Times Per Year	Monthly	Few Times Per Week	Daily	Total
Friends at school...						
(1) Talk to them on your cell phone?	3.2%	.8%	12.5%	37.9%	45.5%	100%
(2) Exchange text messages?	7.3	.5	6.3	26.4	59.5	100
(3) Exchange emails?	44.6	10.2	26.4	13.5	5.3	100
(4) Exchange instant messages?	56.1	6.2	14.1	14.6	8.9	100
(5) See them face-to-face?	1.6	1.3	7.1	30.6	59.3	100
Friends from home...						
(1) Talk to them on your cell phone?	3.9	9.6	43.6	31.3	11.6	100
(2) Exchange text messages?	11.2	4.5	27.2	35.5	21.6	100
(3) Exchange emails?	44.3	17.5	25.4	10.1	2.7	100
(4) Exchange instant messages?	50.4	9.4	18.1	14.9	6.3	100
(5) See them face-to-face?	7.3	41.1	41.5	5.5	2.6	100
Family members...						
(1) Talk to them on your cell phone?	.7	1	11.1	45.1	42.1	100
(2) Exchange text messages?	16.4	3.6	20.9	29.8	29.3	100
(3) Exchange emails?	19.5	11.2	38.7	23.8	9.8	100
(4) Exchange instant messages?	76.5	5.7	10.1	5.7	2.1	100
(5) See them face-to-face?	3.7	21.7	49	14.8	10.9	100

5.2.1. Hyper-Accessibility

The majority of participants in the survey reported a sense of hyper-accessibility. That is, nearly 97 percent of the respondents agreed that the Internet and their cell phones allowed them immediate access to others and over 81 percent of them felt they were always available to others because of the Internet and their cell phones. Furthermore, over 80 percent of the respondents agreed that the Internet and their cell phones allowed them immediate access to others and that they were always accessible no matter where they were because of the Internet and their cell phones (see Table 5.5). Although these general findings suggested that most people generally have some sense of interstitial copresence, they did not explain why the strength of people's sense of hyper-accessibility varied.

According to the OLS regression analyses presented in Table 5.6, the strength of hyper-accessibility was strongly influenced by the sense of experiencing interstitial copresence, which supported the validity of the concept of interstitial copresence. In addition, people with a strong sense of interstitial copresence had, on average, a strong sense of hyper-accessibility. In model one, the strength of the sense of hyper-accessibility was regressed on heavy use of EvEMC, attachment to EvEMC, and the strength of use of EvEMC for relationship maintenance, which

Table 5.5. 2x2 Cross Tabulation of Perceptions of Hyper-Accessibility (n=617)

<i>Thinking about the media (cell phone/Internet) you use, please describe your level of agreement with the following statements:</i>		<i>a. I feel like I am always accessible to anyone no matter where I am.</i>		
		Disagreed	Agreed	Total
<i>b. The Internet and my cell phone allow me immediate access to others anywhere anytime.</i>	Disagreed	1.8%	1.3	3.1
	Agreed	16.9	80.1	96.9
	Total	18.6	81.4	100

only explained six percent of the variance in the average strength of the sense of hyper-accessibility ($r^2=.06$; $F=3.93$; $p<.001$). However, by adding the strength of the sense of experiencing interstitial copresence to model two, an additional 11.5 percent of the variance in the strength of perceived hyper-accessibility was explained ($r^2=.17$; $F=12.37$; $p<.001$).¹³ Although a substantial amount of the variance in the strength of hyper-accessibility was not accounted for in these models, the nearly twelve percent increase in the amount of variance explained provided evidence that the sense of hyper-accessibility was influenced by the sense of experiencing interstitial byplays and side involvements. Furthermore, according to model two, for every one-point increase in the average strength of experiencing interstitial copresence, the sense of hyper-accessibility strengthened by .33 ($t=8.95$; $p<.001$). The estimated average strength of the sense of hyper-accessibility based upon a strong sense of experiencing interstitial copresence – measured as a mean score of 2 or higher – was 1.91 ($t=7.39$; $p<.001$), which exceeded the mid-point of the index for sense of hyper-accessibility, suggesting that, on average, those who have a strong sense of experiencing interstitial copresence have a strong sense of hyper-accessibility (see Table C-1, Appendix C).

The second exploratory question was how the strength of the sense of hyper-accessibility was influenced by heavy use of EvEMC, attachment to EvEMC, and the average use of EvEMC for relationship maintenance. According to model one, the sense of hyper-accessibility among

¹³ Although the findings in Table 5.2 are important, the regression diagnostics revealed concerns regarding the validity of the models. The results of Breusch-Pagan's tests for heteroskedasticity suggest that both models were heteroskedastic (Model 1: $\chi^2= 16.6$, $p<.001$; Model 2: $\chi^2= 29.5$, $p<.001$). Although small to moderate violations of homoskedasticity have only minor impact on regression estimates, White's corrected standard errors (i.e., robust standard errors) were used in the analysis to minimize the effects of heteroskedasticity. One likely cause for the heteroskedasticity detected in the models was that the residuals for both models were slightly negatively skewed. Based upon Jarque-Bera's tests for normality, the null hypothesis that the model are normally distributed was rejected (Model 1: $\chi^2= 73.4$, $p<.01$; Model 2: $\chi^2= 82.4$, $p<.01$). However, since the sample size exceeded 600, the skewness of the models does not present a major concern. That is, the central limit theorem suggests that even when error is not normally distributed, the sampling distribution of the beta coefficient will still be normal in a large sample size. The validity of these findings was explored further in the qualitative phase of the study.

Table 5.6. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Strength of the Sense of Hyper-Accessibility on Selected Independent Variables (n=617)

	Strength of the Sense of Hyper-Accessibility	
	Model 1	Model 2
Heavy Use of EvEMC	.112* (.063)	.052 (.050)
Attached to EvEMC	.105 (.069)	.033 (.066)
Relationship Maintenance via EvEMC	.108*** (.032)	-.015 (.032)
Sense of Experiencing Interstitial Copresence	--	.318*** (.036)
Controls:		
Gender	-.016 (.050)	.054 (.048)
Race	.011 (.078)	-.038 (.074)
Age	.005 (.012)	.021 (.012)
Relationship Status: ^a		
- Dating	.126 (.070)	.065 (.067)
- Serious Relationship (Not Engaged)	.086 (.056)	.072 (.053)
- Engaged/Married	-.126 (.118)	-.079 (.111)
Intercept	1.897*** (.274)	1.226*** (.267)
F-Ratio	3.93***	12.37***
r ²	.055	.170
Change in r ²	--	.115

Note: Standard errors are in parentheses.

^a The constant term for relationship status is "single."

*p ≤ .05; **p ≤ .01; ***p ≤ .001

heavy users of EvEMC was .11 stronger than for light users ($t=2.13$; $p<.05$). Furthermore, the sense of hyper-accessibility strengthened as the average perceived use of EvEMC for relationship maintenance increased. That is, for every one-point increase in the average use of EvEMC for relationship maintenance, the sense of hyper-accessibility strengthened by .11 ($t=3.41$; $p<.001$). However, in model two, adding the strength of experiencing interstitial copresence to the analysis explained the difference between heavy and light users of EvEMC as well as the influence of the frequency of using EvEMC for relationship maintenance.

It is important to note that the difference in the average strength of the sense of hyper-accessibility among people who felt attached to EvEMC and people who did not feel attached to

EvEMC was not statistically significant. This suggested that the sense of hyper-accessibility and feeling of attachment to EvEMC were unrelated phenomena.

5.2.2. *Interstitial Byplays*

The second characteristic of interstitial copresence was a sense of experiencing sequential or simultaneous byplays within different situations through EvEMC. Over 55 percent of the survey participants reported talking on their cell phones at least sometimes while talking to someone face-to-face and over 68 percent of them reported exchanging text messages, instant messages, or emails with others while maintaining a face-to-face conversation. Over 22 percent of them reported using EvEMC at least sometimes to communicate with the same person they were talking to face-to-face. Moreover, over 84 percent of the respondents exchanged text messages or instant messages with two or more people at the same time and about 50 percent of them maintained interactions with others via instant messaging or text messages with others at the same time. In sum, a substantial number of respondents reported engaging in interstitial byplays (See Table 5.7).

Table 5.7. Reported Frequency of Interstitial Byplays (n=617)

	Never	Seldom	Sometimes Often/Very Often	Total
How often do you:				
(1) Send or read text messages, instant messages, or emails while also talking to someone else face-to-face?	8.6%	21.7%	68.7%	100%
(2) Exchange text messages, instant messages, or emails while talking to the same person face-to-face?	50.4	27.4	22.2	100
(3) Write or reply to emails while talking on your cell phone or text messaging?	18.8	21.4	59.8	100
(4) Call or answer a cell phone call during a face-to-face conversation?	7.6	36.6	55.8	100
(5) Exchange instant messages or text messages with more than one person at a time?	6.6	8.6	83.7	100
(6) Write or reply to an email from one person while exchanging instant messages with another person?	27.6	23.3	49.2	100

Just as the sense of experiencing interstitial copresence was positively related to the sense of hyper-accessibility, the sense of hyper-accessibility was positively related to the sense of experiencing interstitial byplays. According to model two in Table 5.8, for every one point increase in the strength in the sense of hyper-accessibility, the average sense of experiencing interstitial byplay strengthened by .37 ($t=7.93$; $p<.001$). In addition, on average, only people with a very strong sense of hyper-accessibility also had a strong sense of experiencing interstitial byplays ($b_0=2.14$; $t=6.79$; $p<.001$) (See Table C-2, Appendix C). Conceptually, this supported the claim that the sense of hyper-accessibility and the sense of experiencing interstitial copresence are reflexively related. In model two, nearly 40 percent of the variance in the average sense of experiencing interstitial byplays was explained by controlling for the strength of the sense of hyper-accessibility ($F=39.9$; $p<.001$).

However, 34 percent of the variance in the average sense of experiencing interstitial byplays was explained by model one ($r^2=.34$; $F=33.9$; $p<.001$). That is, most of the variance in the average strength of experiencing interstitial copresence was attributed to heavy use of EvEMC, the sense of attachment to EvEMC, and the use of EvEMC for relationship maintenance, as they were positively related to the strength of experiencing interstitial byplays. Although the difference in the average strength of experiencing interstitial byplays between heavy use and light use of EvEMC and between those who felt attached and those who did not feel attached to EvEMC decreased and the strength of the influence of the average use of EvEMC for relationship maintenance on the sense of experiencing interstitial byplays weakened from model one to model two, they still significantly influenced the strength of experiencing interstitial byplays.

According to model two, heavy users of EvEMC had a significantly stronger sense of experiencing interstitial byplays than light users; however, even heavy users of EvEMC did not have a strong sense of experiencing interstitial byplays. Specifically, heavy users of EvEMC have an average strength of experiencing interstitial byplays of 1.21, whereas the average strength among light users of EvEMC was 1.04 ($b=.17$; $t=2.81$; $p<.001$). Despite the difference between heavy users and light users of EvEMC, heavy users of EvEMC did not have a strong sense of experiencing interstitial byplays, as the average strength of heavy users was .8 less than the conceptualized minimum mean index score of 2 for claiming a strong sense of experiencing interstitial byplays ($b_0=1.21$; $t=.375$; $p<.001$) (See Table C-2, Appendix C).

Similarly, people who felt attached to EvEMC had a significantly stronger sense of experiencing interstitial byplays, 1.21, than those who did not feel attached to EvEMC, 1.04 ($b=.17$; $t=2.19$; $p<.001$). Yet, those who felt attached to EvEMC also did not have a strong sense of experiencing interstitial byplays. The strength of the sense of interstitial byplays among those who felt attached to EvEMC was only 1.21, which was not strong enough to meet the conceptual criteria for a strong sense of experiencing interstitial byplays ($t=.361$; $p<.001$) (see Table C-2, Appendix C).

The regression analyses did, however, suggest that the average use of EvEMC for relationship maintenance strongly influenced the average strength of experiencing interstitial byplays. Furthermore, people with the highest average use of EvEMC for relationship maintenance also had a strong sense of experiencing interstitial byplays. As the use of EvEMC for relationship maintenance increased, the sense of experiencing interstitial byplays strengthened. Formally stated, for every one point increase in the average use of EvEMC for relationship maintenance, the average strength of experiencing interstitial byplays increased by

.37 ($t=10.21$; $p<.001$). Heavy use of EvEMC for relationship maintenance was operationalized as a mean index score of 3.5 or higher and moderate use was operationalized as a mean score between equal to or greater than 2.5 but less than 3.5. The estimated mean score for the average strength of experiencing interstitial byplays for heavy user of EvEMC for relationship maintenance was 2.34, which suggested that heavy users of EvEMC for relationship maintenance also had a strong sense of experiencing interstitial byplays ($t=7.70$; $p<.001$). Moderate users of EvEMC had a mean index score of just under 2 on the index for the sense of experiencing interstitial byplays, which generally suggested that moderate users of EvEMC for relationship maintenance also had a strong sense of experiencing interstitial byplays ($b_0=1.96$; $t=6.47$; $p<.001$) (See Table C-2, Appendix C).

Table 5.8. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Strength of the Sense of Experiencing Interstitial Byplays on Selected Independent Variables (n=617)

	Strength of Experiencing Interstitial Byplays	
	Model 1	Model 2
Heavy Use of EvEMC	.210*** (.063)	.169** (.060)
Attached to EvEMC	.211** (.083)	.173* (.079)
Relationship Maintenance via EvEMC	.408*** (.038)	.369*** (.036)
Strength of Hyper-Accessibility	--	.365*** (.046)
Controls:		
Gender	-.287* (.060)	-.288*** (.057)
Race	.153 (.093)	.149 (.089)
Age	-.055*** (.014)	-.056*** (.014)
Relationship Status: ^a		
<i>Dating</i>	.222** (.084)	.176* (.081)
<i>Serious Relationship (Not Engaged)</i>	-.007 (.068)	-.024 (.064)
<i>Engaged/ Married</i>	-.268 (.140)	-.222 (.133)
Intercept	1.734 *** (.326)	1.041 *** (.323)
F-Ratio	33.90***	39.90***
r ²	.335	.397
Change in r ²	--	.062

Note: Standard errors are in parentheses.

^a The constant term for relationship status is "single."

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

5.2.3. Interstitial Side Involvements

The majority of the survey respondents reported engaging in a few general types of side involvements at least sometimes. Over 84 percent of the respondents reported talking on their cell phones while in crowds at least sometimes; over 82 percent of them reported talking on their cell phones while driving; over 52 percent of them reported talking on their cell phones or sending text messages while standing in a checkout line at least sometimes; over 92 percent of them reported using EvEMC between classes at least sometimes; and over 70 percent of them reported using EvEMC during a class lecture, meeting, or presentation at least sometimes. Furthermore, over 65 percent of the respondents reported that they occasionally engaged in other activities online and offline while sending instant messages to others (see Table 5.9).

The sense of hyper-accessibility was positively related to the sense of experiencing interstitial side involvements. According to regression models in Table 5.10, around 27 percent of the variance in the average sense of experiencing interstitial side involvements was explained by heavy use, attachment to EvEMC, and the average perceived use of EvEMC for relationship maintenance in model one ($r^2=.27$; $F=25.4$; $p<.001$). Yet, adding the sense of hyper-accessibility to the model explained an additional seven percent of the variance in the average strength of experiencing interstitial side involvements ($r^2=.34$; $F=31.2$; $p<.001$). Furthermore, according to

Table 5.9. Reported Frequency of Interstitial Side Involvements (n=617)

	Never	Seldom	Sometimes/ Often/Very Often	Total
How often do you:				
(1) Talk on your cell phone or send text messages while in a crowd of people?	1.6%	14.1%	84.3%	100%
(2) Talk on your cell phone or send text messages while you're driving?	4.7	12.6	82.7	100
(3) Talk on your cell phone or type text messages while you're at a checkout counter?	18.2	29.3	52.6	100
(4) Call, text, instant message, or email a family member on your way to class?	1.8	4.5	93.6	100
(5) Send or read text messages, instant messages, or emails during a class lecture, meeting, or presentation you're attending?	10.4	17.3	72.3	100
(6) Do other things online while instant messaging (e.g., play games, browse the internet, or lookup information)?	24.1	10.7	65.1	100
(7) Do other things offline while instant messaging (e.g., watch TV or study)?	22.4	10.0	67.5	100

model two, for every one point increase in the average strength of hyper-accessibility, the average strength of experiencing interstitial side involvements increased by .35 ($t=7.81$; $p<.001$). The statistical significance also had substantive merit. People who were classified as having a strong sense of hyper-accessibility also had a comparably strong sense of experiencing interstitial side involvements ($b_0=2.02$; $t=6.68$; $p<.001$) (See Table C-3 in Appendix C). This, too, confirmed that the sense of hyper-accessibility and the sense of experiencing interstitial copresence are reflexively related.

Similar to the findings for interstitial byplays, according to model two, the average sense of experiencing interstitial side involvements was stronger among heavy users of EvEMC, 1.64, than light users of EvEMC, 1.50 ($b=.14$; $t=2.45$; $p<.05$) and people who felt attached to EvEMC had a stronger sense of engaging in interstitial side involvements, 1.72, than people who did not feel attached to EvEMC, 1.50 ($b=.22$; $t=2.80$; $p<.01$). Although the differences were statistically significant in both cases, heavy users of EvEMC and people who felt attached to EvEMC did not have a strong sense of experiencing interstitial side involvements.

The use of EvEMC for relationship maintenance strongly influenced the strength of the sense of experiencing interstitial side involvements. As the use of EvEMC for relationship maintenance increased, the sense of experiencing interstitial byplays strengthened. Formally stated, for every one point increase in the average use of EvEMC for relationship maintenance, the average sense of experiencing interstitial side involvements strengthened by .33 ($t=7.81$; $p<.001$). Furthermore, on average, moderate to heavy users of EvEMC for relationship maintenance had a strong sense of experiencing interstitial side involvements ($b_0=2.31$, 2.63 ; $t=7.83$, 8.94 ; $p<.001$). On average, even many light users of EvEMC for relationship maintenance had a strong sense of experiencing interstitial side involvements, as the mean index

Table 5.10. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Strength of the Sense of Experiencing Interstitial Side Involvements on Selected Independent Variables (n=617)

	Strength of Experiencing Interstitial Side Involvements	
	Model 1	Model 2
Heavy Use of EvEMC	.183** (.061)	.143* (.059)
Attached to EvEMC	.252** (.080)	.215** (.077)
Relationship Maintenance via EvEMC	.362*** (.036)	.325*** (.035)
Sense of Hyper-Accessibility	--	.350*** (.045)
Controls:		
Gender	-.139* (.058)	-.134* (.055)
Race	.125 (.090)	.121 (.086)
Age	-.047*** (.014)	-.049*** (.013)
Relationship Status: ^a		
<i>Dating</i>	.166 (.082)	.122 (.078)
<i>Serious Relationship (Not Engaged)</i>	.092 (.065)	.062 (.062)
<i>Engaged/Married</i>	-.024 (.136)	.020 (.130)
Intercept	2.162*** (.317)	1.498*** (.314)
F-Ratio	25.39***	31.21***
r ²	.274	.340
Change in r ²	--	.066

Note: Standard errors are in parentheses.

^a The constant term for relationship status is "single."

*p ≤ .05; **p ≤ .01; ***p ≤ .001

score of 1.5 for the average use of EvEMC for relationship maintenance scored 1.99 on the index of the strength of experiencing interstitial copresence (t=6.62; p<.001) (See Table C-3, Appendix C).

5.3. Phase II: Qualitative Data Analysis

Findings from the quantitative phase of the study suggested that most people who use EvEMC have a strong sense of hyper-accessibility as well as a strong sense of experiencing interstitial copresence. Moreover, the use of EvEMC for relationship maintenance has a consistently strongly and statistically significant influence on the sense of interstitial copresence. According to the Internet survey, focus group participants had a strong sense of hyper-

accessibility and a strong sense of experiencing interstitial side involvements, but many did not have a strong sense of experiencing interstitial byplays. The average strength of hyper-accessibility was 2.4, which exceeded the index mid-point by .9. The average strength of experiencing interstitial byplay was 1.9, which was just .1 below the mid-point of the index. The strength of experiencing interstitial side involvements was 2.9, which was .9 higher than the mid-point of the index. (Table E-1, Appendix E).

Most of the focus group participants were heavy users of EvEMC, but very few of them felt attached to EvEMC. Only six of the 26 participants were light users of EvEMC, yet only seven of them felt attached to EvEMC. When the participants were asked if they used instant messaging or would have a problem giving up instant messaging, many of them said they did not use it and would not have a problem giving up instant messaging. However, nearly all of the participants said they used Facebook chat, which functions like most other instant messaging services. Although a few examples of different instant messaging services were listed next to the survey question, including Google Talk and MySpace IM, some of them identified Facebook Chat. During the sessions, students would occasionally mention “IM’ing” when referring to sending messages through Facebook Chat. Facebook seemed to have replaced other popular instant messaging programs, as many of them mentioned that they used AIM (AOL, Inc. Instant Messenger), Microsoft Messenger, and Yahoo Chat before Facebook Chat became popular.¹⁴ Accordingly, the variables for heavy use of EvEMC and attachment to EvEMC were recalculated

¹⁴ Feedback on the pilot study did not indicate any confusion or concerns regarding instant messaging. However, it was conducted in September of 2008. At the time of the survey in October, Facebook Chat had only been available to Facebook users for a few months. It was open to all users in late April 2008 (Smith 2008). Over the next 10 months, its popularity gradually increased to over 118 million users (Smith 2009), which was around the time of the focus groups. All of the participants in the focus groups said they had a Facebook profile and most used Facebook Chat. When asked, a few of the participants said that Facebook Chat did not come out until around October or November of 2008 and most others agreed, which suggests the survey was administered at a time when many people who used other instant messaging programs were converting to Facebook Chat.

to exclude instant messaging. Based on the revised variables (in parentheses in Table E-1, Appendix E), 14 of the participants felt attached to all three forms of EvEMC and 24 of them were heavy users of all three forms of EMC.

Over half of the focus group participants were moderate or heavy users of EvEMC for relationship maintenance. That is, 16 participants used EvEMC for relationship maintenance sometimes, but only two of them used EvEMC often for relationship maintenance. Yet, during the sessions, the participants constantly discussed how they managed their personal relationships through EvEMC. The focus group data suggested that the use of EvEMC for relationship maintenance might have been underreported. My suspicion was that the incongruence between the quantitative data and the focus group data was the result of calculating instant messaging into the variable. Therefore, similar to the variables for heavy use and attachment to EvEMC, the index was recalculated based only on the use of cell phone talk, text messaging, and email for relationship maintenance. As anticipated, the averages increased substantially.

5.3.1. Sense of Hyper-Accessibility

The warm up question in each session was, what do you love about having a cell phone and using the Internet and what do you hate about them. In all three groups, all of the participants – including Seth, who was the only participant among the three groups, and one of only two respondents out of the survey sample, who did not own a cell phone – said they loved them because they can get in touch with their family and friends anytime they wish. However, all of them also said that they hated them because their friends and family expect to be able to get in touch with them anytime they wish. Interstitial copresence was characterized by this sense of hyper-accessibility. Corporeal copresence involves the mutual awareness of two or more people

physically populating a temporally and spatially located environment. Interstitial copresence is *a sense* of mutual awareness that both interlocutors within a personal relationship perpetually occupy a private digital space, even when not actively interacting. They assume that their important others are always available to them, yet acutely aware that are expected to be available to their important others anytime and anywhere.

Although landline telephones provide a sense of digital copresence, the awareness of the other is based only on the assumption that the person is physically located at the landline. As group one discussed what they liked and disliked about cell phones and the Internet, Mandy illustrated the difference between digital copresence through landline phones and the sense of hyper-accessibility characteristic of interstitial copresence:

It's a problem with cell phones. Before we all had them. I don't know, we couldn't call someone. We didn't get all worried. Because I get really, really, really worried if I like called someone and they haven't called me back in a really long time or cant get them all day and sometimes people just don't pick up their phones or something, but I'll get all freaked out, like they're dead in a ditch somewhere. And, uh, before, I don't remember thinking that, before we had [cell] phones. I mean, I don't remember having these problems, just because I assume, ok, they're ok. Like calling a home or something, they're just not at home or something, whatever.

Prior to the Internet and cell phone technology, verbal communication with important others was largely limited to face-to-face interactions or mediated through landline phones. With multiple outlets and increased mobility of EvEMC, the expectations are similar to face-to-face interaction. A teacher can see her students sitting in front of her as she teaches the class, so she does not question whether they are physically present. In a similar way, in interstitial copresence, *assuming* the other person is present has replaced *seeing* the person physically present. Stated another way, just as Baudrillard (1970) claimed that simulations have replaced reality, thus producing a hyper-reality, temporal and spatial availability has been replaced by a sense of

perpetual availability, thereby producing a sense of hyper-accessibility. Corporeality is only one form of interstitial copresence, as presence is only the sense of experiencing others' presence and the sense of others sensing you sensing their presence.

The assumption that the other person is present in a digital environment is not the same as anticipating that the person might be present. Interstitial copresence is premised on the idea that if we *know* our friends use cell phones and the Internet, we do not question whether they are available – we *know* they are available. If we know they are available, the major question then is why are they ignoring us. In the second focus group, Mark stated,

The only thing about it is that I've just been so spoiled, being able to talk to anybody whenever I want. If I'm trying to get a hold of somebody and they're not answering, I just get mad. I feel like I should be able to contact anybody whenever I want to.

In the first focus group, Rachel and Kendra expressed similar assumptions that others are always available:

Rachel: "... I know he has [his phone] with him. Everybody has it with them all the time."

Kendra: "I'll send [a message] again. There is a chance that maybe something is wrong or maybe the text didn't go all the way through. Like me, I'll send it and be like, check the outbox, make sure it went through. Maybe he's being a jerk. Let me send it again. Now I've sent it twice. Now I know you're being a jerk. I know you are. I've sent it twice. After that, I just get mad."

Rachel: "Then I'll be like, 'Hello.' I send the 'hello-question-mark' text. I know you're near your phone."

Both Rachel and Kendra "know" the other people are available but just not answering their calls or responding to their messages.¹⁵

¹⁵ This excerpt is also discussed in chapter seven, as it also illustrates the consequences of a strong sense of hyper-accessibility.

Interstitial copresence was premised not only on the assumption that others are constantly available via EvEMC, but also on the awareness of being constantly accessible to others. As the participants in the third focus group began discussing what they liked and disliked about EvEMC, Brad brought up how he felt about his SmartPhone:

Brad: “I feel almost lost, or naked without my cell phone. If I leave my house without my phone, my day is just... I feel like when I get home I’m going to have like 14 emails and 30 text messages. It’s stressful if I get behind with it.”

Jenny: “I can’t be without it. I don’t like it at all. I can be late for class and turn around and go back and get it. I won’t be able to get calls... or call out to somebody else... But I don’t want them to call me, you know. I don’t want them calling me, you know.... I feel like people will get mad at me if I do not text back immediately. I have this, I don’t know, thought that I have to reply right then and there.”

Brad: “Yeah, people have gotten so used to me responding immediately. If I don’t respond in like 30 minutes then people start getting worried about my health.”

On the survey, Brad and Jenny both had a strong sense of hyper-accessibility and felt strongly attached to their cell phones, text messaging, and email (See Table 5.7). Brad felt he simply could not go without his phone and compared it to feeling naked. Like Brad, Jenny would rather face consequences elsewhere rather than not having her phone with her. In the second focus group, Saul also stated that he “felt naked” during the two weeks he had to go without his cell phone because he felt “disconnected.” Similar to Brad and Jenny, Saul reported that it would be difficult to live without his cell phone, text messaging, and email on his survey. Brad, Jenny, and Saul’s comments suggested that people find it hard to live without EvEMC because they have a strong sense of hyper-accessibility.

The data from the focus groups suggested that heavy use of EvEMC for relationship maintenance also strengthened one’s sense of hyper-accessibility. Although Brad reported on the survey that he was, at most, a moderate user of EvEMC for relationship maintenance, Jenny and

Saul were the heaviest users of EvEMC for relationship maintenance among the three groups. Both of them stressed that they liked that they could contact others anytime, but did not like that others expected to get in touch with them anytime. Saul stated, “You just don’t want to talk to ’em when they call. They call; I just don’t answer. It’s less intrusive. You just text ’em back whenever.” To clarify the earlier regression analysis, the focus group data seemed to support the claim that not only did they feel attached to EvEMC because of their sense of hyper-accessibility, but also their sense of hyper-accessibility strengthened as the use of EvEMC for relationship maintenance strengthened.

There was one significant exception to these patterns. Seth was one of only two respondents out of the survey sample who reported that they did not own a cell phone. During the second focus group session, he stated that he had only used a cell phone a few times but had never used text messages, yet he reported a strong sense of hyper-accessibility on the survey. His sense of accessibility was related to his heavy use of instant messaging and email. He stated that he kept his computer logged in even when he was gone. However, he did not understand the mobile dimension of EvEMC. Throughout the session, he complained frequently about people talking on their cell phones before and after class, in elevators, at the mall, and while they were driving. He was the only participant in the group who could not seem to understand why people felt compelled to talk on the phone or exchange text messages in public. For example, in response to Matthew’s story about sending a text message while he was driving, Seth stated,

Texting messaging is always something that’s baffled me. If I’m going to tell a person... ok, if I’ve sent 30 text messages to a person in 30 minutes, which I have never sent a text message in my life. But if I did, why not just call the person and have a conversation. You know they’re there, so why not just call.

Although others tried to explain to him that it allowed for interactions at times and in place in which talking would have been inappropriate or when they did not feel like talking but also did not want to ignore the caller, he still did not accept that people were unable to wait until they were not driving or not in a public space. According to the survey, Seth had a strong sense of hyper-accessibility, but only a very weak sense of experiencing interstitial copresence.

Similar to Seth, Velma, in the first focus group, thought talking or texting in public, especially around her, was rude and offensive. When a few students said that they did not mind people using EvEMC while other people were present, Velma adamantly disagreed:

Velma: “I mind, even if it’s my closest friend, even if it’s my little sister. Not that my presence is so amazing that you have to put all the focus on me, but, I mean, this is real people. I mean, you talk on the phone, use a text, because it’s secondary to the actual conversation with a real person...”

Rachel: “It’s not secondary anymore.”

Velma: “But even if it’s not secondary anymore, you’re right. That’s why I’ve always thought you did it, because you can’t be there to talk to them. So, if you can be there, talking to someone, a real person, why do you need the secondary thing? Why is it necessary?”

Rachel: “The conversation on the phone is more important than person in front of you.”

Despite Rachel’s attempts to explain her view that interactions via EvEMC were just as meaningful as the face-to-face interactions, Velma did not accept her explanations. Like Seth, she did not have a strong sense of experiencing interstitial copresence.

5.3.2. Experiencing Interstitial Copresence

The quantitative data analysis suggested that the sense of hyper-accessibility was strongly related to the sense of experiencing interstitial copresence. The attempts group members made to

justify texting to Seth illustrated this relationship. For example, Jason said, “Maybe you’re with your friends or something. You don’t want to answer the phone. Just send’em a text.” Matthew gave an example of a friend calling while he was watching a football game. Rather than interrupting the football game or outright ignoring the caller, text messaging allowed him to watch the football game and interact with his friend at the same time. Whereas Jason was referring to engaging in interstitial byplay, Matthew provided an example of interstitial side involvement. Jason and Matthew were bridging their sense of hyper-accessibility with their experiences of interstitial copresence. Despite the efforts from Jason, Matthew, and others, Seth did not accept their examples as justifications for using text messages in public or while involved in other activities. Although Seth felt available to others via email and instant messaging, he did not have a sense of experiencing interstitial copresence.

Throughout the sessions, the students regularly alluded to feeling spread between the physical environment and digital environment(s). The experience of shifting between environments occurs as interstitial byplays and side involvements. As the students discussed their experiences with their cell phones and the Internet, their narratives constantly shifted between their interactions within digital encounters and their experiences within their physical environments. That is, they not only described their experience within digital encounters (e.g., a cell phone conversation with a friend), but also expressed constant simultaneous or sequential negotiation of physical and digital environments (e.g., driving to school while talking on the phone with a friend). In the focus groups, many students described experiences characteristic of interstitial byplays. For example, Marla stated:

It’s like second nature. It’s like, ‘hold on.’ [She acts like she answers her cell phone.] If you’re on the phone for like 20 minutes, it’s like, alright come on. [She begins acting like she is switching back and forth between a text message and a

face-to-face conversation.] But, like, ‘hold on a sec,’ have a conversation [with those present] and, like, ‘hold on sec,’ and send a text or answer the call, then, like, get back to the conversation [with those present].

Marla described sequentially negotiating a main involvement in a physical encounter and a main involvement in a digital encounter.

In the same focus group, the students also described experiences consistent with interstitial side involvements:

Gina: “I might talk while I drive, but usually with a Bluetooth [ear piece]. That way, I still have both hands on the steering wheel.”

Rachel: “They know you’re not concentrating, I got a headset, but my dad’s like, ‘but you’re still concentrating on the conversation.’”

Gina: “With the headset, it’s a little more safer.”

Kim: “I have a stick-shift and I still talk and text.”

Rachel: “Yeah, I text while I drive. I do with my friends. I’m like, I’m looking up, and then I’m looking down. I know it dangerous, but...”

Moderator: “[Kendra], you’re nodding your head yes, too. Is there something you’re not telling us?”

Kendra: “I don’t have a car here, but I’m from New Jersey and they just implemented the [no texting while driving] law, like, a year ago. So, people are just like, alright. They’ll keep their cell phones down here” [she lowers her cell phone to her lap and acts out typing a text message.] “so, I’ll get a text message – ‘I just got to know who it is.’” [she acts out frantically texting while driving.]

They were aware of maintaining a main involvement with a digital encounter while simultaneously driving, which was a side involvement in the physical environment. Whereas Gina used a Bluetooth earpiece to simultaneously manage her vehicle and a main involvement via her cell phone, Rachel and Kendra managed the main involvement via text messaging and driving.

Although using a cell phone while driving has received national attention due to the high number of accidents associated with cell phone use, this was only one of many examples of interstitial side involvement. Another form of interstitial side involvement that is less publicized is the use of EvEMC while in the restroom. As focus group one was discussing how they managed public use of EvEMC, Rachel said, “I’ll just go to a corner or the bathroom.” Christy replied, “I’ll talk on the phone while I’m in the restroom.” Velma asked, “really,” which led to the following discussion:

Christy: “Yeah, my boyfriend’s like, ‘where are you.’ I’m like, ‘I’m peeing.’”

Rachel: “I do it too. If it’s my close friend, I’ll just sit in there and talk to her.”

Velma: “I won’t do it in a public restroom.”

Christy: “I do.”

Rachel: “Oh no, I don’t care. I do.”

Velma: “I only do it when my roommates are not around. I don’t want them to think I’m weird.”

Many other interstitial side involvements were also mentioned in the focus groups. For example, exchanging messages during class, meetings, while at work, during a concert, while watching a football game, when studying, while shopping, at checkout counters, and, in one case, while stealing an ex-boyfriend’s Xbox gaming system. Although these were only a few of the limitless interstitial side involvements people could engage in, they suggested that many people engage in highly complex, personal, or even risky side involvements in physical spaces without believing they are interfering with the main involvement within digital encounters.

The restroom excerpt also reinforced some of the finding from the quantitative analyses. Specifically, Velma’s reaction was possibly associated with her weak sense of interstitial

copresence. While Rachel reported a strong sense of experiencing interstitial side involvements, Christy had a slightly weaker sense of experiencing interstitial side involvements and a very weak sense of hyper-accessibility. Yet, throughout the session, she mentioned many examples of engaging in interstitial side involvements with her boyfriend. Her behavior appeared to be a consequence of using EvEMC for relationship maintenance more than a sense of interstitial copresence. That is, she reported moderate use of EvEMC for relationship maintenance and that she felt attached to EvEMC.¹⁶ Christy made clear to the group that she did not like having a cell phone, had not used instant messaging since she was in high school, and loved emails only because they were non-intrusive and she did not have to reply to them immediately.

Many of the participants who had a strong sense of interstitial copresence also discussed the complexity of negotiating interstitial byplays and interstitial side involvements:

Rachel: "I had a guy friend over last night. I was talking to a friend when he came over. I was like, 'Hey, I'll call you back.' He said, 'Why?' I was like, 'I have someone over.' He kept calling. I was like you're the most retarded person. I'll call you back when he leaves. Chill out. He was like, 'You were talking to me first.' I was like, 'I have someone at my house!' He kept calling back."

Marla: [She acts like she is pressing the 'end' button on her cell phone.]
"Ignore... Ignore... Ignore."

Rachel: "I have someone here. I'll call you back."

Rachel described the difficulty of negotiating the interaction the person who visited her at home and her friend in the digital environment. Her comment, "He was like, 'You were talking to me first'" illustrated the conflict between the physical and digital environments, i.e., interstitial copresence. The person on the phone was described like he was physically present and Rachel wanted temporarily to terminate the interaction with him to talk to someone else who just

¹⁶ This is based upon the recalculated variables for relationship maintenance and attachment in which instant messaging was excluded.

arrived. Marla's comment simply described how she would like to handle similar interstitial byplays.

Similarly, they were also aware of the complexity of managing interstitial side involvements. With regards to driving while talking on the cell phone or exchanging text messages, Kim stated, "... Yeah, I've swerved off the road, hit a curb, yeah." Anna also stated, "I remember when I first got my car, I was like 'I can't talk; I have to drive,' but now I'm like, 'it's ok; I can do it now.'" In the third focus group, as Brad was acknowledging that he talked on his phone and exchanged text messages while driving, Summer emphatically interrupted:

Brad: "I feel like there's a double standard because I feel like I can handle it, but when I see other people do something stupid [like] pulling out in front of me..."

June: "Put your phone down"

Brad: "Yeah, I get angry, and I'm probably on my phone too."

Both Brad and June acknowledged that they used EvEMC while they drove, as they knew how to sequentially negotiate the digital main involvement and the physical side involvement. That is, finishing Brad's statement, June declared that people should put their phones down when they are pulling into traffic, or at least this was her strategy. According to the survey data, Brad and June reported a strong sense of experiencing interstitial side involvements.

However, as some of the participants in the second focus group discussed how they used their cell phones when they drove, Seth simply shook his head, seemingly in disgust. When I asked him why he was shaking his head, the following conversation began:

Seth: "I just don't see what's so important."

Paul: "Driving on the cell phone is a serious danger. You know, I wouldn't think twice about answering my cell phone when I'm driving though."

Ron: "We all do it."

Seth: “I fail to see what is so earth-shatteringly important that it can’t wait for you to bring your car to a stop to wherever you’re going in order to call the person back. There is nothing so important that you have to talk on your cell phone right then while you’re driving.”

Matthew: “Do you drive with one hand or two?”

Seth: “I have one hand on the wheel and the other hand just chillin’.”

Matthew: You don’t need two hands to drive.”

Seth: “But I still fail to see what is so important that you have to talk to on your cell phone while you’re driving.”

On the survey, Paul, Matthew, and Ron reported having a strong sense of experiencing interstitial side involvements, which possibly explained why they thought it was important to talk on the phone while driving even though they knew it was dangerous. Matthew’s logic was that you only need one hand to drive; therefore, using one hand to talk does not present a major safety hazard. Seth, who did not have a strong sense of experiencing interstitial side involvements, did not accept his explanation, as he was not as concerned about the mechanics of talking on the cell phone, but rather why people needed to do it in the first place.

5.4. Discussion

The quantitative analysis suggested that the strength of the sense of hyper-accessibility and the strength of the sense of experiencing interstitial byplays and side involvements were positive and reflexively related. The qualitative data supported these findings, as those who expressed the strongest sense of hyper-accessibility also provided narrative of their experiences in which they simultaneously or sequentially negotiated byplays and/or side involvements in physical spaces and digital spaces. A model of this relationship is presented in Figure 5.1.

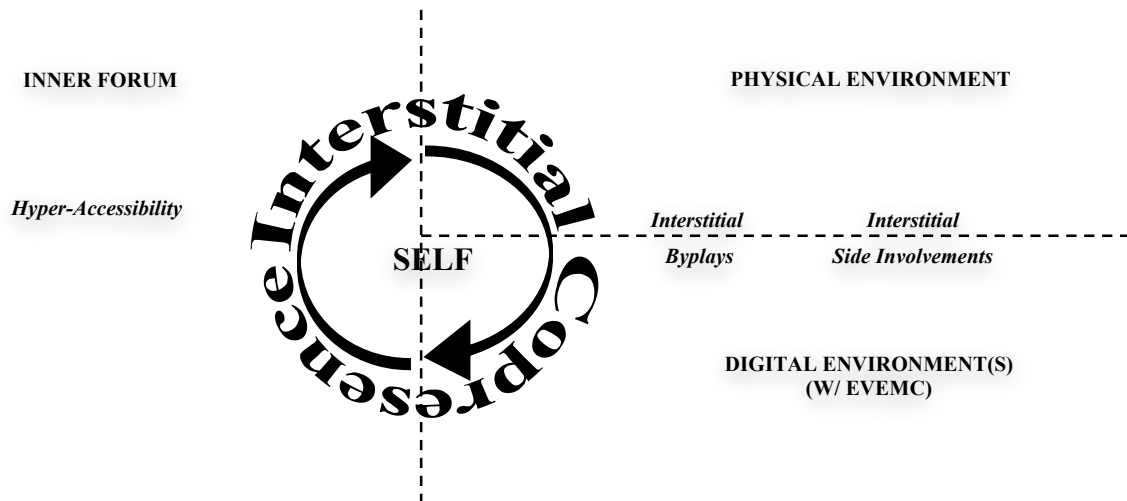


Figure 5.1. Model of Interstitial Copresence

The use of EvEMC for relationship maintenance also strongly influenced the sense of experiencing interstitial copresence, yet was not statistically related to the sense of hyper-accessibility. The qualitative data suggested that people interpret hyper-accessibility as both positive and negative. Just because people have a strong sense of hyper-accessibility does not mean that they embrace EvEMC. In a number of instances, focus group participants who reported a strong sense of hyper-accessibility expressed strong discontentment with always being available. Therefore, the use of EvEMC for relationship maintenance might not be a direct determinant of the sense of hyper-accessibility, but it does influence their sense of experience of interstitial copresence.

The quantitative data suggested that cell phones and the Internet were more popular media for EMC than landline telephones. Not only did very few students report having landline telephone service, but also most of the student who had landline telephone service reported making most of their calls from their cell phones. In addition, the findings in both phases of the analyses suggested that instant messaging might not be as popular as originally thought.

Although a number of studies claimed that instant messaging is one of the most popular forms of EMC in the U.S., findings here suggested that conventional instant messaging program is not a major form of EMC students incorporate into their everyday lives. Facebook, on the other hand, was a significant form of EMC. Although Facebook Chat functions, in large part, the same way as other instant messaging programs (e.g., AIM, Yahoo Messenger, MSN Messenger), most students explained it as a feature of a social networking website – not as an instant messaging program available through a social networking website.¹⁷

Based upon the revised variables, many of the focus group participants felt attached to EvEMC and almost all of them were heavy users of EvEMC. Seth and Jackie were the only two participants who were light users of EvEMC. Although major differences between these two participants' feelings and behaviors and those of heavy users were observed, light use might not be the major cause of these differences, as Velma had similar responses as Seth and Jackie yet reported being a heavy user cell phones for talking and text messaging and emailing. Based upon the quantitative and qualitative findings, it appeared that the common factors among the three of them were relative weak sense of experiencing interstitial copresence. Seth and Jackie had a strong sense of hyper-accessibility, whereas Velma did not. Velma and Jackie did not have a strong sense of experiencing interstitial copresence, but Seth had a strong sense of experiencing interstitial byplay and a weak sense of experiencing interstitial side involvements. His strong sense of experiencing interstitial byplay was associated with his heavy use of instant messaging and Facebook Chat. Furthermore, after triangulating the participants' survey data based upon the revised variable for the sense of attachment to EvEMC with the focus group data, it appeared

¹⁷ The variables for heavy use of EvEMC, attachment to EvEMC, and the use of EvEMC for relationship maintenance appear in their original form in the regression analyses in the following chapters.

that people felt attached to EvEMC because they had a strong sense of experiencing interstitial copresence.

CHAPTER 6: SELF-WORK WITH AND WITHIN EvEMc: SELF-PRESENTATION IN INTERSTITIAL COPRESENCE

6.1. Introduction

In this chapter, the findings from the analysis of the survey data and the focus group data for clandestine boundary work tactics, which was conceptualized as secretive, subtle avoidance tactics for managing one's availability within EvEMc without harming one's identity or the relationship with the important other, and the disruptiveness of EvEMc for self-presentation are presented. The central research questions for this chapter are as follows:

R⁶: Why do people use clandestine boundary work tactics?

R⁷: Do these tactics provide greater control over their self-presentation?

R⁸: Do people who experience a stronger sense of interstitial copresence engage in clandestine boundary work tactics more often?

First, general descriptive statistics for self-presentation from the survey data are presented.

Second, the findings of the quantitative analysis of the influence of heavy use of EvEMc, attachment to EvEMc, and the average use of EvEMc for relationship maintenance on the use of clandestine boundary work tactics as well as the effects of interstitial copresence on this form of self-presentation are also discussed. Lastly, the triangulated findings of the focus group data and the focus group participants' survey data are presented.

6.2. Phase I: Quantitative Data Analysis

With EvEMc, self-presentation is often negotiated simultaneously within a physical encounter and digital encounter (Palen et al. 2001). On the one hand, they provide additional media for engaging in impression management (Taylor and Harper 2003). For example, most of

Table 6.1. Descriptive Statistics for Remedial Work (n=617)

On some occasions, we might think something we said or did upset, angered, disappointed, or surprised someone else. In these situations, how often have you used the following media to contact a person (or people) to correct, clarify, or apologize for something you said or did?				
	Never	Seldom/ Sometimes	Often/ Very Often	Total
(1) Cell phone	1.9%	17.0%	81.0%	100%
(2) Text messaging	11.3	31.1	57.4	100
(3) Instant messaging	62.2	28.8	8.9	100
(4) Email	41.8	44.0	13.1	100

the students surveyed used EvEMC for immediate remedial work. Over 80 percent of the students surveyed often called and nearly 58 percent of them often sent text messages for remedial work. Around 77 percent of them used email and about 37 percent of them used an instant messaging program for engaging in remedial work (See Table 6.1).

On the other hand, EvEMC presents certain challenges to self-presentation. The majority of students surveyed reported experiencing instances in which their performances were disrupted by EvEMC. Around 46 percent of the students reported that an unexpected call or message got them in trouble. For half of them, an unexpected call or message resulted in an argument with an important other and nearly 45 percent of them had been embarrassed by an unexpected call or message. In addition, about 85 percent of the students surveyed reported accidentally sending messages to the wrong people, which could also negative affect their relational identities with the unintended recipient (See Table 6.2).

Table 6.2. Descriptive Statistics for Disruptions due to EvEMC (n=617)

Have you ever...			
	No	Yes	Total
(1) Accidentally sent a personal text message, instant message, or email to the wrong person?	15%	84.6%	100%
(2) Had an unexpected cell phone call, text message, instant message, or email result in personal embarrassment?	56.6	43.4	100
(3) Had an unexpected cell phone call, text message, instant message, or email result in an argument with a friend or family member?	49.9	50.1	100
(4) Had a cell phone call, text message, instant message, or email get you in trouble?	54.0	46.0	100

One of the major challenges to self-presentation with EvEMC that people face is how to manage their availability to important others without turning off their cell phones or logging out of their instant messaging programs. Among the survey respondents, nearly 63 percent of them reported never turning off their cell phones. About 58 percent of them reported using away messages when logged into their instant messaging program, which allowed them to stay logged in without having to reply to any messages. Not only were the majority of the students constantly connected to important others, very few of them reported establishing explicit ground rules with important others about when and how they would be available. Among the students surveyed, only about 40 percent of them set explicit ground rules, and around 88 percent of these students stated that this strategy was not always effective (see Table 6.3).

Table 6.3. Descriptive Statistics for Clandestine Boundary Work (n=617)

How often have you...	Never	Seldom/ Sometimes	Often/ Very Often	Total
(1) [How often do you] turn off your cell phone in the average week?	62.7%	24.3%	13%	100%
(2) [How often do you] use away messages for your instant messenger?	41.7	36.8	21.6	100
(3.a.) Have you ever set up ground rules with friends, family members, or a romantic partner to establish when you will not answer your phone, when your phone will be turned off, or when your phone will be on vibrate? (60% No 39.9% Yes)				
(3.b.) How often do friends, family members, or romantic partners violate these ground rules?	11.3 (.6)	31.1 (32.4)	57.4 (6.8)	100 (39.9)
(4) Read an email from a friend, family member, or romantic partner but told them that you never received it or that you haven't checked your email lately because you didn't feel like replying?	27.4	61.0	11.6	100
(5) Received an email from a friend, family member, or romantic partner and tell them that you replied but you don't know why they didn't receive it?	46.2	45.5	8.3	100
(6) Purposely avoided a friend's, family member's, or romantic partner's phone call and blamed it on your cell phone battery dying?	36.0	55.4	9.6	100
(7) Purposely avoided a friend's, family member's, or romantic partner's phone call, but told them later that you didn't have cell phone service?	38.4	52.3	10.2	100
(8) Purposely avoided a friend's, family member's, or romantic partner's phone call but told them that you didn't hear the phone because the phone was on vibrate or the ringer was on silent?	19.6	60.6	18.8	100
(9) Purposely avoided a friend's, family member's, or romantic partner's text messages and told them you didn't realize you had received the text message?	31.8	56.8	11.6	100
(10) Set your instant messenger to 'appear offline' because you don't want certain friends or a romantic partner to see that you're online and possibly send you an instant message?	48.3	38.7	12.9	100
(11) Set an away message on your instant messenger just so you don't have to acknowledge anyone who sends you an instant message?	51.9	38.3	9.9	100
(12) Purposely ignored a friend's, family member's, or romantic partner's phone call but sent them a text message to let them know you'll call them later?	17.0	55.6	27.	100

The majority of the students surveyed reported using clandestine boundary work tactics. Around 83 percent of the respondents reported intentionally missing a call from important others, but sending them text messages to let them know they would call later, which was the least deceptive tactic. Over 65 percent of them reported avoiding calls from important others but told them later that their phone batteries had died. Around 80 percent of them reported telling the others that they did not hear the phone ring because the ringer was set to silent mode, and over 63 percent of them reported telling callers that they did not have wireless service at the time. Similarly, over 68 percent of the respondents reported ignoring text messages from important others but telling them later that they never received the messages. With regards to ignoring emails from important others, half of the students reported not replying but later telling the sender that they did reply to them and about 73 percent of them told the sender that they had not received the email or had not checked their email lately. Around 72 percent of the respondents reported setting the status of their instant messenger to “invisible” because they wanted to avoid certain people who they thought might try to contact them (see Table 6.3).

Does a sense of interstitial copresence influence the average use of clandestine boundary tactics? Having generally established that students used clandestine boundary work tactics, regression analyses were used to examine if the sense of interstitial copresence influenced their average use of clandestine boundary work tactics. In Table 6.4, the average use of clandestine boundary work tactics was regressed on heavy use of EvEMC, attachment to EvEMC, the strength of the use of EvEMC for relationship maintenance, and, in model two, the sense of interstitial copresence.

According to these models, interstitial copresence was not strongly related to the average use of clandestine boundary work tactics. On the one hand, adding the sense of interstitial

copresence to the analyses explained an additional 14 percent of the variance in the average use of clandestine boundary work tactics. That is, 17 percent of the variance in the average use of clandestine boundary work tactics was explained in model one ($F=13.34$; $p<.001$), whereas model two explained 31 percent of the variance in the frequency of use of clandestine boundary work tactics ($F=24.91$; $p<.001$). To this end, the influence of interstitial copresence was evident. On the other hand, out of the two indices for interstitial copresence, only the sense of experiencing interstitial copresence was statistically related to the use of clandestine boundary work tactics. Specifically, in model two, for every one point increase in the average strength of experiencing interstitial copresence, the average use of clandestine boundary work tactics increased by .46 ($t=10.74$; $p<.001$). This relationship was substantively meaningful, as, on average, those who had a strongest sense of experiencing interstitial copresence – i.e., a mean score of 2 – were at least moderate users of clandestine boundary work tactics ($b_0=1.36$; $t=4.01$; $p<.001$) (See Table C-4, Appendix C). The sense of hyper-accessibility was not significantly related to the average use of clandestine boundary work tactics. These findings were examined further in the second phase of the study.

The average use of EvEMC for relationship maintenance had a statistically significant influence on the average use of clandestine boundary work tactics, but it was not substantively meaningful. That is, as the average use of EVEMC for relationship maintenance increased by one point, the average use of clandestine boundary work increased by .12 ($b=.121$; $t=3.34$; $p<.001$). Substantively, even heavy users of EvEMC for relationship maintenance – i.e., those with a mean score of 5.5 – were, on average, only light users of clandestine boundary work tactics ($b_0=1.36$; $t=3.15$; $p<.001$) (see Table C-4, Appendix C).

Table 6.4. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Perceived Use of Clandestine Boundary Work Tactics on Selected Independent Variables (n=617)

	Use of Clandestine Boundary Work Tactics	
	Model 1	Model 2
Heavy Use of EvEMC	.026 (.062)	-.058 (.056)
Attached to EvEMC	.240** (.080)	.138 (.073)
Relationship Maintenance via EvEMC	.289*** (.036)	.121*** (.036)
Interstitial Copresence: <i>Sense of Experience</i>	--	.456*** (.042)
<i>Sense of Hyper-Accessibility</i>	--	-.014 (.045)
CONTROLS:		
Male	-.062 (.058)	.028 (.053)
Non-White	.119 (.090)	.046 (.082)
Age	-.005 (.014)	.018 (.013)
Relationship Status: ^a		
<i>Dating</i>	.036 (.081)	-.043 (.074)
<i>Serious Relationship (Not Engaged)</i>	-.078 (.065)	-.093 (.059)
<i>Engaged/ Married</i>	-.210 (.135)	-.145 (.123)
Intercept	.507 (.315)	.405 (.303)
F-Ratio	13.34***	24.91***
r ²	.165	.312
Change in r ²	--	.147

Note: Standard errors are in parentheses.

^a The constant term for relationship status is "single."

*p ≤ .05; **p ≤ .01; ***p ≤ .001

According to the regression models in Table 6.5, not only was EvEMC more disruptive to self-presentation for people who use clandestine boundary tactics more often, but also people with a stronger sense of interstitial copresence reported, on average, a higher level of disruptiveness of EvEMC for self-presentations. This model explained 24 percent of the variance in the level of disruptiveness of EvEMC to self-presentations ($F=15.89$; $p<.001$). The use of clandestine boundary work tactics was positively related to the level of disruptiveness of EvEMC to self-presentations. As the average use of clandestine boundary work tactics increased by one point, the level of disruptiveness of EvEMC increased by .65 ($t=6.20$; $p<.001$). The substantive

relationship between heavy use of clandestine boundary work tactics – i.e., mean score of 3.9 – and the level of disruptiveness of EvEMC for self-presentations was not very strong, but it was nonetheless significant ($b_0=2.83$; $t=3.02$; $p<.01$) (see Table C-5, Appendix C). Since the regression analyses only provide correlations, it was unclear whether people who used clandestine boundary work tactics more often actually caused higher levels of disruptiveness or people used clandestine boundary work tactics more often because of the disruptiveness of EvEMC to self-presentations. These relationships were explored further in the qualitative phase of the study.

While the sense of hyper-accessibility was not statistically related to the level of disruptiveness of EvEMC for self-presentation, the strength of experiencing interstitial copresence was statistically related to the level of disruptiveness, yet the relationship was substantively weak. As the average strength of experiencing interstitial copresence increased by one point, the level of disruptiveness of EvEMC for self-presentations increased by .70 ($t=5.70$; $p<.001$). Substantively, these findings were not strong enough to suggest that EvEMC was highly disruptive even among those with a strong sense of experiencing interstitial copresence ($b_0=3.10$; $t=3.02$; $p<.01$) (see Table C-5, Appendix C). As a concept, interstitial copresence was not strongly related to the level of disruptiveness of EvEMC for self-presentations.

Table 6.5. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Perceived Level of Disruptiveness of EvEMC for Self-Presentation on Selected Independent Variables (n=617)

Level of Disruptiveness of EvEMC for Self-Presentations	
Heavy Use of EvEMC	-.014 (.153)
Attached to EvEMC	-.116 (.199)
Relationship Maintenance via EvEMC	.156 (.100)
Interstitial Copresence:	
<i>Sense of Experience</i>	.698*** (.122)
<i>Sense of Hyper-Accessibility</i>	-.028 (.123)
Clandestine Boundary Work:	.646*** (.104)
CONTROLS:	
Male	.004 (.145)
Non-White	-.345 (.223)
Age	.063 (.035)
Relationship Status: ^a	
<i>Dating</i>	-.592** (.203)
<i>Serious Relationship (Not Engaged)</i>	.102 (.161)
<i>Engaged/ Married</i>	-.046 (.336)
Intercept	.314 (.825)
F-Ratio	15.89***
r ²	.240

Note: Standard errors are in parentheses.

^a The constant term for relationship status is "single."

*p ≤ .05; **p ≤ .01; ***p ≤ .001

6.3. Phase II: Qualitative Data Analysis

The focus group data generally supported the findings of the quantitative analysis. First, most of the participants stayed connected, as those who owned cell phones rarely turned off them and rarely set them to silent mode. Over 60 percent of them never turned off their cell phones and just less than half of them used away messages on their instant messaging programs (see Table 6.6). When I asked them to explain why they rarely turned off their cell phone, most of them said that they used the vibrate features instead because they would know if someone was calling or if they received a text. The away message on the instant messenger, however, was a bit

more complicated. Most of the students used Facebook Chat. At the time of the survey, the messaging service did not offer away messages. During the focus group sessions, many of the students said that they used the new feature that allowed them to appear invisible to others while remaining logged into the chat. The visibility function played a similar role as the away message, yet it allowed them to maintain greater control over who contacted them – a clandestine boundary work tactic.

On the survey, almost half of the focus groups participants reported establishing explicit ground rules with important others, but all of them reported that the ground rules were not highly effective. In all of the sessions, my general sense was that most of them assumed that their important others would not respect any formal boundaries, unless they told them that their phone would be turned off or that they would not have Internet access during certain times.

Most of them reported using clandestine boundary work tactics. Over half of them used all nine strategies for clandestine boundary work. Nearly 90 percent of them intentionally avoided a call, but responded with a text message. Two of the most frequently used tactics were telling others that they had not checked their email because they did not feel like replying and avoiding a call, but telling the caller later that the phone was on vibrate or silent (See Table 6.6).

Since the quantitative analyses suggested that the use of clandestine boundary work was only weakly related to the use of EvEMC for interstitial boundary work tactics and the increased use of clandestine boundary work tactics was related to increased disruptions caused by EvEMC, these findings were particularly scrutinized in the qualitative analysis. When the students were asked about how they handled calls or messages that they do not feel like answering, many of them responded immediately with examples – e.g., “my battery died,” “I haven’t checked my email today,” “I didn’t realize I was still logged in (to the instant messenger),” “I was asleep,” “I

Table 6.6. Descriptive Statistics for Clandestine Boundary Work, Focus Group

How often have you...	Never	Seldom/ Sometimes	Often/ Very Often	Total
(1) [How often do you] turn off your cell phone in the average week?	61.5%	34.6%	3.9%	100%
(2) [How often do you] use away messages for your instant messenger?	57.7	30.7	11.6	100
(3.a.) Have you ever set up ground rules with friends, family members, or a romantic partner to establish when you will not answer your phone, when your phone will be turned off, or when your phone will be on vibrate? (54% No, 46% Yes)				
(3.b.) How often do friends, family members, or romantic partners violate these ground rules?	0 (0)	66.7 (31)	33.3 (15)	100 (46)
(4) Read an email from a friend, family member, or romantic partner but told them that you never received it or that you haven't checked your email lately because you didn't feel like replying?	26.9	46.1	26.8	100
(5) Received an email from a friend, family member, or romantic partner and tell them that you replied but you don't know why they didn't receive it?	46.2	46.1	7.6	100
(6) Purposely avoided a friend's, family member's, or romantic partner's phone call and blamed it on your cell phone battery dying?	34.6	57.6	7.7	100
(7) Purposely avoided a friend's, family member's, or romantic partner's phone call, but told them later that you didn't have cell phone service?	38.5	53.7	7.6	100
(8) Purposely avoided a friend's, family member's, or romantic partner's phone call but told them that you didn't hear the phone because the phone was on vibrate or the ringer was on silent?	23.1	43.8	22.9	100
(9) Purposely avoided a friend's, family member's, or romantic partner's text messages and told them you didn't realize you had received the text message?	34.6	61.5	3.9	100
(10) Set your instant messenger to 'appear offline' because you don't want certain friends or a romantic partner to see that you're online and possibly send you an instant message?	30.7	53.8	15.4	100
(11) Set an away message on your instant messenger just so you don't have to acknowledge anyone who sends you an instant message?	26.9	49.9	22.9	100
(12) Purposely ignored a friend's, family member's, or romantic partner's phone call but sent them a text message to let them know you'll call them later?	11.5	57.6	30.7	100

Note: For 3b, the percentage of the entire sample is presented in parentheses.

was in the bathroom,” “I left my phone in the car,” “I didn’t hear the phone ring,” and “I didn’t get your text.” All of the participants who provided examples of clandestine boundary work tactics eventually acknowledged, albeit in different ways, that they were lying to their important others. Some of them provided lengthy disclaimers, whereas others quickly admitted that they were lying. When the third focus group was asked about how they handled calls or messages that they did not want to answer, Jenny initiated the following conversation:

Jenny: “Well, I, uh... well see... um... I... hate to say I lie, but I have a friend, she always calls and wants to do something. I, I, I guess, I have to make up a reason why I didn’t answer...”

Brad: “It’s hard for me to give lame excuses. People who know me well enough to know I’m going to answer the phone. So, when I don’t answer the phone, I have to come up with something individually that that person is going to believe and it’s.... I don’t really like to do that. That’s another reason why I have them

leave a voicemail, because then it's on them. If they leave a voicemail then I have to come up with a good reason why I'm not calling them back. It's typically something simple like, I was asleep or I was, whatever, I didn't hear the phone or something."

Jenny: "This girl will call like five or six times, you know. She just won't let it go. You know..."

Jeremy: "Say your phone was on silent, you know. I was taking a nap."

Brad: "I do that too. 'Aw, sorry, my phone is still on vibrate from class.'"

Summer: "See... Every reason you're saying are all reasons why I really can't answer the phone all the time! And everybody always gets mad at me when I don't answer my phone. I'm either always sleeping or my phone is always on vibrate or literally I can't answer them. People get mad at me and I'm not lying."

Jeremy: "Yeah, especially if I'm doing something else and don't feel like... you know... or if I'm doing something embarrassing. Sometimes I make up little white lies, especially if I was doing something embarrassing, but other times I might make up something."¹⁸

Although Jenny, Brad, and Jeremy were discussing forms of clandestine boundary work, Jenny acknowledged her reluctance to call her excuses lies. Brad tried to dodge categorizing his excuses, but instead simply pointed out that he does not like to make up excuses. Jeremy was the only one to admit that he was lying. However, he made it clear that his excuses were of a certain, less harmful type – white lies.

Jenny, Brad, and Jeremy also seemed to be acutely aware of the norm of obligatory reciprocity, which seemed to underscore the strong sense of hyper-accessibility. On the survey, all three of them reported a strong sense of hyper-accessibility as well as moderate use of clandestine boundary work tactics (see E-2, Appendix E). Having internalized the sense of hyper-accessibility, clandestine boundary work tactics were commonly intended to maintain relationships by withholding the true motive for not replying or answering, as many participants

¹⁸ This except is used again in the discussion section in chapter seven.

explained that not wanting to talk or take the time to reply was unacceptable, rude, or otherwise offensive.

Summer, on the other hand, seemed frustrated that her friends did not believe her when she missed their calls or messages because she was asleep or her phone was set to silent mode. Throughout the entire session, she continuously referred to how much she did not like having a cell phone or feeling hyper-accessible to her important others. On the survey, she reported that she was neither attached nor felt a strong sense of experiencing interstitial copresence. Throughout the session, her responses suggested that she was less cognizant of an interstitial copresence with EvEMC. With regards to experiencing interstitial copresence, she mentioned that she normally left her cell phone in her car when she went out with friends, turned her phone off – as opposed to vibrate mode – when she was in class, and never took her phone with her when she went hiking. On the survey, she reported a weak sense of hyper-accessibility and that she was not attached to EvEMC. Yet, she reported heavy use of cell phone, text messaging, and email. Furthermore, she reported living over 50 miles away from the university, which she confirmed during the focus group session. For Summer, EvEMC seemed to only provide a means for maintaining contact with friends and family.

Almost all of the participants not only used clandestine boundary work tactics, but also believed they were highly effective for managing their relational identities. What seemed to set heavy users of clandestine boundary work tactics apart from moderate and light users were that *all* of them reported low levels of disruptiveness caused by EvEMC. According to the survey, Luke, Anna, and Kim, and arguably Ron and Jason,¹⁹ reported heavy use of clandestine

¹⁹ Heavy use of clandestine boundary work tactics was operationalized as a mean index score of 2 or higher. Ron and Jason had mean scores of 1.8 and 1.9 respectively.

boundary work tactics and low levels of disruptiveness of EvEMC. However, all five of them also reported a strong sense of interstitial copresence.

Those students who reported the strongest sense of interstitial copresence on the survey provided additional examples of deception that extended beyond availability maintenance. The focus group data suggested that deception is a major feature of self-work within EvEMC. Among those with the strongest sense of interstitial copresence, not only was deception common particularly among those with a strong sense of interstitial copresence, but also their stories involved risk-taking related to where they were at, what they were doing, or whom they were with. For example, in the second focus group, the discussion about how they handled intentionally missed calls and messages, the conversation shifted to talking about conditions in which they have lied to their friends and family:

Luke: "I went to a concert in Atlanta, and, uh, my girlfriend didn't want me to go because she thought the tickets were too much. She didn't like the band anyway. So uh, I didn't tell her I went. Well, she called. She was with her family. So she's like, 'so, where ya at; what's going on?' And I was in a hotel room and I was like, uh, 'I'm home, just chillin', watchin' TV.' She's like, 'what's on?' I was like, 'Uh, basketball.' So I turned it up to ESPN so she could hear it, and it all worked out."

Rami: "I hate that. I had an ex-girlfriend who did that all the freakin' time. I'll be like, 'Yeah, I'm already home,' but I'll be at my buddy's doing something. And she'll be like, 'Ok, I'll see you in like 15 minutes.' But then she'll, like, call me in five minutes. She's like, 'I'm already at your place.' I'm like, shhhhiiii.... Woops."

Both participants answered their phones and used risky tactics for managing their personal relationships. On the survey, both Luke and Rami reported a strong sense of interstitial copresence. However, Rami reported a high level of disruptiveness of EvEMC to his self-presentations, but Luke reported a low level of disruptiveness. While Rami expressed using deceptive tactics, he also alluded to the disruptiveness of EvEMC to his self-presentations. He used especially risky tactics via EvEMC for managing his relationship, but these tactics also had

negative consequences for his relational identity when his girlfriend caught him lying to her, as he did not anticipate his girlfriend driving to his house.

Luke's narrative was especially risky, yet highly creative. Recognizing that his girlfriend was in a situation in which she was unable to confirm the validity of his claims to where he is at and what he is doing, he told her that he was at home watching television when, in fact, he was in a hotel over 200 miles away preparing to attend a concert that she disapproved of. Whereas Rami reported only moderate use of clandestine boundary work tactics, 1.6, on the survey, Luke had the highest score among the focus group participants, 3.8. Furthermore, he reported a low level of disruptiveness of EvEMC to self-presentations, 2. The low level of disruptiveness is likely associated with both the riskiness and creativeness of his tactics, which included, but not limited to, clandestine boundary work tactics.

Clandestine boundary work tactics were commonly used – and highly effective for – those who had a strong sense of interstitial copresence. However, these tactics appeared to be only one tool in their repertoire of strategies. For example, Anna and Kim were both heavy users of clandestine boundary work tactics, yet they illustrated the use of different tactics as they discussed how they handle incoming calls when they might not feel like talking to the called:

Anna: "I just ignore [their phone calls] and call'em later."

Kim: "I don't answer it, but then they'll become jerks about it. They get angry. My best friend and my boyfriend, I'm like, 'I'm with people, but I'll talk to you about this later.' He'll usually start in. I once again told you that we will talk about this later. [She begins to laugh.] And then I'll usually hang up. That way, the phone doesn't keep ringing."

However, the tactics they used extended beyond answering or not answering the call. In group three, Saul's comment illustrated the complexity of managing multiple identities within

interstitial copresence, which also expressed the awareness and riskiness of sequentially or simultaneously managing conflicting identities within interstitial copresence:

When I was in high school, I used to mess with more than one girl. So, if I was with one, I would have to lie about where I'm at, and I'd have to make it real legitimate cuz sometimes the girl would be close to where I live. So, if I say I'm at my house she'd be like, 'ok, I'm comin' over.' Ok, no, I'm at the store.

In each instance, the truth would have had potentially serious consequences for their relational identities. To maintain such elaborate and risky lies, it seemed that a strong sense of hyper-accessibility – recognition that the other person could call or send a message at any time – and a strong sense of experiencing interstitial copresence – the sense of one's ability to manage simultaneously or sequentially different situations – are essential for creating and especially maintaining such deceptive stories.

6.4. Discussion

In this chapter, the foci of the analyses were on self-work with and within EvEMC and the influence of interstitial copresence on self-work. Based upon the quantitative analyses, the sense of interstitial copresence, as a concept, was not strongly related to the use of clandestine boundary work. The sense of experiencing interstitial copresence was statistically related to the use of clandestine boundary work tactics. Although most respondents reported using clandestine boundary work tactics, very few of them reported using them often. Those with a strong sense of experiencing interstitial copresence reported moderate use of clandestine boundary work tactics. However, the sense of hyper-accessibility was statistically unrelated to the average use of clandestine boundary work tactics.

The qualitative data revealed that (1) clandestine boundary work tactics might have been underreported on the survey, (2) clandestine boundary work was one strategy for managing self-presentations within interstitial copresence, and (3) hyper-accessibility was a significant motivating factor for using clandestine boundary work tactics. The analysis of the qualitative data suggested that the use of clandestine boundary work tactics might have been underreported on the survey. Throughout the focus group sessions, almost all of the participants provided examples of how they have used clandestine boundary work tactics. In doing so, the group members were evidently cognizant of the deceptive nature of these tactics, yet on only a few occasions did they acknowledge this deceptiveness. In fact, once acknowledged as lying, many of them attempted to provide accounts for why their behaviors should not be considered lying.

On the survey, most respondents reported using clandestine boundary work. This finding was even more pronounced during the focus group sessions. However, the focus group data revealed a number of other strategies for managing self-presentation via EvEMC. Clandestine boundary work tactics were part of a strategy for intentionally avoiding or ignoring call or messages without the other person feeling or knowing they were ignored. Yet, many respondents also reported lying about where they were, what they were doing, and even whom they were with. Furthermore, during the qualitative data analysis, a remarkable difference was observed between the respondents with a strong sense of interstitial copresence and those with a weak sense of interstitial copresence. The participants with a strong sense of interstitial copresence often used highly risky and highly creative tactics for managing their identities via EvEMC.

The use of boundary work tactics for self-presentation was often intended to maintain the integrity of the users' relational identities. Negotiating the norm of reciprocity within perpetual, digital copresence presented many challenges for the respondents. As consequence of feeling

hyper-accessible, many participants felt they had to respond to messages quickly and answer every call or construct an acceptable excuse for not doing so. To this end, the sense of hyper-accessibility seemed to dissolve relational barriers, as interactions via EvEMC gave way to an awareness of perpetual “absent-present” others (Gergen 2002).

With such an extreme disparity between the quantitative data and qualitative data regarding the influence of the sense of hyper-accessibility, further regression analyses were conducted to determine the nature of the statistically insignificant relationship between the sense of hyper-accessibility and the use of clandestine boundary work tactics. Further analyses revealed that the influence of hyper-accessibility was statistically explained by the strength of interstitial copresence. That is, when only the variable for hyper-accessibility was added to model one in Table 6.5, the sense of hyper-accessibility was statistically significant at the $p < .001$ level. However, as model two showed, the sense of hyper-accessibility was insignificant when interstitial copresence was added to the model. Conceptually, this finding suggested that experiencing interstitial copresence – as the experience of social actions – was a stronger predictor of other social actions associated with self-presentation. Moreover, since interstitial copresence was conceptualized as a reflexive process between awareness and action – the sense of hyper-accessibility and the sense of experiencing interstitial copresence – this finding suggested that the use of clandestine boundary work tactics might be influenced by the sense of hyper-accessibility, yet the average use of these tactics increased as the average sense of experiencing interstitial copresence increased. Regardless, further analyses are necessary to understand this relationship.

Boundary work tactics provided a greater *sense* of control over identities in an increasingly boundless copresence. However, the effectiveness of any particular tactic remains

unclear. The findings from the quantitative data analysis suggested that the use of clandestine boundary work is positively related with a higher level of disruptiveness of EvEMC for self-presentations. Yet, based on the qualitative data analysis, it seemed that people used these tactics to reduce the disruptiveness of EvEMC. In both phases of the study, it was readily apparent that EvEMC was more disruptive to self-presentation among those with the strongest sense of interstitial copresence. For some people, such as Luke and Kim, clandestine boundary work tactics seemed to be effective. For others, such as Rachel and Rami, despite moderate use of these tactics, EvEMC were still highly disruptive to their self-presentations. Out of the nine focus group participants who reported a weak sense of interstitial copresence, only one of them reported that EvEMC were highly disruptive to self-presentation. Conversely, of the 19 participants who reported a strong sense of interstitial copresence, seven of them reported that EvEMC were highly disruptive to their self-presentations. The five participants who reported relatively heavy use of clandestine boundary work tactics also reported that EvEMC were not highly disruptive to their self-presentations. Yet, the other eight participants who were light or moderate users of clandestine boundary work tactics also reported that EvEMC was not highly disruptive to self-presentation. Therefore, the disruptiveness of EvEMC to self-presentation was associated more with the strong sense of interstitial copresence than with the use of clandestine boundary work tactics. The positive correlation between clandestine boundary work tactics and the disruptiveness of EvEMC to self-presentation observed in the quantitative analysis was at least partially explained by the fact that tactics were used most often by people with a strong sense of interstitial copresence and people with the strong sense of interstitial copresence often used riskier tactics for managing identities via EvEMC.

CHAPTER 7: SELF-WORK WITH AND WITHIN EvEMC: CONSEQUENCE OF EvEMC FOR SELF-CONCEPTION

7.1. Introduction

In this chapter, the findings from the analysis of the quantitative and qualitative data for the concepts related to self-conception – the use of EvEMC for eliciting identity support and the consequences of EvEMC for self-appraisal – are triangulated. The central research questions in this chapter are as follows:

R⁹: To what extent does EvEMC affect how people evaluate themselves? Are they significant sources of identity support? What effect do they have on self-appraisal?

R¹⁰: Are the effects of EvEMC on identity support and self-appraisal more pronounced among those who have a strong sense of interstitial copresence?

First, general descriptive statistics for identity support and self-appraisal from the survey data are presented. Second, the findings of the quantitative analysis of the influence of interstitial copresence, heavy use of EvEMC, attachment to EvEMC, and the use of EvEMC for relationship maintenance on the frequency of use of EvEMC for eliciting identity support as well as on the strength of consequences of EvEMC for self-appraisal. Lastly, the findings of the focus group data and the focus group participants' survey data are presented.

7.2. Phase I: Quantitative Data Analysis

Among the students who were surveyed, many of them reported using EvEMC for eliciting identity support. Just over 56 percent of them reported using EvEMC often for communicating with people who know their “real” selves; and nearly 30 percent of them used EvEMC often to feel better about themselves. Over 78 percent of the students reported seeking

Table 7.1. Descriptive Statistics for Identity Support via EvEMC (n=617)*How often do you call, text, instant message, or email close friends or family...*

	Never	Seldom/ Sometimes	Often/ Very Often	Total
(1) For reassurance of your abilities?	21.4%	60.9%	17.7%	100%
(2) To feel better about yourself?	19.1	52.5	28.4	100
(3) Just to communicate with someone who knows the 'real you'?	9.2	34.7	56.0	100
(4) To talk about an embarrassing situation (e.g., "I can't believe I lost my train of thought during my presentation")?	7.6	51.7	40.7	100
(5) For support after you said or did something you regretted (e.g., "I got upset, told him off, and just left")?	10.2	51.9	37.9	100
(6) To get their opinion about how others perceive you (e.g., "did anybody think I was a jerk for just abruptly leaving last night")?	16.9	54.3	28.8	100
(7) To get their perspective about the way you acted or something you did in a situation?	10.4	44.1	45.5	100

reassurance from important others through EvEMC and over 80 percent used EvEMC to feel better about themselves. Furthermore, they also displayed signs of the coupling of "I have a feeling/Get me a friend." Over 40 percent of the respondents used EvEMC often to feel better about an embarrassing situation. Almost 40 percent of them often used EvEMC to seek support after something they said or did that they regretted. Around 30 percent of them used EvEMC to get others' opinions about how people perceived them in particular situations and over 45 percent of them used EvEMC to get other people's perspectives about their behavior in a particular situation (see Table 7.1).

Although EvEMC could provide a source of identity support, it could also have consequences for self-appraisal, especially when the norm of reciprocity is violated. Over 52 percent of the students surveyed felt good about themselves when their friends and family contacted them regularly via EvEMC and felt bad about themselves when their friends and family did not contact them regularly. Almost 60 percent of them felt rejected by their friends if they did not answer their calls or respond to their messages in a reasonable amount of time. Furthermore, nearly 70 percent of them felt lonely when their friends did not call or send

Table 7.2. Descriptive Statistics for Effects of EvEMC on Self-Appraisal (n=617)

<i>Please tell me how well each of the following statements describes you personally.</i>	Disagreed	Agreed	Total
(1) I feel good about who I am as a person when friends and family call, text message, instant message, or email me regularly, but feel bad about myself when they stop calling, texting, instant messaging, or emailing as often.	47.5%	52.5%	100%
(2) I get lonely when no one calls, sends text messages, instant messages, or emails for a while.	43.1	67.9	100
(3) I eventually feel rejected when friends do not respond to my phone calls, text messages, instant messages, or emails for a while.	41.5	59.5	100
(4) I feel excluded when my friends call, text, instant message, or email each other but not me.	39.2	60.8	100

messages, and over 60 percent of them felt excluded when their friends called or sent messages to other friends via EvEMC but not them (See Table 7.2).

The descriptive statistics suggested that EvEMC affects the evaluative dimension of self-work. Of the students surveyed, most of them not only reported using EvEMC for eliciting identity support, but also reported that EvEMC affects their self-appraisals. However, what factors influenced the differences in their responses? Specifically, were the behaviors and feelings they reported associated with the sense of interstitial copresence? Did the strength of the sense of interstitial copresence influence the use of EvEMC for identity support? Moreover, did it influence the strength of the effect of EvEMC for their self-appraisals?

With regards to the first question, the strength of the sense of interstitial copresence was a statistically significant predictor of the use of EvEMC for eliciting identity support. Specifically, according to the regression model in Table 7.3, when all other factors were held constant, the average use of EvEMC for eliciting identity support increased by .27 for every one-point increase in the average strength of experiencing interstitial copresence ($t=5.27$; $p<.001$). Similarly, as the average sense of hyper-accessibility increased by one-point, the use of EvEMC for eliciting identity support increased by .19 ($t=3.36$; $p<.001$).

Although heavy use of EvEMC and attachment to EvEMC were statistically unrelated to the use of EvEMC for eliciting identity support, the use of EvEMC for relationship maintenance

Table 7.3. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Use of EvEMC for Eliciting Identity Support on Selected Independent Variables (n=617)

	Use of EvEMC for Identity Support
Heavy Use of EvEMC	-.012 (.069)
Attached to EvEMC	.088 (.090)
Relationship Maintenance via EvEMC	.250*** (.045)
Interstitial Copresence:	
<i>Sense of Experience</i>	.273*** (.052)
<i>Sense of Hyper-Accessibility</i>	.187*** (.056)
CONTROLS:	
Male	-.391*** (.045)
Non-White	-.020 (.101)
Age	-.013 (.016)
Relationship Status: ^a	
<i>Dating</i>	-.148 (.092)
<i>Serious Relationship (Not Engaged)</i>	.030 (.073)
<i>Engaged/ Married</i>	.026 (.152)
Intercept	.723* (.374)
F-Ratio	23.54***
r ²	.300

Note: Standard errors are in parentheses.

^a The constant term for relationship status is "single."

*p ≤ .05; **p ≤ .01; ***p ≤ .001

was a significant predictor of the average use of EvEMC for eliciting identity support.

Specifically, for every one-point increase in the average use of EvEMC for relationship maintenance, the use of EvEMC for eliciting identity support increased by .25 (t=5.57; p<.001).

The strength of interstitial copresence and the use of EvEMC for relationship maintenance, along with the other factors included in this regression model, explained 30 percent of the variance in the use of EvEMC for eliciting identity support (F=23.54; p<.001).

The effect of EvEMC on self-appraisal was significantly related to the sense of interstitial copresence as well as attachment to EvEMC, but unrelated to the use of EvEMC for relationship maintenance. First, according to the regression analysis in Table 7.4, as the average strength of the sense of experiencing interstitial copresence increased by one point, the strength of the effect

of EvEMC on self-appraisal increased by .23 ($t=4.44$; $p<.001$). In addition, for every one point increase in the average strength of the sense of hyper-accessibility, the strength of the effect of EvEMC on self-appraisal increased by .18 on average ($t=3.15$; $p<.01$). Second, EvEMC had a stronger effect on the self-appraisals among people who felt attached to EvEMC than on people who did not feel attached to them ($b=.29$; $t=3.22$; $p<.001$). This model explained 14 percent of the variance in the strength of the effect of EvEMC on self-appraisal ($F=9.12$; $p<.001$).

Table 7.4. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Effect of EvEMC on Self-Appraisal on Selected Independent Variables (n=617)

	Strength of Effect of EvEMC on Self-Appraisal
Heavy Use of EvEMC	-.063 (.069)
Attached to EvEMC	.292*** (.091)
Relationship Maintenance via EvEMC	-.021 (.045)
Interstitial Copresence:	
<i>Sense of Experience</i>	.230*** (.052)
<i>Sense of Hyper-Accessibility</i>	.176*** (.056)
CONTROLS:	
Male	-.006 (.066)
Non-White	-.119 (.101)
Age	-.017 (.016)
Relationship Status: ^a	
<i>Dating</i>	-.193* (.092)
<i>Serious Relationship (Not Engaged)</i>	-.154* (.073)
<i>Engaged/ Married</i>	.409** (.152)
Intercept	1.15** (.375)
F-Ratio	9.12***
r^2	.154

Note: Standard errors are in parentheses.

^a The constant term for relationship status is "single."

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

7.3. Phase II: Qualitative Data Analysis

Most of the focus group participants reported using EvEMC to elicit identity support. Based upon their survey responses, the average strength of the use EvEMC for eliciting identity support was 1.9, which was nearly the mean of the survey sample. In the first session, Kim, Gina, Jennifer, Rachel, and Kendra reported heavy use of EvEMC for identity support, as did Paul, Ron, and Rami in the second session. Jennifer was the only one who did not report having a strong sense of interstitial copresence. Velma and Christy in the first session, Mark, Quincy, and Paul in the second session, and Jeremy, Summer, and Jackie in the third session reported moderate use of EvEMC to elicit identity support. Mark, Paul, and Jeremy were the only three who had a strong sense of interstitial copresence. Mark, Quincy, and Jackie reported a strong sense of hyper-accessibility, but not a weak sense of experiencing interstitial copresence (see Table E-3, Appendix E).

Furthermore, according to Table E-3, the mean strength of the effect of EvEMC on self-appraisal among the focus group participants was 1.6, which was also the mean of the survey sample. Based upon the survey, EvEMC had a strong effect on Marla, Jennifer, and Kendra from the first session, Ron, Rami, and Paul from the second session, and Jeremy and Brad from the third session. Jennifer was the one student who did not also report a strong sense of interstitial copresence. She felt a strong sense of hyper-accessibility, but had a weak sense of experiencing interstitial copresence. EvEMC had a moderate effect on the self-appraisals of Velma, Anna, Gina, and Rachel in the first session, Mark and Quincy in the second session, and June in the third session. Yet, only Anna, Gina, and Rachel reported a strong sense of interstitial copresence.

Although many of the students provided explanations and examples of eliciting identity support via EvEMC, the sense of urgency in their statements seemed to vary according to their sense of interstitial copresence. As the students in the second focus group discussed using EvEMC when they were embarrassed, Paul and Seth both explained that EvEMC provided them with identity support:

Paul: “You need a source of comfort, and that’s the first thing you can do. You know, you can talk to anyone at anytime. If I didn’t talk to anyone immediately then it would be stuck in my mind and I’d just turn over it. It’d be multiplying and just get worse and worse and worse, rather than just quickly venting to someone.”

Seth “Yeah, if something bad has happened, I get on Facebook Chat and I’m like, hey, call me. If I want to talk, I just have to log on to Facebook Chat and get a phone call pretty quick. It makes you feel better. Once you talk to someone, you, you know, you get it out. You feel better. Even if the problem isn’t solved, you get to get it all out. You feel a little bit better. You get to talk to somebody. Somebody gets to hear your side of the story. They support you, you know.”

For Paul, the identity support sought through EvEMC was explained in much the same way it would be explained in corporeal copresence. He did not explain the use of EvEMC for identity support as particularly different than identity support sought in face-to-face interactions except that others can be present when physically absent, which was characteristic of a strong sense of interstitial copresence. Whereas Paul reported heavy use of EvEMC for identity support as well as a strong sense of interstitial copresence on the survey, Seth reported that he did not use EvEMC for identity support and had only a weak sense of interstitial copresence. In Seth’s comment presented here, he did not directly seek identity support through Facebook Chat; rather, since he did not have a long-distance service provider on his landline phone, he used Facebook Chat to ask a friend to call him on the landline phone in his dorm. In this sense, Facebook Chat provided him with a sense of instant-access to important others in the absence of other available technologies. Whereas Paul sought immediate identity support via EvEMC because he felt that

others were available in interstitial copresence, Seth felt others were highly accessible via Facebook Chat compared to his landline phone.

Furthermore, whereas landline phones and instant messaging (as well as email) provided a sense of digital copresence, the configuration of these forms of EMC with forms of EMC via cell phones provided a sense of interstitial copresence. Important others were thought to be available anytime and anywhere. The instant identity support via EvEMC that Paul described was common among the participants who had a strong sense of interstitial copresence. When I asked the third focus group how they used EvEMC after something embarrassing occurred, Jenny stated, “Oh, in embarrassing situations, I text my best friend immediately. I call all over the place.” Richard said, “You’re going to go home and see somebody anyway and eventually tell someone about it. It’s kind of the instant gratification. Instead of waiting to talk about it, you’re just like, this is what I did. I can’t believe it.” Unlike landline phones alone, EvEMC provides instant gratification. Similarly, as the students in the second focus group discussed the same question, Matthew said,

Even, even in a relationship. Like, I’ll get mad at my girlfriend, maybe for something stupid. I’ll, like, either call my best friend or some girl I know and be like, hey, here’s what I did, here’s what she did. She’ll be like, you’re an idiot, so, ok, then I won’t be mad at her anymore. But if she’s like, well, you’re probably right, then, you know... (He shrugs his shoulders and smirks.)

In this case, Matthew sought immediate support from his friend about his performance of a particular identity. In the first focus group, Kim explained,

Usually the people you are calling can reassure you or know you a lot better, it makes you feel better. If you didn’t have these maybe you’d feel like, ‘oh my gosh.’ With you’re friends, they’d be like, ‘who cares; don’t worry about it.

Through EvEMC, people can seek immediate support for any questions they have about themselves or how others perceive them. Moreover, as Kim’s statement suggested, people can constantly check in with important others to see how they feel about them.

The sense of interstitial copresence via EvEMC had significant consequences on self-appraisal. In the quantitative phase, the effect of EvEMC on self-appraisal was primarily measured in terms of the perceived violation of the norm of reciprocity and the absence of calls or messages from important others. On the survey, half of the focus group participants reported that the presence or absence of EvEMC with important others influenced how they felt about themselves. Furthermore, over half of them reported feeling lonely, rejected, or ostracized if they did not receive calls or messages from important others or if their important others did not answer their calls or reply to their messages (see Table 7.5).

When important others did not answer their cell phones or reply to their messages, the callers/senders were likely to feel ignored unless they had prior knowledge that could explain their behavior. I asked each group how they felt when friends or family did not answer their calls or reply to their messages. Students in each group said that it was possible that the other person had a legitimate reason for not answering or replying, yet almost all of them also suspected that they were being ignored. In the first focus group, Matthew said, “Man, I feel like an idiot. I mean, like, say you keep calling them or texting them. It’s making me look like, pfff, look at this

Table 7.5. Descriptive Statistics for Effects of EvEMC on Self-Appraisal, Focus Groups

<i>Please tell me how well each of the following statements describes you personally.</i>	Disagreed	Agreed	Total
(1) I feel good about who I am as a person when friends and family call, text message, instant message, or email me regularly, but feel bad about myself when they stop calling, texting, instant messaging, or emailing as often.	50%	50%	100%
(2) I get lonely when no one calls, sends text messages, instant messages, or emails for a while.	42.3	67.7	100
(3) I eventually feel rejected when friends do not respond to my phone calls, text messages, instant messages, or emails for a while.	34.6	66.4	100
(4) I feel excluded when my friends call, text, instant message, or email each other but not me.	38.9	62.1	100

fool.” Jason nodded his head in agreement and replied, “See, I get the hint. I’ll just stop talking to her.” Matthew’s reflected appraisal was that his friend was rejecting his request for communication and thought he was desperate for calling or texting; he thought others felt he was a “fool” for continuously calling or texting. The “hint” Jason referred to was that his friend was uninterested in him. He was so certain that she was ignoring him that he would have rather ended the friendship than accept the possibility that she had a legitimate reason for not answering or replying. In the third focus group, when this happened to Jenny, she felt ignored too. However, instead of getting angry, she became self-conscious and worried that she had done something to upset them or make them angry: “When they don’t answer, I don’t get mad. I just think, did I do something to make them mad or something?”

In the absence of important cues and information that help define the situation, many of the participants constructed narratives of possible scenarios to explain why their calls were unanswered or messages not reciprocated. In the third focus group, Brad’s and Jeremy’s comments illustrate this dimension of such reflected appraisals:

Brad: “It’s really frustrating because it’s nice that you can be connected but it’s really frustrating when you have to be. And when you try to get in touch with somebody but you can’t. Like, I’ll give people... If I send somebody a text, I’ll give them an hour before I start getting frustrated, because if you’re in class, that’s fine, but class break is going to be within an hour and you can send me a reply.”

Jeremy: “If somebody texts or calls me, and I like call’em back in like five minutes and they don’t pick up, I’m like, really? Really? You just called me or texted me, I know you’re there. I know you have your phone. So what’s made you so busy that you’re not answering or texting me back?”

Brad knew his friend was in class, so he would allow him about an hour to reply before he would get frustrated. He felt that his friend had no excuse for not replying between classes though.

Similarly, Jeremy assumed his friend was available because he had just called. Since he had no other information to justify him not answering the call, he would get aggravated.

When information was unavailable, many of them would not accept excuses that they felt illogical or inconsistent. Some of them were still skeptical even when the other person provided an explanation for missing the call or not replying to the message. For example, Seth mentioned, “Maybe the person was in the shower.” Matthew replied, “I call somebody and they didn’t pick up, and they call [later] and [tell me that] they just got in the shower. I don’t buy it.” Others tested whether or not they were being ignored. Shortly after Matthew’s comment, Saul said, “I’ve done that... to a chick. When I had my friend with me... and she won’t answer... I’m like, why don’t you call and see if she’ll pick up. They usually do. When they’re ignoring you, when he’s over, we’ll like text her at the same time to see which one she’ll text back.” Saul felt so confident that he was being ignored that he enlisted his friend’s assistance to prove it. On the survey, Brad, Jeremy, Matthew, and Saul reported having a strong sense of interstitial copresence.

7.4. Discussion

In this chapter, the effect of EvEMC on self-appraisal and the use of EvEMC for eliciting identity support were examined. The quantitative analysis suggested that the sense of interstitial copresence significantly influenced the use of EvEMC for eliciting identity support as well as the strength of the effect of EvEMC on self-appraisal. The nature of this influence was explored in the focus group session. Based upon the qualitative data, the sense of hyper-accessibility underscored most of discussion regarding the use of EvEMC for eliciting identity support. Furthermore, the sense of experiencing interstitial copresence was evident in the discussion on

the effect of EvEMC on self-appraisal. When explaining their reactions to important others who do not answer their calls or reply to their messages and why they felt the person did not have any reason not to answer or reply, many of the focus group participants provided similar scenarios in which they engaged in interstitial byplays or side involvements. In this sense, they felt their important others had no excuses because they could have also engaged in interstitial byplays or side involvements while talking or replying to them.

In addition, both the quantitative and qualitative data suggested that the more people use these media for managing their personal relationships, the more likely they are to also use them for eliciting identity support from these personal relationships. For many people, EvEMC served as portals for accessing important others. The more people used these media for managing their personal relationships, the more likely they were to also use them for eliciting identity support from these personal relationships.

The regression analyses suggested that the effect of EvEMC on self-appraisal was much stronger among those who felt attached to EvEMC than among those who did not feel attached. In the focus group, the nature of this relationship became apparent, as many of the participants associated their reliance on EvEMC with their connection to family and friends. Since these devices were significant media for social interaction for many of the participants, when the nature of the interactions changed, e.g., calls went unanswered, messages were not reciprocated, others have not called or sent messages, many of them felt ignored or avoided, which effected their self-appraisals.

The findings in the previous chapter suggested that people use deceitful tactics to manage their availability to others, the findings in this chapter suggest that people are highly skeptical of important others' excuses for missing their calls or not replying to their messages. Those who

had a stronger sense of interstitial copresence usually expressed a stronger or more adamant skepticism of others' excuses.

In the following chapter, the impact of EvEMC on personal relationships is explored; moreover, self-work in personal relationships with and within EvEMC is examined. To set the stage for the next chapter, the general pattern of self-work with and within interstitial copresence could be generally summarized with an example from the third focus group. As Jeremy explained to the group that he did not care if his girlfriend does not answer his calls or replies to his messages, he stated,

I usually know where she's at and what she's doing. Not that I'm creepy or a stalker. I just kind of know her classes... I just... I mean... We've been dating for close to three years, and she goes to UT, and I know her classes and I know the extra-curriculars she's in and stuff like that. I also know that sometimes, that she's busy or she's asleep or you know. Usually if she doesn't pick up and I know she's not doing any specific activity, like in class, she's probably got it on silent and it's in her purse and hasn't checked it or something, or she's studying or something. I don't take offense to it. She'll probably call me back when she's able to.

At this point, the note-taker and I both took note of his sudden skepticism about his girlfriend's whereabouts when she does not answer his calls or reply to his messages. What began as a justification for the group seemed to turn into a personal reassurance that his girlfriend does not ignore him. He felt that he knew every possible reason that she would have for not answering the phone, down to her not hearing it because it was on silence. The motive for his strangely detailed justification to the group became clearer later in the session. As discussed in the previous chapter, when Jenny, Brad, and himself were discussing how they ignored calls that they did not feel like answering and messages they did not feel like replying to, Jeremy said,

Yeah, especially if I'm doing something else and don't feel like... you know... Sometimes I make up little white lies, especially if I was doing something embarrassing, but other times I might make up something... The most common time I would white-lie to someone about where I'm at is when I'm supposed to be

somewhere and I'm like 'I'm on my way,' but I haven't left yet. I tell them... what they want to hear. 'I'm caught in traffic.' I show up like ten minutes late and I'm like... Yeah, if the reason isn't good enough, I'm like... if I get a call and I'm watching a show or something, I'll just be like, 'I'm studying. Let me call you back later.'

For Jeremy, his awareness of the deceptive tactics he used to avoid calls and account for not replying to messages seemed to influence his skepticism of his girlfriend's excuses for not answering his call or replying quickly to his messages.

CHAPTER 8: NEGOTIATING PERSONAL RELATIONSHIPS WITH AND WITHIN EvEMC

8.1. Introduction

The analyses in chapter five provided support for the concept of interstitial copresence. In chapters six and seven, self-work with and within EvEMC and the influence of the sense of interstitial copresence on self-work were explored. In this chapter, the dynamics of negotiating personal relationships with and within EvEMC as well as the influence of interstitial copresence on the management of personal relationships are explored. The analyses in this chapter examine the findings of the previous chapters within the context of personal relationships. The central research questions are as follows:

R¹¹: How do people feel EvEMC affects their personal relationships?

R¹²: Does their sense of interstitial copresence influence their experience with EvEMC in their personal relationships?

To begin, general descriptive statistics for the perceptions of the effects of EvEMC on the respondents' personal relationships from the survey are presented. Second, the findings of the quantitative analysis of the influence of the sense of interstitial copresence, heavy use of EvEMC, attachment to EvEMC, and the use of EvEMC for relationship maintenance on the effects of EvEMC on personal relationships are discussed. Lastly, the findings of the focus group data and the focus group participants' survey data are presented.

8.2. Phase I: Quantitative Data Analysis

The students surveyed had mixed feelings about the effects of EvEMC on their personal relationships. Although 78 percent of them felt that their personal relationships were stronger

because they had cell phones and about 61 percent of them felt that text messaging had strengthened their personal relationships, only around 30 percent of them felt that instant messages or email strengthened their personal relationships. About half of the students felt text messaging and email were useful media for managing their familial relationships and around 47 percent of the students felt that text messages and email allowed them to stay in touch with their family without having to spend as much time talking to them (See Table 8.1).

However, the effects of EvEMC were not entirely positive. Many of the students surveyed felt that managing their personal relationships with and within EvEMC placed unreasonable demands on them. About 25 percent of them felt their lives revolved around their cell phones. Around 24 percent of the students surveyed felt that life would be less stressful without their cell phones and about 22 percent of them felt life would be less stressful without email and around 43 percent of the students surveyed felt that they were being pulled in multiple directions by friends and family.

In addition, many of the respondents felt that they were unable to manage their relationships because of EvEMC. Around 23 percent of the respondents reported that they could not provide important others with the attention they deserved or keep up with all of their demands and nearly 27 percent of them reported that they could not meet others' expectations. Many of them even reported that they had to select which relationships they gave attention to, aware of the fact that they let others down. That is, 40 percent of the respondents reported that they felt like they let others down as they tried to meet expectations of one relationship, and 32 percent of them felt that they alienated some friends and family members because they simply could not find the time to respond to their calls and messages. This sense of inadequacy was

Table 8.1. Descriptive Statistics for the Satisfaction with EvEMC in Personal Relationships and Relationship Strain (n=617)*Please tell me how well the following statements describe you personally.*

	Strongly Disagree	Somewhat Disagree	Agree	Total
1. Satisfaction with EvEMC in Personal Relationship:				
(a) I feel my relationships with my family and friends are stronger now because I own a cell phone.	6.8%	15.2%	78%	100%
(b) Text messaging has strengthened my relationships with my family and friends significantly.	17.5	21.7	60.8	100
(c) Instant messaging has strengthened my relationships with my family and friends.	51.2	22.0	26.7	100
(d) I feel my relationships with my family and friends are stronger now because of email.	39.1	28.4	32.6	100
(e) Because of email I can keep in touch with my family without having to spend as much time talking to them.	28.7	24.6	46.7	100
(f) Because of text messaging I can keep in touch with my family without having to spend as much time talking to them.	28.7	25.0	46.3	100
2. Relationship Strain:				
a. Sense of Demand				
(a) I feel that I'm constantly being pulled in multiple directions by friends and family who demand my attention.	21.6	35.7	42.8	100
(b) Life would be so much less stressful if I didn't have a cell phone.	46.8	29.7	23.5	100
(c) Life would be much less stressful if I didn't use email.	55.1	32.9	22.0	100
(d) I feel like my whole life revolves around my cell phone.	47.0	28.5	24.5	100
(e) Cell phones, text messaging, instant messaging, and email have added to the stress in my family.	55.3	27.7	17.0	100
b. Sense of Inadequacy				
(a) I don't feel I can provide my friends and family the attention I think they deserve.	44.9	31.9	23.2	100
(b) I can't keep up with all of the demands of my friends and family.	44.7	32.1	23.2	100
(c) I don't feel I can meet the expectations people have of me.	39.9	33.2	26.9	100
(d) In trying to meet the expectations of one relationship, I feel like I let down other relationships.	30.3	29.8	39.9	100
(e) I feel like my friends and family think I'm avoiding them when I'm unable to answer their phone calls, instant messages, text messages, or emails.	33.4	29.0	37.6	100
(f) I feel like I alienate certain friends and family because I just can't find time to respond to their emails, phone calls, text messages, and instant messages.	36.6	31.8	31.6	100

coupled by the fact that around 38 percent of them felt like their important others think they are avoiding them when they do not answer the calls or messages.

The OLS regression analyses presented in Table 8.2 suggested that the sense of interstitial copresence as well as the use of EvEMC for relationship maintenance were positively related with the perception of the effect of EvEMC on personal relationships. First, according to model one, for every one point increase in the strength of the sense of experiencing interstitial copresence, the level of satisfaction with EvEMC in personal relationships increased by .21 ($t=5.29$; $p<.001$). Furthermore, for every one point increase in the strength of the sense of hyper-accessibility, the level of satisfaction with EvEMC in personal relationships increased by .18 ($t=4.39$; $p<.001$). Second, for every one point increase in the average use of EvEMC for

relationship maintenance, the level of satisfaction with EvEMC in personal relationships increased by .20 ($t=5.79$; $p<.001$). Model one explained 29 percent of the variance in the strength of satisfaction with EvEMC in personal relationships ($r^2=.29$; $F=25.25$; $p<.001$).

When the variables for relationship strain were added to the analysis, an additional 5 percent of the variance in the perceived effects of EvEMC on personal relationships was explained ($r^2=.34$ $F=23.43$; $p<.001$). In model two, the sense of experiencing interstitial copresence and the average use of EvEMC for relationship maintenance were still positively related to the perceived effects of EvEMC on personal relationships, but the influence of these factors was slightly weaker than in model one. The influence of the sense of hyper-accessibility was slightly stronger than model one. Specifically, for every one point increase in the strength of experiencing interstitial copresence, the level of satisfaction with EvEMC in personal relationships strengthened by .18 on average ($t=4.58$; $p<.001$) and for every one point increase in the strength of hyper-accessibility, the level of satisfaction with EvEMC in personal relationships increased by .19 ($t=4.55$; $p<.001$). Furthermore, for every one point increase in the average use of EvEMC for relationship maintenance, the level of satisfaction with EvEMC in personal relationships increased by .18 ($t=5.26$; $p<.001$).

In addition, people who reported the strong sense of excessive demand from important others and a sense of inadequacy in personal relationships also reported a higher level of satisfaction with EvEMC in their personal relationships. With all other factors held constant, on average, for every one point increase in the strength of the sense of excessive demand, the level of satisfaction with EvEMC in personal relationships increased by .16 ($t=2.87$; $p<.01$). Furthermore, as the sense of inadequacy in relationships increased by one point, the strength of the effect increased by .10 ($t=.250$; $p<.001$).

Table 8.2. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Level of Satisfaction with EvEMC in Personal Relationships on Selected Independent Variables (n=617)

	Level of Satisfaction with EvEMC in Personal Relationships	
	Model 1	Model 2
Heavy Use of EvEMC	-.031 (.051)	-.022 (.050)
Attached to EvEMC	.116 (.067)	.123 (.065)
Relationship Maintenance via EvEMC	.204*** (.033)	.179*** (.032)
Interstitial Copresence:		
<i>Sense of Experience</i>	.212*** (.038)	.176*** (.038)
<i>Sense of Hyper-Accessibility</i>	.182*** (.041)	.185*** (.040)
Relationship Strain:		
<i>Demand</i>	--	.164** (.056)
<i>Inadequacy</i>	--	.104** (.040)
CONTROLS:		
Male	.140** (.049)	.151** (.047)
Non-White	-.107 (.075)	-.096 (.073)
Age	-.004 (.012)	-.007 (.011)
Relationship Status: ^a		
<i>Dating</i>	-.079 (.068)	.096 (.066)
<i>Serious Relationship (Not Engaged)</i>	-.078 (.054)	-.068 (.053)
<i>Engaged/ Married</i>	-.177 (.113)	-.164 (.110)
Intercept	-.014 (.278)	-.086 (.270)
F-Ratio	22.25***	23.43***
r ²	.288	.335
Change in r ²	--	.047

Note: Standard errors are in parentheses.

^a The constant term for relationship status is "single."

*p ≤ .05; **p ≤ .01; ***p ≤ .001

Overall, these regression analyses suggested that most people did not feel EvEMC had an especially positive impact on their personal relationships. People who had a stronger sense of interstitial copresence felt EvEMC had a more positive effect on their personal relationships. Heavy users of EvEMC for relationship maintenance also felt EvEMC had more positive effects on their personal relationships, which was intuitively an expression of their reasoning for using EvEMC in their relationships in the first place. Finally, EvEMC seemed to have a Janus-faced characteristic. That is, people who felt a strong sense of excessive demand from important others

also reported higher levels of satisfaction with EvEMC in their personal relationships. Similarly, people with a stronger sense of inadequacy in relationships also had a higher level of satisfaction with EvEMC in their relationships.

8.3. Phase II: Qualitative Data Analysis

The Janus-faced nature of EvEMC was evident when the focus group data and the survey data were triangulated,. According to the survey data for the focus group participants, nearly half of the participants reported being moderately satisfied with EvEMC in their relationships, but also reported feeling moderate levels of strain on their relationships associated with EvEMC (see Table E-4, Appendix E). In all three sessions, most of the students expressed that they loved and hated EvEMC, yet they were often unaware of the polarized nature of their statements. Even when this dualism was explicitly stated, neither the students making the comments nor the other participants addressed the contradictions. For example, in the first focus group, Kim, who, according to the survey, had the strongest sense of interstitial copresence among the 26 participants (see Table E-4), stated, “I hate being connected sometimes. I like being connected all the time, and other times I hate it. Because you’ll get like 50 phone calls. I hate to turn it off...” Neither she nor the other participants recognized the love/hate in her statement. Instead, the conversation shifted toward how they managed multiple calls without turning off the cell phone. Although they seemed tacitly conscious of their contradictory feelings about EvEMC, they never explicitly addressed how EvEMC were both beneficial and detrimental to their relationships.

Consistent with the quantitative analyses, the extent to which the participants used EvEMC for managing their personal relationship significantly influenced their perspectives and

experiences with EvEMC in their relationships. However, the perceived effects of EvEMC on their personal relationships varied drastically among those who reported having a strong sense of interstitial copresence. For example, Kim reported that EvEMC had neither positive or negative effect on her personal relationships, whereas Rachel, with the second strongest sense of interstitial copresence, did not feel that EvEMC had an especially positive effect on her relationships yet felt a moderate sense of demand from others and inadequacy in her relationships. Paul and Brad were the only two participants with a strong sense of interstitial copresence who felt EvEMC had a very positive effect on their relationships and did not feel even a moderate sense of demand or inadequacy. Gina reported the opposite effect. She had a strong sense of interstitial copresence and felt EvEMC had some positive effects on her personal relationships, yet she had a strong sense of demand and inadequacy associated with managing her relationships with and within EvEMC.

The participants who had the weakest sense of interstitial copresence – Christy and Summer – reported moderate to high levels of satisfaction with EvEMC in their personal relationships. Although both of them reported a moderate sense of demand from important others, Christy felt a moderate sense of inadequacy whereas Summer did not. Christy reported on the survey that she did not have a strong sense of interstitial copresence, but her comments during the session suggested a strong sense of hyper-accessibility as well as a sense of experiencing interstitial copresence, but only as they pertained to her relationship with her boyfriend. Nearly every example she provided during the session involved her boyfriend. When I asked the students what the longest period of time was that they had gone without the Internet or their cell phones, Anna stated, “I hate losing my phone,” which evoked the following response from Christy:

I love losing it... I was with my boyfriend in park, walking our dog and, um, I lost my phone somewhere. And, so I was kind of happy because it was kind of junky. I was just going to use the insurance to get a new one. He's like, 'No, we have to go back and get the phone. That's like our lifeline in our relationship.' I was like, 'please, can't we just be without it for like two or three minutes?' He's like, 'No.' So we had to go get it. It was the most depressing thing ever.

For many of the participants the sense of hyper-accessibility was the primary reason they never wanted to be without their cell phone (as discussed in chapter 5). However, it was in a particular relationship that Christy felt a certain obligation to carry a cell phone. She not only felt like she was always available to her boyfriend, but also felt it was central to their relationship, as her boyfriend felt it was their "lifeline."

The strain EvEMC placed on personal relationships was, in fact, the sheer expectation that important others *are* available regardless of time or location. Although family members were cited throughout the discussions, close friends and especially romantic partners were the most volatile relationships negotiated via EvEMC. Those with a strong sense of interstitial copresence were not only aware of negotiating their availability to others but also expected others to be available to them. Kim, who reported the strongest sense of interstitial copresence of the 26 focus group participants, expressed such awareness of the perceived consequences of not answering or replying to important others:

Kim: "I don't answer [my phone when I am out with friends], but then they'll become jerks about it. They get angry. My best friend and my boyfriend, I'm like, 'I'm with people, but I'll talk to you about this later,' and he'll usually start in. 'I once again told you that we will talk about this later.' [She begins to laugh.] And then I'll usually hang up. That way the phone doesn't keep ringing. Because, yeah, it's so annoying when somebody doesn't answer their phone, because it's like they're ignoring you.

Marla: "I've ignored my boyfriend's calls before, and he'll call like 30 times and I won't answer it.... Ugh... just take my phone, just take it away."

The sentiments that Kim and Marla expressed were common among all of the participant. Kim preferred not to answer her phone while she was out with friends, but felt that she had to answer in order avoid more serious consequences later because the other person will feel ignored if she does not answer. Marla concurred with Kim's reaction, but also expressed her frustration with having to even deal with the assumption that she should always be available because she had a cell phone.

8.3.1. Strategies for Relationship Maintenance

The subtle differences between Kim's tactic and Marla's tactic reflected a pattern of relationship maintenance that arose throughout the discussions. Momentarily aware of their lack of control of EvEMC, many of the participants described relationship maintenance strategies for managing calls and/or messages – self-presentation strategies for specifically for relational identities. The strategies were attempts at managing the logistics of relationships, particularly with information control and audience segregation, yet in a social environment without relational boundaries (McCall and Simmons 1966).

To begin with, I asked them when and why they choose to contact an important other in one medium over another. In circumstances when there was fear of losing face, most of them said email was often the medium of choice because it was the most disembodied form of EvEMC. As the participants were discussing the use of text messaging in tense situations or situations in which they were concerned about losing face, Gina interjected,

Well, I love email. I use it all the time in my job. I work with [a local newspaper], and I'm the entertainment editor. I have to email a lot of, like, people I'm nervous to talk to, like record people, so I can get interviews with bands and stuff. Always scared to... And email just makes me feel better. I always sound professional, because I can write well. I just can't sound nervous talking to people who are

more important than me. It's a lot easier to be able to write to people – to think about it first. It is still as quick as a phone call, but doesn't take as long as a formal letter.

Although most of the participants knew that it was not as immediate as a phone call, they admitted that they used email when they were nervous about talking to someone or otherwise distrusted their own ability to maintain their preferred identity through a more embodied medium. Brad explained:

In IM and email, you can think more about what you're saying than if you were having a conversation. You're not dealing with non-verbal communication, since they can't see you and you're not hearing what, like, awkward situations, awkward talk. You don't have to look them in their face to say something. It's a lot easier to type it out and send. I'm not very good at editing in my head what comes out of my mouth. But I'm really good at editing what I type. It's easier to write jokes. That's just the way, I don't know, instant messaging started for me."

Forms of EMC that are the most disembodied, email and text messaging, allow for greater control over one's performance. Brad and Gina cognitively evaluated the specific form of EvEMC based upon degree of embodiment available.

The strategies for managing important relationships via EvEMC also varied according to the relationship. Jeremy's response to Brad's previous comment illustrated the selection process based upon the closeness of the relationship:

There is no emotion in words. Like, you can put a little exclamation point, but, like, it is very... it is very hard to interpret what the other person is trying to say. There is no tone... That is when, like, if you're going to have a serious discussion, right, just call'em up, because if you start texting, they will misinterpret... then there will be hurt feelings, and then you actually talk to the person, and you're like, 'I really didn't mean to say that that way' and then you're like, 'oh.' 'Wow, I took this the wrong way.'

Brad responded, "Yeah, like, take everything you thought I meant and turn it around the other way." Although it might appear that Jeremy contradicted his earlier statement regarding the utility of using instant messaging and text messaging for remedial work, he was emphasizing an

embarrassing situation rather than a situation in which hurt feelings were involved. Furthermore, Brad and he were both referring to the “serious discussion,” which most of the participants related to a close friend or romantic partner.

In the same conversation, June provided her diagnosis of the problem, which reveals one of the potential dilemmas that could arise at any given point in text-based communication:

I think people feel like they can say more in instant messaging than they could in person, so that leads to situations or comments that are sometimes a little much. People might not want to talk about certain things in person... You think one thing is meant. It's worse in instant messaging than text, because text, it's harder to have a text conversation than instant messaging. When you're having a instant messaging conversation, it's like you're talking to the person, but you have to think out what you're going to type and edit what you're saying and send it, but there is no emotion in text; you're just making a statement.

The advantages people find in less embodied forms of EMC – increased possibility of presenting oneself in a manner consistent with the vicarious performance they imaged – also put them at risk of giving off the wrong impression due to the lack of other verbal and non-verbal cues.

As a final point regarding the strategic selection of the medium for communication, a strong sense of interstitial copresence underscored the calculus for strategically selecting the desired electronic medium for relationship maintenance. Following June's previous statement, Jeremy replied,

I think, like, the order would... for me, would be, the easiest would be just talking to them on the phone and then, like, IM would be next best then text messaging would be best. When you're on the IM, you're usually, you know, on the computer. You're at least kind of a little more, I don't know... for me, when I'm instant messaging, I would be on the computer and there would be less distraction, I guess you could say. It would be just me and the computer. You know, I would get the message and I would hear it and I'm like, 'ok,' and I would type something back and then while I'm waiting for them to respond, I could do something else on the computer... I could still talk to people while doing homework or researching on the computer. And then text messaging, you know, when you send the message, you know, depending on what the other person is doing, you don't know exactly what they're doing, and then they may not... it's

just with text, sending a message is harder on a small keyboard then, like, a big one, on the computer. Text messaging can be more long and drawn out, and instant messaging is more fluid; there's no gap in the conversation.

In this statement, Jeremy expressed awareness that his performances were always embedded in two environments, the physical and virtual; awareness of negotiating interstitial side involvements and potential interstitial byplays; and relation-based – compared to location-based – interaction.

Similar to the strategies used for selecting which media to use for self-presentation, three strategies for relationship maintenance related to the degree of embodiment of media used were observed in all three sessions. From the focus group discussion, the strategies for relationship maintenance were identified as (1) total avoidance, (2) redirection, and (3) descending/escalating embodiment.

Total avoidance strategies worked best in relationships in which the other is not expected to answer the cell phone or reply to messages. Rami told the group that he just did not answer his phone. When asked if it made his friends angry, he said that it did not because “they know I do not answer my phone.” In such cases, total avoidance may not require remedial work, as the call or message was not expected to be reciprocated in the first place.

Redirection is the *mutual* transfer of an encounter to another medium to strategically facilitate certain forms of communication as opposed to other forms. For example, Rachel said, “My boyfriend and I, we have our arguments through text. I'd call and try to talk, but nothing would come out. And then, like, I'm texting up a storm. And we have, like, text fights.” Rachel and her boyfriend were unable to communicate when they talked on the phone, so they would switch to exchanging text messages. Although her statement suggested that they fought through text messaging, the emotion and non-verbal animation in the delivery of her statement suggested

that it was a means of resolving their differences when they reached a stalemate in their phone conversations.

Relative to the redirection tactic, *descending/escalating embodiment* is a tactic for strategically setting or redirecting an encounter to a medium with a desired level of embodiment without the other person's expressed consent. Deescalating embodiment was most commonly reported in encounters that were initiated by the participant but the other person did not reciprocate. Many of the students mentioned attempting cycling through different forms of EvEMC until the other person responds. A failed face-to-face attempt could be followed by a virtual attempt: "she doesn't see me. I'll call her to get her attention." Jackie mentioned that she would usually send a text message if her friend did not answer her cell phone. In fact, June ended a relationship through a series of text messages:

I had to break up with someone over text messaging. It was not what I wanted to do. He gave me no other options. He wouldn't answer my phone calls. I was in a long-distance relationship and he wasn't talking to me on the phone. He was not on AIM with me. He was... he was just totally out of it. I had no other choice, let me tell you.

In June's case, she used text messaging to be heard by the other person immediately. She opted for text messaging because she "knew" he would get it. In other words, he could not ignore the text message. In the same conversation, Brad gave an example of escalating embodiment. His girlfriend broke up with him in a three-page email. When Summer asked, "Did you reply." He said, "No, I got it... I printed it out and drove over to her apartment to talk to her." In this case, Brad used an escalating embodiment tactic. The encounter preceded, but one interlocutor strategically switches the medium. However, descending/escalating embodiment could be used for managing relationships in which interest is expressed in the main involvement, but the side involvement is equally important. Matthew's comment illustrated this type of descending

embodiment: “[S]ay you’re watching a football game, you want to watch the game. You’re not going to sit there and talk to them, so if they want to talk to me, text message me. That way, I can still watch the game.” The encounter was continued, but one interlocutor strategically switched the medium for greater control or management of the encounter.

8.3.2. Deception, Double-Standards, and the Dissolution of Boundaries

Throughout the focus group discussions, the students presented two seemingly disconnected views of EvEMC in their relationships: as the contacted and the contactor. A common theme in both views was the centrality of deception in their relationships. As the contacted, they jokingly offered numerous examples of avoiding important others by providing, as Jeremy called them, “white-lies,” statements intended to deceive the other person but with the best interests of one’s relational identity or the other person in mind. On only one occasion did someone mention intentionally deceiving the other with bad intentions. For the majority of the students, they used deception as a means of coordinating and managing their personal and social lives. Matthew, for example, just did not feel like talking to a friend who was calling him:

Like, I’ll be driving down the street and they’ll be like, ‘Oh let me call Matt. I just saw him.’ Ignore. [Acting out pressing the ignore button on his phone.] And then they, you know, send me a text message: ‘I just saw you ignore my phone call.’ And, like, I know, shit.

However, he was also caught in a “white-lie,” which confirmed to the other that he was available but did not want to spend the effort, time, or energy talking to her.

The consequences of the centrality of deception were experienced not only when caught in the lie, but also when the person evaluates others as contactors. That is, when the participants’ calls were unanswered or messages unreciprocated, it seemed that they became acutely aware of

their own lying behaviors, which was most evident in their evaluations of the other's motives for not answering or replying quickly. Jason expressed a much deeper sense of unfounded rejection when a woman he was dating did not reciprocate his initiations. In the first session, as Paul was telling a story about how he felt his friend ignored his calls, Jason interjected:

You bitch [referring to Paul's friend].... If I'm calling one of my guy friends... oh, something's happening [He shrugs his shoulders, suggesting it is not a big problem that his guy friends do not answer.] ... unless it's fantastic, it can be missed. I'd say, damnit, that's messed up. If it's critical, I'd be upset. Otherwise, if I talk to a female [implying a girlfriend or a woman he was dating]... It's one thing to have a life; it's another thing to pick up the phone and put it back down. That's where 'you bitch' comes in.

Jason was imagining the person picking up the phone, looking at the caller-id, and, upon realizing it was him calling, not answering his call. His sense of rejection appeared to be associated also with his own actions. That is, not only did he have a strong sense of interstitial copresence, he also reported heavy use of clandestine boundary work tactics (see Table 6.8 in chapter six). He mentioned ignoring people's calls and messages, but he seemed certain that when his calls were unanswered by women he was pursuing, dating, or simply friends with, they were ignoring him.

In other cases in which students felt ignored by a romantic partner, their reactions, based upon these unsubstantiated feelings, could potentially lead to other problems in the relationship.

Similar to Jason, Kendra also felt ignored when her initiation was not reciprocated:

Kendra: "[If he does not respond to my text] I'll send it again. There is a chance that maybe something is wrong or maybe the text didn't go all the way through. Like, me, I'll send it and be like, check the outbox, make sure it went through. 'Maybe he's being a jerk. Let me send it again.' Now I've sent it twice. Now I know you're being a jerk. In know you are. I've sent it twice."

Moderator: "Then what do you do?"

Kendra: "Then I get mad."

Rachel: "Um, Hello? I send the 'hello question mark' text. I know you're near your phone."

Marla: "I'd be like, I don't know. I make it really fair.... Like if, ok, I don't know, I'm sending him a text or whatever and I don't hear from him and like two days later he sends me a text and is like, 'I never saw it'... until two days later? You know what I mean, like, I'm just like emmm, I'll play that game. I hate games, but I'm like, emmm, a text takes five seconds, you know. I don't know the logic in that, but it makes sense in my head."

Anna: "If someone takes a few hours to text me, I'm just going like, ok. [She shrugged her shoulders to suggest it frustrates her.]

Rachel: "Yeah, I want'em to feel it. I want them to feel it too."

Moderator: "Feel what?"

Rachel: "Ignored."

Although they found it stressful to answer their cell phones constantly or reply to messages immediately (or within the expected timeframe) and often made excuses for those times when they could but choose not to answer or reply, they, similar to Matthew and Jason, seemed to hold others to this unreasonable standard. They expected others to always answer or reply immediately, and were generally skeptical of any excuses for not answering or replying. Consequently, in these cases, they became angry or began treating the other person the way they felt, or, in their words, "knew," they were being treated.

EvEMC appeared to create two additional sources of relationship strain, especially within romantic relationships, compared to face-to-face interaction. First, although people expected their partners to answer or reply when they called them or sent them messages, engaging in EvEMC with someone else when they were together often resulted in conflict. The person not involved in the digital conversation felt ignored. Furthermore, for those with a strong sense of interstitial copresence, recognizing the digital space as a social space from which they were

excluded, they felt their partners were choosing someone else within the digital space over them, which Kim and Kendra explained as follows:

Kim: "I don't like texting when other people are around. Like, if we're trying to have a conversation. My boyfriend does this. If I'm sitting around talking to him, and he's doing this [acting like she's texting] with his phone, and I like snatch it from him and like throw it over here. 'Pay attention!' He's like, 'I'm listening. I heard.' And he'd like give me snippets of what I just said to him. And that drives me crazy. My brother does it too."

Kendra: "I have this situation with my best friend, this guy, and he texts ALL THE TIME. Like, his Blackberry is, like, his best friend. He can't put it down. And I went home for break and I went to visit him and he was like this [Begins acting like she is typing a message with her head down and phone in her lap] the entire time! Uh, yeah... uh, huh... yeah... uh, huh... yeah... [Acting out being ignored while her friend continues to text someone else]. I hear you. Are you serious? I am physically in front of you. So if we have messages or something in a group of friends... and then it will be like maybe a few text messages, but him, hours of text messages, um, no."

Second, in romantic relationships, conflict often arose – or suspicion was at least aroused – when one of them received a message or call unexpectedly from someone of the opposite sex or from an ex-boyfriend or ex-girlfriend in the presence of the other person. They were even more suspicious if their partner did not or was unwilling to answer the call, read the message, or reply to the message. This point came up first in a conversation between Rachel, Kim, and Jan:

Kim: "If my boyfriend... When we very first started dating, this girl would not stop texting him, and it would be like three in the morning. You can see it when it pops up on the screen, and that would make me so mad. Still, to this day, she will randomly text. It's been two years, so it's not that big of a deal, but it will make me angry for that brief second. He'll do the exact same thing. If he doesn't know who's texting me, he'll see it. He's like, 'Oh, who's [John]?' I'm like, 'Somebody I work with,' and then there's three more, and he's like, 'Why does he continue to text you.' I'm like, 'It's not a big deal. He's asking me about getting shifts covered.' But it's like the other people, like emmm..." [She acts as if she is suspicious.]

Rachel: "What bothers me is, like, my boyfriend would... it's not like... someone would call and he wouldn't pick it up; he'd text. I'm like, 'why can't you answer the call?' Who is it that you can't pick up the phone? You have to just text. I'd rather you answer the call then ignore it and start texting. I can't see what you're texting, but when you're talking, you're in front of me."

Gina: “You can see the look on their face, like... and they’re like, uhh... and they’ll put it down. It’s sitting on the table, pick up and look at it, and then hit ignore and put it in their pocket.”

In another focus group, Matthew stated,

It starts arguments. Let’s say, my ex-girlfriend had called me, and... I don’t want to say, like... oh, I need something from her or that’s why so and so texted. And especially let’s say someone is out drinking at a party and they text you at three o’clock in the morning... Well, I know, like, if someone texted my girlfriend at three o’clock in the morning, dude, I’m like, ‘what’s this guy texting you at three o’clock in the morning for?’ I mean, you’re either going to be drunk or you’re going to want something.

In both examples, the participants felt that their partners might be hiding something from them.

Many of the respondents acknowledged that such calls or messages usually created tension and in some cases led to arguments.

The qualitative analyses of the effects of EvEMC on personal relationships revealed that the consequences of self-presentation and self-appraisals were inherently reflexive. People’s awareness of their own deceptive strategies for negotiating relational identities often led them to assume that important others used similar deceptive strategies and had similar motives as them. Consequently, in these instances, their evaluations of self were often based upon the assumption that important others were ignoring or avoiding them. To explore the validity of these finding among the larger sample of survey respondents, an OLS regression analysis in which the effect of EvEMC on self-appraisal was regressed on the average use of clandestine boundary work tactics, in addition to the heavy use of EvEMC, attachment to EvEMC, the use of EvEMC for relationship maintenance and the sense of interstitial copresence. For these finding to be supported, the use of clandestine boundary work tactics would be positively related to the effect of EvEMC on self-appraisal. According to the regression model in Table 8.3, for every one point increase in the average use of clandestine boundary work tactics, the strength of the effect of

EvEMC on self-appraisal increased .23 ($t=4.88$; $p<.001$). Furthermore, EvEMC had a strong effect on the self-appraisals of heavy users of clandestine boundary work tactics ($b_0= 1.69, 2.12$; $t=4.17, 4.39$; $p<.001$). That is, heavy use of clandestine boundary work was operationalized as mean score greater than or equal to 2. A strong effect of EvEMC on self-appraisal was operationalized as a mean score greater than or equal to 1.5 (see Table C-8, Appendix C).

Table 8.3. Unstandardized OLS Coefficients from the Multiple Linear Regression of the Effect of EvEMC on Self-Appraisal on Selected Independent Variables, with the Inclusion of Clandestine Boundary Work Tactics (n=617)

	Strength of Effect of EvEMC on Self-Appraisal
Heavy Use of EvEMC	-.051 (.069)
Attached to EvEMC	.227** (.089)
Relationship Maintenance via EvEMC	-.049 (.045)
Interstitial Copresence:	
<i>Sense of Experience</i>	.133** (.055)
<i>Sense of Hyper-Accessibility</i>	.176*** (.055)
Clandestine Boundary Work Tactics	.227*** (.047)
CONTROLS:	
Male	-.009 (.065)
Non-White	-.127 (.100)
Age	-.021 (.016)
Relationship Status: ^a	
<i>Dating</i>	-.178* (.091)
<i>Serious Relationship (Not Engaged)</i>	-.128 (.072)
<i>Engaged/ Married</i>	.370** (.150)
Intercept	1.23*** (.368)
F-Ratio	10.66***
r^2	.175

Note: Standard errors are in parentheses.

^a The constant term for relationship status is "single."

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

8.4. Discussion

The results of the quantitative analyses suggested that the more people use EvEMC for managing close relationships the stronger the belief that EvEMC had a positive effect on the quality of their personal relationships. However, people who reported feeling a sense of strain on their relationships associated with EvEMC also reported higher levels of satisfaction with EvEMC in their personal relationships. This seemingly contradictory finding can be partially explained by examining the dynamics of negotiating relationships within interstitial copresence.

The same advantages provided by EvEMC were also the sources of significant strain on their personal relationships. Some of those with a stronger sense of interstitial copresence expressed that while they generally expected others to always be available to them, they did not always want to be accessible to them. This problem arose because of the dissolution of boundaries between situations in the physical space and digital space when the devices are on and/or the user is logged in. Interstitial copresence blurred – if not entirely removed – the boundaries between situated interactions in the physical space and those in the digital space. To exploit the potentials of EvEMC, people often left their cell phones on and carried them with them wherever they went, checked their email regularly, and stayed logged in to an instant messaging program. During these times, the user had little actual control over when important others called, sent text messages, instant messages, or emails. In interstitial copresence, when a call was placed or message sent, it demanded timely action from the recipient. Inaction was often interpreted as action, often of the unfavorable or negative sort. If the call went unanswered or the message unreciprocated in a timely manner, the caller or sender would likely interpret the unresponsiveness as purposeful, unwarranted, or otherwise unexplainable avoidance. In some cases, to maintain the current state of the relationship, the user would either acknowledge the

caller or sender immediate by engaging in interstitial byplay or interstitial side involvement or use a clandestine boundary work tactic.

Deception was the most common strategy for managing personal relationship in interstitial copresence. All of the participants in the focus groups provided examples regarding such deception, e.g., lying about where they were, why they did not answer the call or reply to the message, why they had to end the call or message exchange, who they were with, why they could not talk or exchange messages, or who was calling or sending messages. Most of the participants not only admitted to using such deceitful tactics to manage their relationships, but also were commonly skeptical of their important others when they did not answer or reply to them in a timely manner as well as their explanations for not answering or replying. They recognized that others were likely engaging in the same deceptive practices.

In addition, the dissolution of boundaries within interstitial copresence produced an unpredictable and, in many cases, volatile state in personal relationships. The unregulated nature of calls and messages through EvEMC created potential for unexpected and undesired introduction of information to personal relationships, particularly for those with a strong sense of interstitial copresence. Many respondents who were in romantic relationships reported being suspicious of calls or messages received at odd times, especially if their partners were unwilling to disclose the caller's or sender's name when asked, or by certain friends or acquaintances, especially of the opposite sex, and ex-boyfriends or ex-girlfriends. They were even more suspicious when their partners were unwilling to answer a call or reply to a message while they were present.

Negotiating personal relationships within interstitial copresence involved careful, and often difficult, self-presentation, particularly related to the use of deceptive tactics for managing

one's availability to the other without disrupting one's relational identity and the management of information in an increasingly a social environment without relational boundaries. Furthermore, the consequences of managing self-presentation in this manner were not only the stress of managing excessive demands from important others and a certain sense of personal inability to provide others with attention the relationship calls for, but also the sense of skepticism and distrust of the other, recognizing that they might employ similar tactics for managing the relationship as well.

CHAPTER 9: TOWARD A THEORY OF INTERSTITIAL SELFHOOD

9.1. Summary and Discussion

The driving question in this study was how have EvEMC affected the experience of self, particularly within our personal relationships. The primary objectives were to explore the nuances of negotiating self and personal relationships with and within multiple forms of EMC and to provide a theoretical and empirical framework for future research on the impact of using multiple forms of EMC on the self and personal relationships. The study focused on the use of the four most popular forms of EMC, cell phone talk, text messaging, instant messaging, and emailing (Hamptons et al. 2009; Jones and Fox 2009; Lenhart et al. 2009).

9.1.1. *Interstitial Copresence*

Throughout the course of our daily lives, most people cycle through different forms of EMC, between computer-mediated communication and communications via mobile devices. The unique configurations of the interface parameters of EvEMC as well as the technological integration of different forms of EMC into single devices produced a digital environment in which one's important others are always copresent. Similar to EvEMC, landline telephones provide a sense of digital copresence. However, EvEMC provides a qualitatively different sense of copresence than EMC via landline telephones. Since landline telephones are geographically fixed, they provide a sense of digital copresence that is very similar to corporal copresence. Landline conversations require both parties to be spatially and temporally located within the vicinity of the telephone service (e.g., the office or home) similar to sitting across from each

other at a café. EvEMC provide a digital environment in which important others are always assumed available regardless of their physical locations.

In order to examine the impact of these everyday forms of EMC on the experience of self, it was necessary to explore the context of copresence produced through managing relationships with and within multiple forms of EMC. As Turkle (2008) argues, the changing state of the self is the likely result of the changing context of copresence. At different times and places, researchers have examined self-work and relationship maintenance within different forms of EMC. The findings of these studies provided a foundation for examining the sense of copresence resulting from the cycling through, switching between, and simultaneously use of everyday forms of electronically mediated communication.

The concept of interstitial copresence was constructed by synthesizing the finding of previous research on EMC and copresence, identities, and self-work. Interstitial copresence was conceptualized as a sense of perpetual copresence socially and cognitively located within and between the physical space and digital social space. Not to be confused with the interface parameters of different EvEMC, interstitial copresence was characterized as a sense of perpetual copresence through EvEMC, i.e., a sense of hyper-accessibility and a sense of simultaneous or sequential management of identities and relationships within and across physical and digital spaces. Cell phones and the Internet only provide the potential for interstitial copresence. The sense of interstitial copresence strengthens only through a collaborative, interactive process with important others with and within EvEMC.

In chapter five, the concept of interstitial copresence was explored. The descriptive statistics from the Internet survey suggested that most people who use EvEMC feel a sense of hyper-accessibility and engage in simultaneous or sequential byplays and side involvements

within physical and digital spaces. According to the regression analyses, people who use EvEMC most often, especially for relationship maintenance, commonly feel a strong sense of hyper-accessibility and have a strong sense of experiencing interstitial byplays and side involvements. However, the positive effects of general use of EvEMC and use of EvEMC for relationship maintenance on the strength of hyper-accessibility were found to be functions of the sense of experiencing interstitial copresence. That is, using EvEMC alone does not produce a sense of hyper-accessibility. Rather, the sense of hyper-accessibility increases as people's sense of experiencing interstitial byplays and side involvements increases. The strength of experiencing interstitial copresence was influenced by the use of EvEMC for relationship maintenance as well as the sense of hyper-accessibility, which suggested that people engaged in interstitial byplays and side involvements because they felt a strong sense of hyper-accessibility and in order to manage the expectations associated with their personal relationships.

The quantitative analyses provided only a general snapshot picture of the relationship between the use of EvEMC, attachment to EvEMC, and relationship maintenance and the sense of interstitial copresence. However, these findings were strongly supported by the qualitative analyses. The analysis of the focus group data suggested that the sense of interstitial copresence arises through the process of negotiating personal relationships with and within EvEMC. Some focus group participants used EvEMC but did not have a strong sense of interstitial copresence. In these cases, EvEMC was primarily used for emergencies, coordinating activities, or other peripheral tasks. In other words, EvEMC primarily served a utilitarian purpose for them. For those who reported a strong sense of interstitial copresence, EvEMC were ends in themselves. That is, EvEMC provided a social space for interacting with important others. Rather than chatting at a coffee shop or over beers at a pub, the same dialogue and relative intimacy

experienced in face-to-face interactions are transferred, with varying success, to a digital coffee shop encounter. EvEMC did not – in any way – replace the need or desire for face-to-face interactions, nor were such interactions perceived as supplementary. Instead, interstitial copresence was a blending and balancing of both corporeal and digital copresence. Unlike much of the research from the 1990s that dichotomized face-to-face versus online interaction, the findings here suggested that interstitial copresence is a cognitive social space that converges the physically real and digitally real environment.

It is important to note also that an analytic distinction must be made between discussing a physical and digital space and interstitial copresence. The dichotomy between the physical space and digital space are empirical facts, yet conceptually distinct from the sense of copresence produced through interactions within and across these spaces. The sense of interstitial copresence appeared to develop from self-reinforcing processes. That is, as more personal relationships are negotiated more often with and within EvEMC, people must develop strategies for managing their relationships within digital and physical encounters without disrupting the flow of their daily lives. Interstitial side involvements, such as driving while talking on the cell phone or exchanging text messages during a class lecture, or interstitial byplays, such as exchanging instant messages with more than one person at a time or exchanging text messages with someone in another state while having lunch with a friend, become normalized as a result. Over time, people develop a stronger awareness of the perpetual availability of important others and a stronger awareness of others' awareness of their availability to them. To this end, interstitial copresence is intrinsically a social construct that eventually translates into, "you have a cell phone and have access to the Internet, therefore you should be available to me," as perception

detached from any particular personal relationship. Interstitial copresence is a reflexive process between perception and action, which is interrelated with the dialectics of self.

9.1.2. Self-Work Within Interstitial Copresence

Interstitial copresence not only develops through a reflexive process similar to that of the self, the state of the self, too, changes as the sense of interstitial copresence strengthens. In chapters six and seven, the focus shifted to exploring self-work with and within EvEMC, with particular emphasis on the impact of interstitial copresence on the experience of the self. Negotiating relational identities within interstitial copresence have certain consequences for the performative and evaluative elements of self-work.

The analyses in chapter six focused on relational boundary work with and within EvEMC, which was found to be a critical component to self-presentation within interstitial copresence. The quantitative data analysis explored a particular form of relational boundary work with and within EvEMC, clandestine boundary work – a strategy whereby deception was used in attempt to manage and coordinate one’s personal relationships, personal responsibilities, and personal desires without violating the expectations associated with one’s relational identities. The regression analyses suggested that the sense of interstitial copresence was only partially related to the use of clandestine boundary work tactics. That is, people with a stronger sense of experiencing interstitial copresence used clandestine boundary work tactics more often, yet the sense of hyper-accessibility was statistically unrelated to the use of such tactics. However, the qualitative data analysis produced results contrary to these findings. In all three focus group sessions, the sense of hyper-accessibility was the most influential factor in determining the tactics people used for managing their relational identities. Yet, clandestine boundary work

tactics were only one of many strategies for managing relational identities. While all users of EvEMC used boundary work tactics, people with a strong sense of interstitial copresence often used riskier and more creative boundary work tactics. Therefore, the insignificant relationship between the use of clandestine boundary work tactics and the sense of hyper-accessibility was likely the result of measuring only one boundary work strategy, albeit a very common one, among many strategies for managing self-presentation within interstitial copresence.

The regression analyses also suggested that EvEMC was more disruptive to self-presentation among those who used clandestine boundary work tactics most often. Since regression analyses only indicate association rather than causation, the nature of the positive relationship between the use of clandestine boundary work tactics and the perceived disruptiveness of EvEMC for self-presentation was explored during the focus groups. Most people reported that EvEMC had caused disruption to their self-presentation. People with the stronger sense of interstitial copresence reported higher levels of disruptiveness of EvEMC. Furthermore, since those with a strong sense of interstitial copresence not only frequently used clandestine boundary work tactics, but also used riskier and more creative tactics for managing relational identities, the sheer difficulty of managing multiple relational identities within interstitial copresence observed in the qualitative analysis likely explained the positive relationship between the use of these tactics and the perceived disruptiveness of EvEMC to self-presentation.

Interstitial copresence was conceived of a perpetual digital copresence, interactions via EvEMC had consequences not only for self-presentation but also for self-conception. The analyses found that the sense of interstitial copresence was positively related to the use of EvEMC for eliciting identity support. Although the quantitative

analysis examined the use of EvEMC for overtly seeking identity support, the qualitative analyses found that just answering the call or replying to the message quickly from important others often provided the callers or senders identity support, especially for those with a strong sense of interstitial copresence. In interstitial copresence, as a consequence of the sense of hyper-accessibility, people commonly exhibit the emotional qualities of what Turkle (2008) referred to as, “I want to have a feeling/Get me a friend.” Turkle (2008:128) argues “always-on/always-on-us” technologies “gives us the potential to communicate whenever we have a feeling, enabling a new coupling of ‘I have a feeling/Get me a friend.’ This formulation has the emotional corollary, ‘I want to have a feeling/Get me a friend.’” If others are not corporeally copresent to provide identity support, important others are assumed to be immediately available through EvEMC.

However, the expectation of instantaneous identity support that seems to arise in interstitial copresence presented serious consequences for people’s self-appraisals. The regression analyses suggested that the sense of interstitial copresence was positively related with the strength of the effect of EvEMC on self-appraisals. According to the focus group data, the process of evaluating self within interstitial copresence followed the same patterns as self-appraisal within corporeal copresence. In a face-to-face interactions, if a greeting is not reciprocated, an assessment can draw on additional cues – “she did not see me,” “I do not think he recognized me,” “he just looked at me and walked the other direction,” etc. In interstitial copresence, since important others were assumed to be perpetually available, the definition of the digital situation was also perpetual, beginning with the assumption of that important others are always ready and willing to communicate. If important others have not initiated encounters over a subjectively

reasonable amount of time and/or if they have not answered their phone calls or replied to their messages, the definition of the situation reflects a perceived lack of reciprocation. In these circumstances, people often felt ignored or ostracized.

Furthermore, in interstitial copresence, if the digital greeting, or request for an encounter, is not reciprocated, the caller often reflects on the history of the relationship for cues to explain what is often interpreted as a digital “cold shoulder.” As with all situations, digital situations are only partially defined by the other. The other part of the definition of the situation is left to the person’s construction after collecting the essential information – location, current activities, etc. The vicarious and actual performances merge in EvEMC, which explains why, for example, Christy’s boyfriend was shocked when she told him later in the conversation that she was peeing. Although this behavior was not detrimental to the relationship, her boyfriend defined the situation in a manner that clearly did not include her in the restroom. In the case of the unanswered phone call, the history of the relationship is not only called upon to explain why the other person did not answer the call, but also the history of how the caller negotiated calls and messages from the other. However, the accuracy of the interpretations of the other’s actions are rarely, if ever, verifiable. Yet, this is only a slight deviation from face-to-face interaction.

Zhao (2005:401) points out,

Even in corporeal copresence, discrepancies exist between a person’s self-view and the views others hold of that person (Rosenberg 1986). In telecopresence, such discrepancies may become more pronounced due to the absence of nonverbal cues, but the strength of the association between our self-views and our perceptions of the views others hold of us must be similar to those in corporeal copresence.

The definition of the situation is always based upon subjective interpretations of the information available to the interlocutors. Goffman (1959:1) claims,

When the individual enters the presence of others, they commonly seek to acquire information about him or to bring into play information about him already possessed.... Although some of this information seems to be sought almost as an end in itself, there are usually quite practical reasons for acquiring it. Information about the individual helps to define the situation, enabling others to know in advance what he will expect of them and what they may expect of them and what they may expect of him.

Within EvEMC, beyond the direct information provided through limited aural and/or visual communication, the missing information that would otherwise be available in face-to-face interactions is imaginatively filled in. Similar to the digital self that Zhao (2003:401) argues arises in online interaction,

A mental image of the others will emerge from mere plain text exchanges... nonverbal expressions are important, but not necessary, for self-formation, as our sense of self is based primarily on what we believe others think of us, rather than on what others actually think of us.

The other might volunteer additional information, but usually only information consistent with their relational identity. In all situations, people have an interest in controlling the information available to their audience and ensuring that audiences remain segregated. In encounters, both parties must exchange information to define the situation. However, the definition of the situation within interstitial copresence is based less upon information directly available to one's senses and more upon one's imagination or assumptions about the situation. Since the definition of the situation is reliant on verbal or textual descriptions from the other, accounts must be provided when unexpected or contrary information is introduced.

In synchronous digital interactions with important others, the information we normally observe without discussion in face-to-face interaction must be established through explicit

inquiry, such as “Where are you” and “What are you doing.” In text-based exchanges, every aspect of the messages exchanged is subject to scrutiny – the time elapsed between sending a message and receiving a reply; the length of the message; the meaning of the words used; the spelling and grammar; abbreviation versus complete words, etc. Emoticons, bold font, all capital letters, underlines, etc., add emotional signifiers to otherwise emotionless messages. The mastery of these strategies could make the difference in whether the relationship is pursued or between an enjoyable evenings or an evening spent explaining what was “really meant” by the message. The recipient evaluates these cues with reference to the relational identity associated with the specific relationship. The information could be interpreted as identity support or it could be interpreted negatively. When messages are not reciprocated, negative emotional reactions often result. In personal relationships, violation of the normative expectations may be interpreted as a lack of identity support for the other.

9.1.3. Negotiating Personal Relationships within Interstitial Copresence

The consequences of performing and evaluating self within interstitial copresence were most evident in personal relationships. The analyses in chapter eight suggested that people do not feel that EvEMC have had an overwhelmingly positive impact on their personal relationships. However, as the strength of interstitial copresence increased, the level of satisfaction with EvEMC in personal relationships increased. The level of satisfaction with EvEMC was not only positively related to the sense of interstitial copresence, but also positively related with the sense of relationship strain associated with EvEMC. The results of the regression analyses found that, on average, people who felt excessive demand from important others and an inability to manage their personal relationship due to EvEMC also reported higher levels of satisfaction with EvEMC

in their personal relationships. The focus group data revealed that people often do not connect their satisfaction with EvEMC to issues arising within the relationship directly associated with the use of EvEMC. They rarely considered the negative impact of EvEMC on personal relationships, yet were never short of stories about the problems caused by EvEMC.

Interstitial copresence exhibits inherently Janus-faced qualities: People exploit EvEMC for the potentials for providing more freedom within and control over their lives. However, as EvEMC increasingly becomes part of all of one's relationships, people could also experience greater constraints and relationships could become highly difficult to manage. People feel that EvEMC provide them with the ability to manage their relationships more efficiently, as these media are able to supplement face-to-face interactions with important others. Whether it is an emoticon sent to a friend via instant message while typing a term paper or a cell phone call to a family member on the drive home from school, EvEMC are media that allow personal relationships to be managed remotely in ways never before seen. The mobility and multiple access points of EvEMC gives people a sense of freedom that they can communicate with important others virtually anywhere and anytime. If they are expecting a phone call, they no longer have to wait at a landline phone. If they are unable to explain themselves face-to-face, they can call on the cell phone. Furthermore, EvEMC allow for greater control over self-presentation. If people are afraid of losing face by talking to someone face-to-face, they could call or, better yet, email the person, as messages generally allow people more time to think about what they want to convey. EvEMC also provide greater control over one's availability, e.g., screening incoming calls or replying via text message or instant message instead of answering a phone call. If people do not have time or do not want to

talk to important others but want to maintain the relationship, they could send a text message or instant message instead.

Although people believed that EvEMC maximized their ability to manage their personal relationships, they also expressed that these media were highly constraining and decreased their ability to manage their relationships. Yet, throughout the focus group sessions, the participants were seemingly unaware of the discrepancies between the positive effects they said EvEMC had on their personal relationships and the experiences with EvEMC with important others that they described throughout the sessions. People exploited the potentials of EvEMC for managing their personal relationships but also tended to find it difficult to segregate their audiences and control the information available to their audience. As a consequence of manage multiple personal relationships within interstitial copresence, the inability to maintain relational boundaries that many of them felt also led them feel that the demands important others had for them were unreasonable and, in many cases, very difficult, if not impossible, to fulfill. However, the unaddressed double standard was that many of them had the same unreasonable expectations for their important others.

Moreover, the analyses in chapter eight also provided insights into the reflexive nature of the consequences of experiencing self in interstitial copresence. Although deceptive strategies for self-presentation were often used to avoid disrupting relational identities, the consequences of these strategies extended far beyond those faced if important others find out the truth. Aware of their own use of such deceptive tactics, many of the focus group participants were chronically skeptical of the excuses important others gave them for why they could not answer their calls or reply to their messages

quickly. These findings suggested that personal relationships managed within interstitial copresence are increasingly characterized by an inherent distrust of the other.

Furthermore, the emotional reaction a person has to situations in which important others did not answer their calls, reply to their messages within a reasonable amount of time, or initiate digital encounters are likely to be more intense because of their awareness of their own lying behaviors. When the effect of EvEMC on self-appraisal was regressed on the average use of clandestine boundary work tactics, the use of these tactics was positively related to the strength of the effect of EvEMC on self-appraisal. Therefore, as personal relationships managed within interstitial copresence move toward totality, it is likely that the use of deceptive tactics for managing relational boundaries could become more pronounced and as a consequence of the inherent distrust of the other person due to an awareness of one's own lying behaviors, the effect of EvEMC on self-appraisal could intensify. While the potentials of EvEMC for managing personal relationships are undeniable, negotiating these relationships within interstitial copresence have harmful potentials for both identities and relationships as well, as the very foundation for establishing genuine trust is compromised.

9.2. Conclusions: Toward a Theory of Interstitial Selfhood

In interstitial copresence, the self is, at every moment, negotiated within both a physical environment and digital environment, yet never fully within either. It is a reflexive, dialectic process involving observation, interpretation, internal organization, and emotional and behavioral reactions negotiated simultaneously within physical and digital environments. As personal relationships and the use of EvEMC for managing personal relationships move toward

totality, the interstitial copresence that develops could result in the deterioration of the boundaries between different relational identities and relationships. As a result of the dissolution of the boundaries between separate relational identities, the self becomes spread among all of one's personal relationships; moreover, it becomes interstitial, as multiple relational identities must be simultaneously managed within physical and digital environments. The Janus-faced nature of interstitial copresence produces an environment in which the interstitial self becomes increasingly unstable.

The findings of this study provide support to Gergen's (2000) claim that the postmodern self has shifted from an identifiable "true" or "knowable" self to a relational self:

Where both the romantic and the modernist conceptions of identifiable selves begin to fray, the result may be something more than a void, an absence of self. Instead, if this tracing of the trajectory is plausible, we may be entering a new era of self-conception. In this era the self is redefined as no longer an essence in itself, but relational. In the postmodern world, selves may become the manifestations of relationship, thus placing relationships in the central position occupied by the individual self for the last several hundred years of Western history. (pp.146-47)

It is not enough, however, to claim that the self is relational. The interstitial self is relational to the extent that the self becomes a product of one's personal relationships. As a consequence of the Janus-faced nature of interstitial copresence, the interstitial self, as a relational self, is likely to become increasingly capricious. Zurcher (1977) claims that the orientation of the mutable self is toward the "self-as-process," highlighting its capability of rapidly and harmoniously switching between identities and relationships. Yet, he could not have predicted at the time that the adaptation of the self to communicative technologies would result in the dissolution of the boundaries between different identities and relationships. The findings of this study suggest a certain relational paradox: The interstitial self seeks stability (self-as-object) within rapidly

changing, inherently unstable relationships. Gergen (2000: 170) argues, “We realize increasingly that who and what we are is not so much the result of our ‘personal essence’ (real feelings, deep beliefs, and the like), but how we are constructed in various social groups.” Within interstitial copresence, personal relationships become inherently unstable. Regardless of assumptions about the actual stability of the relationships, the necessarily deceptive nature of self-presentation and the schizophrenic character of self-appraisals produce an inherent instability. Skeptics of this perspective might claim that such instability could be explained by personal insecurities or self-consciousness. This could be true as well. However, as this study suggested, it takes only a few missed calls, a peculiar tone of voice during a phone call, or an unexpected text message for the instability to become apparent.

Whereas the mutable self is able to adapt to technologies, the interstitial self exhibits similar abilities, but eventually reaches a point at which it becomes saturated (Zurcher 1977; Gergen 2000). Yet, Gergen’s (2000) claim that the self is “under siege,” denies a certain fundamental feature of the social being: the ability to adapt to the social condition of the day. The claim that the self is moving toward “total saturation” thereby reducing the individual to simulation lacks empirical basis. Like the natural trajectory of personal relationships, EvEMC move toward totality. Motivated by the desire to maximize the potentials of EvEMC – greater efficiency, freedom, and control – people are likely to continue integrate EvEMC into their personal relationships. As the interstitial self becomes increasingly boundless through negotiating personal relationships within interstitial copresence with and within EvEMC, its orientation is toward survival through adaptation. That is, the interstitial self is oriented toward stability yet maintained through adaptability. Horstmanshof and Power (2005) argue communicative technology “disrupts and destabilizes” the management of boundaries. Rather

than becoming reduced to simulation, the findings here tend to suggest that the life course of the interstitial self is likely to be characterized by an intensely polarized cycle of stability (self-as-object) and instability (self-as-process), with short periods of “stable instability,” as one’s personal relationships are perceived by the person as generally stable, followed by crisis points in which the self must be reoriented toward change to adjust to the change in personal relationships.

9.3. Limitations

Although this exploratory study provided valuable insights into the impact of EvEMC on the self and personal relationships, it also had certain limitations that must be noted. First, the generalizability of the findings is limited, to a certain extent. College students are the most connected demographic in America, and many of the findings would be expected to appear much different based upon generational variation. The limited generalizability that should be noted is simply with the potential variation between college students and other demographics within this age range.

Additional factors that were not evaluated yet significant in both the quantitative and qualitative phases of this study were differences based upon gender. Although a careful analysis of gender differences was beyond the scope of this study, the significance must not be understated. The gender differences in the findings were more pronounced in the participants’ perceptions and behaviors within romantic relationships than other personal relationships. Future research is necessary to examine the extent and consequences of these differences.

Finally, the mixed-methods research design provided a novel approach to the study of EMC. Individually, the Internet survey and the focus groups provided interesting findings, yet

theoretically mixing the methods provided far greater insights into the effects of EvEMC on the self and personal relationships. In addition, the qualitative data helped clarify both the significant and insignificant findings in the regression analyses. Furthermore, it supplemented some of the problematic quantitative measures. However, the mixed-methods research design proved to be tremendously valuable for both understanding the nature of the impact of EvEMC as well as revealing a certain set of limitations, particularly with the quantitative data.

In particular, as a result of excluding a few questions that were initially thought to be related to a sense of hyper-accessibility but later reconsidered, the mean index for the sense of hyper-accessibility included only two items. Although the index generally met the assumptions for OLS regression analyses, the variable was suspect. The qualitative data certainly supplemented the findings of the regression analyses, yet future quantitative research must attempt to construct measures for hyper-accessibility that are more precise.

To study the social impact of EMC, researchers should also consider developing innovative, theoretically driven mixed-methods research designs. Although the pilot study was vital to the success of the final survey, this study could have benefitted greatly from pre-survey focus groups as well, as the findings regarding hyper-accessibility as well as the conceptualization of instant messaging could have possibly been avoided. In future studies, researchers could develop more sophisticated mixed-methods approaches by using innovative qualitative and quantitative methods.

9.4. Proposals for Future Research

As communicative technologies rapidly advance and with very little lag time between public introduction and adoption of such technologies by innovators, aficionados, and people

simply looking to manage their lives more efficiently, the need for rigorous social research on the impact of these technologies is of the greatest importance. Countries have not invaded other countries in the name of these technologies, nor have these devices caused environmental catastrophes. Yet, within many national headlines, the impact of communicative technology appears. Tiger Woods, Governor Mark Sanford, and Representative Mark Foley's recent experiences testify to consequences of seemingly innocuous social media. However, these national headlines signify a much greater and a more intimate phenomenon observable within the lived experience: a strengthening sense of interstitial copresence as a byproduct of the increasing use of these technologies for managing personal relationships.

Among the numerous social impacts of EMC that need further research three particular issues are especially critical. First, although this study provided general support for the development of an interstitial self through EvEMC, additional research is necessary to explore the validity of these claims as well as the consequences of negotiating self within interstitial copresence. Specifically, the claims herein lend themselves to quantitative studies similar to Kuhn and McPartland's 20 Statements Test, from which Zurcher (1977) constructed his theory of the mutable self. Moreover, qualitative observational research and group interviews and personal interviews could provide insights into the changing state of selfhood.

With regards to consequences of interstitial copresence, one obvious issue in which this line of research could be particularly useful is studying cell phones use as an interstitial side involvement while driving a vehicle. Conventional assumptions suggest that people lack self-discipline or are otherwise irresponsible drivers. These claims might very well be true. However, based on annual statistics of car accidents attributed to cell phone use, something more is at work. Even with wireless devices hands-free communication, e.g., speakerphone or Bluetooth

devices, people are still distracted. Could it be that attempting to maintain a conversation with a digitally copresent passenger contributes to greater inattentiveness than a conversation with a corporeally copresent passenger?

Second, study suggested that interstitial copresence arises from exploiting the potentials of EvEMC for maintaining personal relationships. Yet, negotiating personal relationships within interstitial copresence could have consequences on one's personal relationships. Taken to its natural end, the Janus-faced qualities of interstitial copresence could become increasingly polarized, which could produce a greater sense of intimacy within the relationship and, at the same time, a greater degree of volatility and fragility. Does this process vary among different types of personal relationships? Furthermore, what are the implications of interstitial copresence on the sense of privacy? Have communicative technologies put an end to any sense or even desire for real personal privacy?

Third, the effects of social networking websites, particularly Facebook, were generally unaddressed in the quantitative study. However, beyond its built-in instant messenger, Facebook appeared to be a significant medium for negotiating personal relationships. Further research on the Facebook should explore how Facebook is integrated into personal relationships as well as the consequences of negotiating personal relationships through Facebook in addition to other forms of EMC. A large body of research has explored the self online (see Ellison, Steinfield, and Lampe 2007; Shau and Gilley 2003; Waskul and Douglass 1997; Zhao 2005). However, how does the self negotiated online translate or otherwise contribute to interstitial selfhood?

This study was intended to contribute to a growing field of research on the impact of communicative technologies on the self and personal relationships by proposing a theory of interstitial selfhood. As the Internet and cell phones continue to become normalized in our

everyday American life, the importance of examining the consequences of the convergence of physical and digital social environments becoming increasingly critical to our general understanding of social relations. To understand the changing context of social life due to communicative technology requires a paradigm shift from dichotomous theories and comparisons of differences between online and offline or being on the cell phone or off the cell phone to multi-dimensional perspectives that explore the differences, similarities, and points of convergence between the physical and digital environments. The theory of interstitial selfhood proposed here is another step in this direction. Researcher must continue to develop multi-dimensional theories and innovative research techniques to further our understanding of the self and personal relationships negotiated with and within multiple forms of EMC.

LIST OF REFERENCES

- Alexander, Norman and Pat Lauderdale. 1977. "Situated Identities and Social Influence." *Sociometry*. 40:225-33.
- Anderson, Ben and Karina Tracey. 2001. "Digital Living: The Impact (or Otherwise) of the Internet on Everyday Life." *American Behavioral Scientist*. 45:456-75.
- Aoki, Kumiko and Edward Downes. 2003. "An Analysis of Young People's Use of and Attitudes Toward Cell Phones." *Telematics and Informatics*. 20:349-64.
- Baron, Naomi. 2004. "See You Online: Gender Issues in College Student Use of Instant Messaging." *Journal of Language and Social Psychology*. 23:397-423.
- Baron, Naomi, Lauren Squires, Sara Trench, and Marshall Thompson. 2005. "Tethered or Mobile? Use of Away Messages in Instant Messaging by American College Students." Pp. 393-412 in *Mobile Communication: Re-Negotiation of the Social Sphere*, edited by R. Ling and P. Pedersen. London, UK: Springer.
- Basch, Charles. 1987. "Focus Group Interview: An Underutilized Research Technique for Improving Theory and Practice in Health Education." *Health Education Behavior*. 14:411-48.
- Baudrillard, Jean. 1983. *Simulations*. New York: Semiotext(e)
- Baym, Nancy, Yan Zhang, and Mei-Chen Lin. 2004. "Social Interactions Across Media: Interpersonal Communication on the Internet, Telephone, and Face-to-Face." *New Media and Society*. 6:299-318.
- Berger, Peter. 1963. *Invitation to Sociology: A Humanistic Perspective*. New York, NY: Anchor.
- Best, Samuel and Brian Krueger. 2006. "Online Interactions and Social Capital: Distinguishing Between New and Existing." *Social Science Computer Review*. 24:395-410.

- Blumberg, Stephen and Julian Luke. 2009. "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July-December 2008." Atlanta, GA: Center for Disease Control.
- Blumer, Herbert. 1954. "What is Wrong with Social Theory?" *American Sociological Review*. 19:3-10.
- . 1966. "Sociological Implications of the Thought of George Herbert Mead." *American Journal of Sociology*. 71:535-44.
- Blumstein, Philip and Peter Kollock. 1988. "Personal Relationships." *Annual Review of Sociology*. 14:467-90.
- Boase, Jeffrey, John Horrigan, Barry Wellman, and Lee Rainie. 2006. "The Strength of Internet Ties." Washington, DC: PEW Internet and American Life Project. Retrieved October 5, 2007 (<http://www.Pewinternet.org/Reports/2006/The-Strength-of-Internet-Ties.aspx>).
- Bonebrake, Katie. 2002. "College Students' Internet Use, Relationship Formation, and Personality Correlates." *CyberPsychology and Behavior*. 5:551-57.
- Brown, Barry, Nicola Green, and Richard Harper. 2001. *Wireless World: Social and Interactive Aspects of the Mobile Age*. London. UK: Springer.
- Brown, B.A.T. and M. Perry. 2000. "Why Don't Telephones Have Off Switches? Understanding the Use of Everyday Technologies: A Research Note." *Interacting with Computers* 12:623-34.
- Bryant, J. Alison, Ashley Sanders-Jackson, and Amber M. K. Smallwood. 2006. "IMing, Text Messaging, and Adolescent Social Networks." *Journal of Computer-Mediated Communication*. 11:577-92.

- Butt, Sarah and James Phillips. 2008. "Personality and Self Reported Mobile Phone Use." *Computers in Human Behavior*. 24:346–60.
- Calder, Bobby. 1977. "Focus Groups and the Nature of Qualitative Marketing Research." *Journal of Marketing Research*. 14:353-64.
- Callero, Peter. 2003. "The Sociology of Self." *Annual Review of Sociology*. 29:115-33.
- Canary, Daniel J and Laura Stafford. 1994. "Maintaining Relationships through Strategic and Routine Interaction." Pp. 3-19 in *Communication and Relational Maintenance*, edited by D. Canary and L. Stafford. San Diego, CA: Academic Press.
- Carini, Robert, John Hayek, George Kuh, John Kennedy, and Judith Ouimet. 2003. "College Students Responses to Web and Paper Surveys: Does Mode Matter?" *Research in Higher Education*. 44:1-19.
- Caronia, Letizia and Andre H. Caron. 2004. "Constructing a Specific Culture: Young People's Use of the Mobile Phone as a Social Performance." *Convergence*. 10:28-61.
- Ceaser, Terry. 2005. "E-Mail: Connections, Contexts, and Another Space." *Fast Capitalism*. 1(1) Retrieved March 30, 2009 (<http://www.fastcapitalism.com/>).
- Central Intelligence Agency. 2009. *The World Factbook*. Washington, DC. Retrieved January 6, 2010 (<https://www.cia.gov/library/publications/the-world-factbook/index.html>).
- Charmaz, Kathy. 2003. "Grounded Theory: Objectivist and Constructivist Methods." Pp. 249-91 in *Strategies of Qualitative Inquiry*, edited by N. Denzin and Y. Lincoln. Thousand Oaks, CA: Sage.
- Choney, Suzanne. 2009. "Obama Gets to Keep His BlackBerry." *Associated Press*. Retrieved January 22, 2010 (<http://www.msnbc.msn.com/id/28780205/>).

- CITA: The Wireless Association. 2010. *Wireless Quick Facts, Mid-Year Figures*. Washington, DC. Retrieved January 8, 2010
(http://www.ctia.org/media/industry_info/index.cfm/AID/10323).
- Cole, Jeffery and John Robinson. 2002. "Internet Use and Sociability in the UCLA Data: A Simplified MCA Analysis." *IT and Society*. 1:202-218.
- Cooley, Charles. 1922. *Human Nature and the Social Order*. New York, NY: Scribner.
- Creswell, John and Vicki Plano-Clark. 2006. *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage.
- Dainton, Marianne and Daniel J. Canary. 2003. *Maintaining Relationships Through Communication Relational, Contextual, and Cultural Variations*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Denzin, Norman. 1966. "The Significant Others of a College Population." *Sociological Quarterly*. 7:298-310.
- DiMaggio, Paul, Eszter Hargittai, W. Russell Neuman, and John P. Robinson. 2001. "Social Implications of the Internet." *Annual Review of Sociology*. 27:307-336.
- Edwards, Tom. 2009. "Homes With Cell Phones Nearly Double in First Half of Decade." Washington, DC: U.S. Census Bureau. Retrieved December 11, 2009
(http://www.census.gov/PressRelease/www/releases/archives/income_wealth/014418.html).
- Ellison, Nicole, Charles Steinfield, and Cliff Lampe. (2007). "The Benefits of Facebook 'Friends': Social Capital and College Students' Use of Online Social Network Sites." *Journal of Computer-Mediated Communication*, 12(4).
(<http://jcmc.indiana.edu/vol12/issue4/ellison.html>).

- Epstein, Seymour. 1973. "The Self-Concept Revisited or a Theory of a Theory." *American Psychologist*. 28:404-14.
- Esbjornsson, Mattias and Alexandra Weilenmann. 2005. "Mobile Phone Talk in Context." Pp. 140-54, in *Modeling and Using Context: Proceedings from the 5th International and Interdisciplinary Conference CONTEXT*, edited by A. Dey, B. Kokinov, D. Leake, and R. Turner Berlin, Germany: Springer-Verlag.
- Fallows, Deborah. 2002. "Email at Work." Washington, DC: PEW Internet and American Life Project. Retrieved April 12, 2007 (<http://www.Pewinternet.org/Reports/2002/Email-at-work.aspx>).
- . 2006. "The Internet and Daily Life." Washington, DC: PEW Internet and American Life Project. Retrieved March 10, 2008 (http://www.Pewinternet.org/pdfs/PIP_Internet_and_Daily_Life.pdf).
- Flannigan, Andrew. 2005. "IM Online: Instant Messaging Use Among College Students." *Communication Research Report*. 22(3): 175-87.
- Fortunati, Leopoldina. 2005. "Mobile Telephone and the Presentation of Self." Pp. 203-218 in *Mobile Communications: Re-negotiation of the Social Sphere*, edited by R. Ling and P. Pedersen. Surrey, UK: Springer.
- Garcia-Montes, Jose M., Domingo Caballero-Munoz, and Marino Perez-Alvarez. 2006. "Changes in the Self Resulting from the Use of Mobile Phones." *Media, Culture, and Society*. 28:67-82.
- Gecas, Viktor. 1982. "The Self-Concept." *Annual Review of Sociology*. 8:1-33.

- Gecas, Victor and Peter Burke. 1995. "Self and Identity." Pp. 41-67 in *Sociological Perspectives on Social Psychology*, edited by K. Cook, G. Fine, and J. House. Boston, MA: Allyn and Bacon.
- Gergen, Kenneth. 1971. *The Concept of Self*. New York, NY: Holt, Rinehart, and Winston.
- . 2000. *The Saturated Self: Dilemmas of Identity in Contemporary Life*. New York, NY: Basic Books.
- . 2002. "The Challenge of the Absent Presence." in *Perpetual Contact Mobile Communication, Private Talk, Public Performance*, edited by J. E. Katz and M. Aakhus. Cambridge: Cambridge University Press.
- Gertz, Bill. 2009. "Exclusive: Obama to Soon Get Secure BlackBerry." *The Washington Times*. April 22. Retrieved December 2, 2009
(<http://www.washingtontimes.com/news/2009/apr/22/inside-ring-exclusive-obama-gets-his-blackberry/>).
- Geser, Hans. 2004. "Toward a Sociological Theory of the Mobile Phone." Pp. 1-47. Z
(http://socio.ch/mobile/t_geser1.pdf).
- Geser Hans. "Towards a Sociological Theory of the Mobile Phone." In *Sociology in Switzerland: Sociology of the Mobile Phone*. Online Publications, Release 3.0. Zurich, Switzerland: Soziologisches Institut der Universitat Zurich. Retrieved April 19, 2006
(http://socio.ch/mobile/t_geser1.htm).
- Glaser, Barney G. and Anselm L. Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York, New York: Aldine Publishing Company.
- Glotz, Peter, Stefan Bertschi, and Chris Locke. 2006. *Thumb Culture: The Meaning of Mobile Phones in Society*. Piscataway, NJ: Transaction.

- Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. Garden City, NY: Double Day and Company, Inc.
- . 1963. *Behavior in Public Places: Notes on the Social Organization of Gatherings*. New York, NY: Free Press.
- . 1964. "The Neglected Situation." *American Anthropologist*. 66:133-135.
- . 1981. *Forms of Talk*. Philadelphia, PN: University of Pennsylvania Press.
- Gordon, Chad. 1968. "Self-Conceptions: Configurations of Content." Pp. 29-60 in *The Self in Social Interaction: Volume 1: Classic and Contemporary Perspectives, vol. Volume 1: Classic and Contemporary Perspectives*, edited by C. Gordon and K. Gergen. New York, NY: Wiley.
- Gouldner, Alvin. 1960. "The Norm of Reciprocity: A Preliminary Statement." *American Sociological Review*. 25(2): 161-75.
- Green, Nicolas. 2008. "On The Move: Technology, Mobility, and the Mediation of Social Time and Space." *Information Society*. 18:281-92.
- Grohol, JM. 1999. "Too Much Time Online: Internet Addiction or Healthy Social Interactions." *CyberPsychology and Behavior*. 2:395-402.
- Haddon, Leslie. 1998. "The Experience of the Mobile Phone." Presented at the 14th World Congress of Sociology, July 26, Montreal, Quebec.
- Hampton, Keith, Lauren Sessions, Eun Ja Her, and Lee Rainie. 2009. "Social Isolation and New Technologies: How the Internet and Mobile Phones Impact Americans' Social Networks." Washington, DC: PEW Internet and American Life Project. Retrieved April 12, 2007 (<http://www.Pewinternet.org/Reports/2009/18--Social-Isolation-and-New-Technology.aspx>).

- Hancock, Jeffrey T., Jennifer Thom-Santelli, and Thompson Ritchie. 2004. "Deception and Design: The Impact of Communication Technology on Lying Behavior." Presented at CHI, April 29, Vienna, Austria: ACM.
- Hanley, Michael. 2009. "Factors Influencing Mobile Advertising Acceptance: Will Incentives Motivate College Students to Accept Mobile Advertisements?" Unpublished. Muncie, IN: Ball State University.
- Hanson, Jarice. 2007. *24/7: How Cell Phones and the Internet Change the Way We Live, Work, and Play*. Westport, CN: Praeger.
- Harari, Oren and David Beaty. 1990. "On the Folly of Relying Solely on a Questionnaire Methodology in Cross-Cultural Research." *Journal of Managerial Issues*. 2:267-81.
- Hardey, Michael. 2002. "Life Beyond the Screen: Embodiment and Identity through the Internet." *The Sociological Review*. 50(4): 570-85.
- Harvey, Mike. 2008. "BlackBerry-Using Barak Obama Set to Become First President 2.0." *The Times*. January 19. Retrieved December 2, 2009 (http://www.timesonline.co.uk/tol/news/world/us_and_americas/us_elections/article5542182.ece).
- Harwood, John. 2009. "CNBC Exclusive: CNBC Interview with President Barak Obama Today." *CNBC*. Retrieved December 1, 2009 (<http://www.cnbc.com/id/28545989>).
- Haythornthwaite, Caroline. 2001. "Introduction: The Internet in Everyday Life." *American Behavioral Scientist*. 45:363-82.
- Helgeson, Vicki. 2003. "Social Support and Quality of Life." *Quality of Life Research*. 12:25-31.

- Horrigan, John. 2009. "Wireless Internet Use." Washington, DC: Pew Internet and American Life Project. Retrieved January 12, 2010 (<http://www.pewinternet.org/Reports/2009/12-Wireless-Internet-Use.aspx>).
- . 2007. "A Typology of Information and Communication Technology Users." Washington, DC: Pew Internet and American Life Project. Retrieved May 4, 2008 (<http://www.pewinternet.org/Reports/2007/A-Typology-of-Information-and-Communication-Technology-Users.aspx>).
- Horstmanshof, Louise and Mary R. Power. 2005. "Mobile Phone, SMS, and Relationships." *Australian Journal of Communication*. 32:33-52.
- Hulme, Michael. 2004. "Exploring the Implications of Social Identity of the New Sociology of the Mobile Phone." Presented at *The Global and the Local in Mobile Communication: Places, Images, People, and Connections*. June 10. Budapest, Hungary.
- Humphreys, Lee. 2005. "Cell phones in Public: Social Interactions in a Wireless Era." *New Media and Society*. 7:810-33.
- Iachello, Giovanni, Ian Smith, Sunny Consolvo, Mike Chen, and Gregory Abowd. 2005. "Developing Privacy Guidelines for Social Location Disclosure: Applications and Services." Pp. 65-76 in *ACM International Conference Proceeding Series, vol. 93: Proceedings of the 2005 Symposium on Usable Privacy and Security*, edited by L. Cranor and M. Zurko. The Association for Computing Machinery: New York, NY
- Igarashi, Tasuku, Tadahiro Motoyoshi, Jiro Takai, and Toshikazu Yoshida. 2008 "No Mobile, No Life: Self-Perception and Text-Message Dependency among Japanese High School Students." *Computers in Human Behavior*. 24: 2311-24.

- Ijsselseijn, Wijnand. 2002. "Elements of a Multi-Level Theory of Presence: Phenomenology, Mental Processing, and Neural Correlates." Presented at the 5th International Workshop Presence. October 9. Porto, Portugal.
- Ishii, Kenichi. 2006. "Implications of Mobility: The Uses of Personal Communication Media in Everyday Life." *Journal of Communication*. 56:346-65.
- Ito, Mizucko. 2005 "Mobile Phones, Japanese Youth, and the Re-Placement of Social Contact." Pp.131-38 in *Mobile Communications: Re-negotiation of the Social Sphere*, edited by R. Ling and P. Pedersen. London, England: Springer.
- James, William. 1892. *Principles of Psychology*. New York, NY: Holt.
- Johnsen, Jan-Are. 2007. "Constraints on Message Size in Quasi-Synchronous Computer Mediated Communication: Effect on Self-Concept Accessibility." *Computers in Human Behavior*. 23:2269-84.
- Johnson, Amy, Michel Haigh, Jennifer Becker, Elizabeth Craig, and Shelley Wigley. 2008. "College Students' Use of Relational Management Strategies in Email in Long-Distance and Geographically Close Relationships." *Journal of Computer-Mediated Communication*.13:381-404.
- Jones, Steve. 2002. "The Internet Goes to College: How Students are Living in the Future with Today's Technology." Washington, DC: Pew Internet and American Life Project. Retrieved April 17, 2007 (<http://www.pewinternet.org/Reports/2002/The-Internet-Goes-to-College.aspx>).
- Jones, Sydney and Susannah Fox. 2009. "Generations Online in 2009." Washington, DC: Pew Internet and American Life Project. Retrieved January 4, 2010 (<http://www.pewinternet.org/Presentations/2009/Generations-Online-in-2009.aspx>).

- Jones, Steve, Camille Johnson-Yale, Francisco Perez, and Jessica Schuler. 2007. "The Internet Landscape in College." Pp. 39-51 in *Information and Communication Technologies: Considerations of Current Practice for Teachers and Teacher Educators, Yearbook 2007, vol. 2*, edited by P. Kelleher and R. Bogert. Boston, MA: Blackwell Publishing.
- Kim, Hyo, Gwang Jae Kim, Han Woo Park, and Ronald E Rice. 2007. "Configurations of Relationships in Different Media: FtF, Email, Instant Messenger, Mobile Phone, and SMS." *Journal of Computer-Mediated Communication*. 12:1183-207.
- Kraut, R, S Kiesler, B Boneva, J. Cummings, V. Helgeson, and A. Crawford. 2002. "Internet Paradox Revisited." *Journal of Social Issues*. 58:49-74.
- Kraut, Robert, Michael Patterson, Vicki Lundmark, Sara Kiesler, Tridas Mukopadyay, and William Scherlis. 1998. "Internet Paradox: A Social Technology that Reduces Social Involvement and Psychological Well-Being?" *American Psychologist*. 53:1017-1031.
- Krishnan, Murali. 2008. "Availability and Mobile Phone Interruptions: Examining the Role of Technology in Coordinating Mobile Calls." Thesis. Department of Interaction and System Design, Blekinge Institute of Technology, Ronneby, Sweden.
- Laurier, Eric. 2001. "Why People Say Where They Are During Mobile Phone Calls." *Environment and Planning D: Society and Space*. 19: 485–504.
- Layne, Benjamin, Joseph DeCristoforo, and Dixie McGinty. 1999. "Electronica Versus Traditional Student Ratings of Instruction." *Research in Higher Education*. 40:221-32.
- Ledbetter, Andrew. 2008 "Media use and relational closeness in long-term friendships: interpreting patterns of multimodality." *New Media Society*. 10(4): 547-64.
- Langbein, Laura and Claire Felbinger. 2006. *Public Program Evaluation: A Statistical Guide*. Armonk, NY: M.E. Sharpe.

- Lenhart, Amanda, Sydney Jones, and Alexandra Macgill. 2008. "Adults and Video Games."
Washington, DC: Pew Internet and American Life Project. Retrieved August 17, 2009
(<http://www.pewinternet.org/Reports/2008/Adults-and-Video-Games.aspx>).
- Lenhart, Amanda, Maya Simon, and Mike Graziano. 2001. "The Internet and Education:
Findings of the Pew Internet and American Life Project." Washington, DC: Pew Internet
and American Life Project. Retrieved February 8, 2006
(<http://www.pewinternet.org/Reports/2001/The-Internet-and-Education.aspx>).
- Leung, Louis and Ran Wei. 1998. "The Gratifications of Pager Use: Sociability, Information-
Seeking, Entertainment, Utility, and Fashion and Status." *Telematics and Informatics*.
15(4): 253-64.
- . 2000. "More Than Just Talk on the Move: Uses and Gratifications of the Cellular Phone."
Information and Mediated Communication Quarterly. 77:308-20.
- Licoppe, Christian. 2004 "'Connected' Presence: the Emergence of a New Repertoire for
Managing Social Relationships in a Changing Communication Technoscape."
Environment and Planning D: Society and Space. 22(1):135-56.
- Licoppe, Christian and Jean Heurтин. 2001. "Managing One's Availability to Telephone
Communication Through Mobile Phones: A French Case Study of the Development
Dynamics of Mobile Phone Use." *Personal and Ubiquitous Computing*. 5:99-108.
- . 2002. "France: Preserving the Image." Pp. 94-109 in *Perpetual Contact: Mobile
Communication, Private Talk, Public Performance*, edited by J. Katz and M. Aakhus.
New York, NY: Cambridge University Press.
- Ling, Rich. 2004. *The Mobile Connection: The Cell Phone's Impact on Society*. San Francisco,
CA: Morgan Kaufmann.

- Ling, Rich and Per E. Pedersen. 2005. *Mobile Communications: Re-negotiation of the Social Sphere*. London, England: Springer.
- Locke, Chris, Stefan Bertschi, and Peter Glotz. 2005. *Thumb Culture: The Meaning of Mobile Phones for Society*. Bielefeld: Transcript.
- Losh, Susan. 2004. "Gender, Education, and Occupational Digital Gaps 1983-2002." *Social Science Computer Review*. 22:152-66.
- Lundgren, David. 2004. "Social Feedback and Self-Appraisals: Current Status of Mead-Cooley Hypothesis." *Symbolic Interaction*. 27:267-86.
- Madden, Mary and Amanda Lenhart. 2006. "Online Dating." Washington, DC: Pew Internet and American Life Project. Retrieved March 8, 2007 (<http://www.pewinternet.org/Reports/2006/Online-Dating.aspx>).
- McCall, George J. and J. L. Simmons. 1966. *Identities and Interactions*. New York, NY: The Free Press.
- McCall, Michal. 1970. "Boundary Rules in Relationships and Encounters." Pp. 35-61 in *Social Relationships*, edited by G. McCall. Chicago, IL: Aldine Publishing Company.
- Mead, George H. 1934. *Mind, Self, and Society*. Chicago, Ill: University of Chicago Press.
- Meltzer, Bernard, John Petras, and Larry Reynolds. 1975. *Symbolic Interactionism: Genesis, Varieties, and Criticism*. Boston, MA: Routledge and Kegan Paul Ltd.
- Messinger, Sheldon, Harold Sampson, and Robert Towne. 1962. "Life as Theater: Some Notes on the Dramaturgic Approach to Social Reality." *Sociometry*. 25:98-110.
- Morgan, David. 1988. *Focus Groups as Qualitative Research*. Thousand Oaks, CA: Sage.
- . 1989. "Adjusting to Widowhood: Do Social Networks Really Make It Easier " *Gerontologist*. 29:101-7.

- . 1996. "Focus Groups." *Annual Review of Sociology*. 22:129-52.
- Murtagh, Ged. 2002. "'Seeing the 'Rules:': Preliminary Observations of Action, Interaction and Mobile Phone Use." Pp. 81–91 in *Wireless World: Social and Interactional Aspects of the Mobile Age*, edited by B. Brown, N. Green and R. Harper. London: Springer-Verlag
- Nardi, Bonnie, Steve Wittaker, and Erin Bradner. 2000. "Interaction and Outeraction: Instant Messaging in Action." Pp. 79-88 presented at ACM 2000 Conference on Computer Supported Cooperation. Philadelphia, PA.
- Nastri, Jacqueline, Jorge Pena, and Jeffrey Hancock. 2006. "The Construction of Away Messages: A Speech Act Analysis." *Journal of Computer-Mediated Communication*. 11:1025-45.
- National Opinion Research Center. 2008. *General Social Surveys, 1972-2008 Cumulative Codebook*. Chicago, Ill: National Data Program for the Sciences.
- Neuman, Lawrence. 2003. *Social Research Methods: Qualitative and Quantitative Approaches*. Boston, MA: Pearson Education.
- Neustadt, Alan and John P. Robinson. 2002. "Social Contact Differences Between Internet Users and Nonusers in the General Social Survey." *IT and Society*. 1:73-102.
- Newburger, Eric. 1997. *Computer Use in the United States*. Washington DC: U.S. Census Bureau.
- Nie, Norman. 2001. "Sociability, Interpersonal Relations, and the Internet: Reconciling Conflicting Findings." *American Behavioral Scientist*. 45:420-35.
- Nie, Norman and Lutz Erbring. 2002. "Internet and Society: A Preliminary Report." *IT and Society*. 1:275-83.

- Nippert-Eng, Christena. 1996. *Home and Work: Negotiating Boundaries through Everyday Life*. Chicago, IL: University of Chicago Press.
- O'Sullivan, Patrick. 2000. "What You Don't Know Won't Hurt Me: Impression Management Functions of Communication Channels in Relationships." *Human Communication Research*. 26:403-31.
- Oblinger, Diana. 2004. "The Next Generation of Educational Engagement " *Journal of Interactive Media in Education*. 8:1-18.
- Odell, Patricia, Kathleen Korgen, Phyllis Schumacher, and Michael DeLucchi. 2000. "Internet Use Among Female and Male College Students." *CyberPsychology and Behavior*. 3:855-62.
- Onwuegbuzie, Anthony and Burke Johnson. 2006. "The Validity Issue in Mixed Research." *Research in the Schools*. 13:48-63.
- Owens, Timothy. 2006. "Self and Identity." Pp. 205-32 in *Handbook of Social Psychology*, vol. 3, edited by J. Delamater. New York, NY: Springer.
- Palen, Leysia, Marilyn Salzman, and Ed Youngs. 2000. "Going Wireless: Behavior and Practice of New Mobile Phone Users." Pp. 201-10 in *Computer Supported Cooperative Work: Proceedings of the 2000 ACM Conference on Computer Supported Cooperative Work*, edited by W. Kellogg and S. Whittaker. Philadelphia, Pennsylvania: Association for Computing Machinery.
- Park, Woong Ki. 2005. "Mobile Phone Addiction." Pp. 253-72 in *Mobile Communications: Renegotiation of the Social Sphere* edited by R. Ling and P. Pedersen. London, England: Springer.

- Persson, Anders. 2001. "Intimacy Among Strangers: On Mobile Telephones Calls in Public Places." *Journal of Mundane Behavior*. 2(3). Retrieved June 23, 2009 (<http://www.mundanebehavior.org/issues/v2n3/person.html>).
- Pertierra, Raul. 2005. "Mobile Phones, Identity and Discursive Intimacy." *Human Technology*. 1:23-44.
- Pew Internet and American Life Project. 2006. "Pew Internet and American Life Project, Associated Press, and AOL Cell Phone Survey, March 8-28." Washington, DC: Pew Research Center. Retrieved April 20, 2008. (<http://www.pewinternet.org/Shared-Content/Data-Sets/2006/March-2006--Cell-Phones.aspx>).
- Plant, Sadie. 2002. "On the Mobile: The Effects of Mobile Telephones on Social and Individual Life." (http://www.motorola.com/mot/doc/0/234_MotDoc.pdf).
- Podesta, John. 2009. "Obama's Link to America: His BlackBerry." *Los Angeles Times*. January 20. Retrieved January 2, 2010 (<http://articles.latimes.com/2009/jan/20/opinion/oe-podesta20>).
- Princeton Survey Research Associates International. 2006. "Annual Gadgets Survey." Washington, DC: Pew Internet and American Life Project. Retrieved April 20, 2007 (<http://www.pewinternet.org/Shared-Content/Data-Sets/2006/FebruaryApril-2006-Gadgets-and-Internet-Typology.aspx>).
- Rabby, Michael. 2007. "Relational Maintenance and the Influence of Commitment in Online and Offline Relationships." *Communication Studies*. 58(3):315-37
- Ramirez, Artemio and Kathy Broneck. 2009. "IM Me': Instant Messaging as Relational Maintenance and Everyday Communication." *Journal of Social and Personal Relationships*. 26 291-314.

- Rainie, Lee. 2010. "Internet, Broadband, and Cell Phone Statistics." Washington, DC: Pew Internet and American Life Project. Retrieved March 10, 2007.
<http://www.pewinternet.org/Reports/2010/Internet-broadband-and-cell-phone-statistics.aspx>).
- Rainie, Lee and Scott Keeter. 2006. "Americans and Their Cell Phones." Washington, DC: Pew Internet and American Life Project. Retrieved March 10, 2007
(<http://www.pewinternet.org/Reports/2006/Americans-and-their-cell-phones.aspx>).
- Rettie, Ruth. 2005. "Presence and Embodiment in Mobile Phone Communication." *PsychNology*. 3:16-34.
- . 2007. "Texters not Talkers: Phone Call Aversion among Mobile Phone Users." *PsychNology Journal* 5:33-57.
- Rheingold, Howard. 1993. *The Virtual Community: Homesteading on the Electronic Frontier*. Cambridge, MA: MIT Press.
- Richardson, Ingrid and Carly Harper. 2002. "Corporeal Virtuality: The Impossibility of a Fleshless Ontology." *Body, Space, and Technology*. 4:1-24.
- Rosenberg, Morris. 1989. "Self-Concept Research: A Historical Overview." *Social Forces*. 68:34-44.
- Salant, Priscilla and Don Dillman. 1994. *How to Conduct Your Own Survey*. Hoboken, NJ: Wiley.
- Salmon, Gilly. 2002. "Mirror, Mirror, on My Screen... Exploring Online Reflections." *British Journal of Educational Technology*. 33:379-91.

- Sandstrom, Kent, Daniel Martin, and Gary Fine. 2009. *Symbols, Selves, and Social Reality: A Symbolic Interactionist Approach to Social Psychology and Sociology*, 3d ed. Cary, NC: Oxford University Press.
- Schau, Hope J. and Mary C. Gilly. 2003. "We Are What We Post? Self-Presentation in Personal Web Space." *Journal of Consumer Research*. 30:385-404.
- Schutz, Alfred. 1967. *The Phenomenology of the Social World*. Chicago, Ill: Northwestern University Press.
- Schutz, Alfred and Thomas Luckmann. 1973. *The Structures of the Life-World*. Evanston, IL: Northwestern University Press.
- Shiu, Eulynn and Amanda Lenhart. 2004. "How Americans Use Instant Messaging." Washington, DC: Pew Internet and American Life Project. Retrieved March 10, 2007 (<http://www.pewinternet.org/Reports/2004/How-Americans-Use-Instant-Messaging.aspx>).
- Shrauger, Sidney and Thomas Choeneman. 1979. "Symbolic Interactionist View of Self-Concept: Through the Looking-Glass Darkly." *Psychological Bulletin*. 86:549-73.
- Smith, Anita and Kipling D. Williams. 2004. "R U There? Ostracism by Cell Phone Text Messages." *Group Dynamics: Theory, Research, and Practice*. 8:291-301.
- Smith, Justin. 2008. "Facebook Chat Now Open For Everyone." Inside Network, Inc. Retrieved March 1, 2010 (www.insidefacebook.com/2008/04/23/facebook-chat-now-open-for-everyone/).
- . 2009. "Facebook Chat: Latest Stats and What's Coming Next." Inside Network, Inc. Retrieved March 1, 2010 (www.insidefacebook.com/2009/02/23/facebook-chat-latest-stats-whats-coming-next/).

- Spagnolli, Anna and Luciano Gamberini. 2007. "Interacting via SMS: Practices of Social Closeness and Reciprocation." *British Journal of Social Psychology*. 46:343-64.
- Stafford, Laura and Daniel Canary. 1991. "Maintenance Strategies and Romantic Relationship Type, Gender and Relational Characteristics " *Journal of Social and Personal Relationships*. 8:217-42.
- Stafford, Laura, Susan Kline, and John Dimmick 1999. "Home Email: Relational Maintenance and Gratification Opportunities." *Journal of Broadcasting and Electronic Media*. 43(4): 659-69.
- Stets, Jan and Peter Burke. 2005. "Sociological Approach to Self and Identity " Pp. 128-52 in *Handbook of Self and Identity*, edited by M. Leary and J. Tangney. New York, New York: Guilford Press.
- Stryker, Sheldon. 1980. *Symbolic Interactionism: A Social Structural Perspective*. Upper Saddle River, New Jersey: Pearson Education.
- Student Monitor. 2002. "Computing and the Internet." Ridgewood, NJ: Student Monitor, LLC. Retrieved February 6, 2006 (<http://www.studentmonitor.com/computing.php>).
- Taylor, Alex. 2002. "Phone Talk." Pp. 149-166 in *Mobile Communications: Re-negotiation of the Social Sphere*, edited by R. Ling and P. Pedersen. Surrey, UK: Springer.
- Taylor, Ales and Richard Harper. 2001. "“Talking Activity”: Young People and Mobile Phones,” presented at CHI, March 31, Seattle, WA: ACM.
- . 2003. "The Gift of the Gab?: A Design Oriented Sociology of Young People's Use of Mobiles." *Computer Supported Cooperative Work*. 12:267-296.

- Terenzini, Patrick, Laura Rendon, Lee Upcraft, Susan Millar, Kevin Allison, Patricia Gregg, and Romero Jalomo. 1994. "The Transition to College: Diverse Students, Diverse Stories." *Research in Higher Education*. 35:57-73.
- Thurlow, Crispin, Alice Tomic, and Laura Lengel. 2004. *Computer Mediated Communication: Social Interaction and the Internet*. Thousand Oaks, Calif.: SAGE.
- Tillema, Taede, Martin Dijst, and Tim Schwanen. 2007. "Electronica and Face-to-Face Communication in Maintaining Social Relationships." Pp. 1-20 in *Bijdrage voor het Colloquium Vervoersplanologisch Speurwerk*. Antwerp, Belgium.
- Townsend, Anthony. 2000. "Life in the Real-Time City: Mobile Telephones and Urban Metabolism." *Journal of Urban Technology*. 7:85-104.
- Trice, Ashton. 2002. "First Semester College Students' Email to Parents: I. Frequency and Content Related to Parenting Style." *College Student Journal*. 36:327.
- Turkle, Sherry. 1995. *Life on the Screen: Identity in the Age of the Internet*. New York, NY: Simon and Schuster.
- . 2008. "Always-On/Always-On-You: The Tethered Self." Pp. 121-138 in *The Handbook of Mobile Communications Studies*, edited by J. Katz. Cambridge, MA: MIT Press.
- Turner, Ralph H. 1976. "The Real Self: From Institution to Impulse." *American Journal of Sociology*. 81:989-1016.
- Turner, Victor. 1979. "Frame, Flow, and Reflection: Ritual and Drama as Public Liminality." *Japanese Journal of Religious Studies*. 6:465-99.
- U.S. Census Bureau. 2010. "Table 1128: Adult Computer and Adult Internet Users by Selected Characteristics: 1995 to 2006." *The 2008 Statistical Abstract: The National Data Bank*.

- Washington, D.C.: U.S. Census Bureau. Retrieved February 4, 2010
(<http://www.census.gov/compendia/statab/tables/09s1121.xls>).
- Walsh, Shari and Katherine White. 2007. "Me, My Mobile, and I: The Role of Self- and Prototypical Identity Influences in the Prediction of Mobile Phone Behavior." *Journal of Applied Social Psychology*. 37(10):2405–34.
- Walther, Joseph B. 2007. "Selective Self-Presentation in Computer-Mediated Communication: Hyperpersonal Dimensions of Technology, Language, and Cognition." *Computers in Human Behavior*. 23:2538-57.
- Walther, Joseph B. and Kyle D'Addario. 2001. "The Impacts of Emoticons on Message Interpretation in Computer-Mediated Communication." *Social Science Computer Review*. 19:324-47.
- Walther, Joseph B., Tracy Loh, and Laura Granka. 2005. "Let Me Count the Ways: The Interchange of Verbal and Nonverbal Cues in Computer-Mediated and Face-to-Face Affinity." *Journal of Language and Social Psychology*. 24:36-65.
- Waskul, Dennis and Mark Douglass. 1997. "Cyberself: The Emergence of Self in On-line Chat." *The Information Society: An International Journal*. 13:375-97.
- Wasserman, Ira and Marie Richmond-Abbott. 2005. "Gender and the Internet: Causes of Variation in Access, Level, and Scope of Use." *Social Science Quarterly*. 86:252-70.
- Wei, Ran and Ven-Hwei Lo. 2006. "Staying Connected While on the Move: Cell Phone Use and Social Connectedness." *New Media and Society*. 8:53-72.
- Weilenmann, Alexandra. 2003. "'I Can't Talk Now, I'm in a Fitting Room': Formulating Availability and Location in Mobile Phone Conversations." *Environment and Planning*. 35:1589-605.

- Wellman, Barry. 2001. "Physical Place and Cyberplace: The Rise of Personalized Networking." *International Journal of Urban and Regional Research*. 25:227-52.
- Wellman, Barry, Anabel Quan Haase, James Witte, and Keith Hampton. 2001. "Does the Internet Increase, Decrease, or Supplement Social Capital?: Social Networks, Participation, and Community Commitment." *American Behavioral Scientist*. 45(3): 436-55.
- Whittaker, Steven. 2002. "Theories and Methods in Mediated Communication." Pp. 243-86 in *The Handbook of Discourse Processes*, edited by A. Graesser, M. Gernsbacher, and S. Goldman. Mahwah, NJ: Erlbaum.
- Williams, Kipling, Christopher Cheung, and Wilma Choi. 2000. "Cyberostracism: Effects of Being Ignored Over the Internet." *Journal of Personality and Social Psychology*. 79:748-62.
- Wolff, Brent, John Knodel, and Werasit Sittitrai. 1993. "Focus Groups and Surveys as Complementary Research Methods: A Case Example." Pp. 118-36 in *Focus Groups: Advancing the State of the Art*, edited by D. Morgan. Newbury Park, CA: Sage.
- Wright, Kevin. 2004. "On-Line Relational Maintenance Strategies and Perceptions of Partners within Exclusively Internet-Based and Primarily Internet-Based Relationships." *Communication Studies*. 55:239-53.
- Young, Kimberly. 2008. "Internet Addiction: The Emergence of a New Clinical Disorder." *CyberPsychology and Behavior*. 1(3): 237-44.
- Zhao, Shanyang. 2002. "Reconceptualizing Presence: Differentiating Between Mode of Presence and Sense of Presence." Presented at the 5th International Workshop Presence. October 9. Porto, Portugal.

- . 2003. "Toward a Taxonomy of Copresence." *Presence*. 12:445-55.
- . 2005. "The Digital Self: Through the Looking Glass of Telecopresent Others." *Symbolic Interaction*. 28:387-405.
- . 2006. "Do Internet Users Have More Social Ties? A Call for Differentiated Analyses of Internet Use." *Journal of Computer-Mediated Communication*. 11:844-62.
- Wynn, Elyn and James Katz. 1997. "Hyperbole over Cyberspace: Self-Presentation and Social Boundaries in Internet Home Pages and Discourse." *The Information Society*.13:297-327.
- Zurher, Louis. 1977. *The Mutable Self: A Self-Concept for Social Change*. Beverly Hills, CA: Sage.

APPENDICES

Appendix A: List of Terms

Clandestine Boundary Work: Purposeful and intentional tactics taken to avoid violating the relational boundary rules and the norm of reciprocity. It involves secretive, subtle avoidance tactics for managing the fluidity of boundaries between physical and virtual encounters and a means of negotiating the norms of obligatory reciprocity therein.

Hyper-Accessibility: An internally validated sense of perpetual copresence via EvEMC even in the absence of digital or physical encounters.

Interstitial Byplay: A form of relational multi-tasking; the simultaneous or sequential management of a copresent encounter and one or more digitally copresent encounter(s).

Interstitial Copresence: A sense of perpetual copresence socially and cognitively within and between the physical space and digital social space.

Interstitial Self: A relational self embedded in the everyday experiences of interstitial copresence. It consists of an awareness of constant interstitial copresence and sense of negotiating relationships within physical and virtual encounters simultaneously or sequentially. A self embedded within interstitial copresence. It is a reflexive, dialectic process involving observation, interpretation, internal organization, and emotional and behavioral reaction embedded within interstitial copresence. As such, the interstitial self

is never completely negotiated within the physical or the virtual social setting; rather, the interstitial self is negotiated sequentially or simultaneously within both settings.

Interstitial Side Involvement: A form of relational multi-tasking; engaging in an activity or activities in a physical environment while maintaining a telecopresent main involvement.

Appendix B: Descriptive Statistics of Dependent, Independent, and Control Variables

Table B-1 Descriptive Statistics: Dependent Variables (n=617)

	Mean	SD	Min	Max	^a
Strength of Sense of Hyper-Accessibility (mean index):	2.41	.98	0	3	.66
Please describe your level of agreement with the following statements:					
(1) The Internet and my cell phone allow me immediate access to others anywhere anytime.	2.63	.56	0	3	--
(2) I feel like I am always accessible to anyone no matter where I am.	2.43	.78	.38	4	--
Strength of the Sense of Experiencing Interstitial Byplay (mean index):	1.82	.85	0	4	.81
How often do you:					
(1) Send or read text messages, instant messages, or emails while also talking to someone else face-to-face?	2.18	1.19	0	4	--
(2) Exchange text messages, instant messages, or emails while talking to the same person face-to-face?	.85	1.10	0	4	--
(3) Write or reply to emails while talking on your cell phone or text messaging?	1.83	1.26	0	4	--
(4) Call or answer a cell phone call during a face-to-face conversation?	1.74	.99	0	4	--
(5) Exchange instant messages or text messages with more than one person at a time?	2.71	1.19	0	4	--
(6) Write or reply to an email from one person while exchanging instant messages with another person?	1.64	1.38	0	4	--
Strength of the Sense of Experiencing Interstitial Side Involvement (mean index):	2.44	.79	.14	4	.76
How often do you:					
(1) Talk on your cell phone or send text messages while in a crowd of people?	2.44	.98	0	4	--
(2) Talk on your cell phone or send text messages while you're driving?	2.54	1.09	0	4	--
(3) Talk on your cell phone or type text messages while you're at a checkout counter?	1.70	1.21	0	4	--
(4) Call, text, instant message, or email a family member on your way to class?	3.07	.98	0	4	--
(5) Send or read text messages, instant messages, or emails during a class lecture, meeting, or presentation you're attending?	2.35	1.31	0	4	--
(6) Do other things online while instant messaging (e.g., play games, browse the Internet, or look up information)?	2.13	1.50	0	4	--
(7) Do other things offline while instant messaging (e.g., watch TV or study)?	2.19	1.48	0	4	--
Use of Clandestine Boundary Work Tactics (mean index):					
How often have you...	1.19	.76	0	3.99	.87
(1) Read an email from a friend, family member, or romantic partner but told them that you never received it or that you haven't checked your email lately because you didn't feel like replying?	1.24	1.03	0	4	--
(2) Received an email from a friend, family member, or romantic partner and tell them that you replied but you don't know why they didn't receive it?	.90	1.04	0	4	--
(3) Purposely avoided a friend's, family member's, or romantic partner's phone call and blamed it on your cell phone battery dying?	1.09	1.05	0	4	--
(4) Purposely avoided a friend's, family member's, or romantic partner's phone call, but told them later that you didn't have cell phone service?	1.02	1.03	0	4	--
(5) Purposely avoided a friend's, family member's, or romantic partner's phone call but told them that you didn't hear the phone because the phone was on vibrate or the ringer was on silent?	1.59	1.13	0	4	--
(6) Purposely avoided a friend's, family member's, or romantic partner's text messages and told them you didn't realize you had received the text message?	1.21	1.07	0	4	--
(7) Set your instant messenger to 'appear offline' because you don't want certain friends or a romantic partner to see that you're online and possibly send you an instant message?	1.01	1.19	0	4	--
(8) Set an away message on your instant messenger just so you don't have to acknowledge anyone who sends you an instant message?	.90	1.13	0	4	--
(9) Purposely ignored a friend's, family member's, or romantic partner's phone call but sent them a text message to let them know you'll call them later?	1.77	1.15	0	4	--
Disruptiveness of EvEMC for Self-Presentation (additive index):					
Have you ever...	4.10	1.90	0	8	.64
(1) Accidentally sent a personal text message, instant message, or email to the wrong person?	.85	--	0	1	--
(2) Received an unexpected phone call that disrupted a class or meeting?	.70	--	0	1	--
(3) Had an unexpected cell phone call, text message, instant message, or email result in personal embarrassment?	.43	--	0	1	--
(4) Had an unexpected cell phone call, text message, instant message, or email result in an argument with a friend or family member?	.50	--	0	1	--
(5) Had a cell phone call, text message, instant message, or email get you in trouble?	.46	--	0	1	--
(6) Had a cell phone call, text message, instant message, or email affect the way people perceive you?	.26	--	0	1	--
(7) Done something absentminded in public because you were involved in a cell phone conversation or typing or reading a text message, instant message, or email?	.71	--	0	1	--
(8) Drawn criticism or dirty looks because of the way you use your cell phone in a public setting?	.17	--	0	1	--

Table B-1 (Continued)

	Mean	SD	Min	Max	^a
Identity Support via EvEMC (mean index):	2.00	.91	0	4	.92
How often do you call, text, instant message, or email close friends or family...					
(1) To elicit character support (e.g., "You have a great personality," "No, nobody thinks you're mean or weird")?	1.71	1.21	0	4	--
(2) For reassurance of your abilities?	1.49	1.09	0	4	--
(3) To talk about an embarrassing situation (e.g., "I can't believe I lost my train of thought during my presentation")?	2.24	1.07	0	4	--
(4) For support after you said or did something you regretted (e.g., "I got upset, told him off, and just left")?	2.10	1.11	0	4	--
(5) To get their opinion about how others perceive you (e.g., "did everybody think I was a jerk for just abruptly leaving last night")?	1.81	1.22	0	4	--
(6) Just to hear a familiar voice?	2.49	1.16	0	4	--
(7) To feel better about yourself?	1.74	1.20	0	4	--
(8) Just to communicate with someone who knows the 'real you'?	2.51	1.23	0	4	--
(9) To get their perspective about the way you acted or something you did in a situation?	2.27	1.17	0	4	--
(10) To remind you of who you really are?	1.60	1.27	0	4	--
Effects of EvEMC on Self-Appraisal (mean index):	1.56	.82	0	3	.87
Please tell me how well each of the following statements describes you personally.					
(1) I feel good about who I am as a person when friends and family call, text message, instant message, or email me regularly, but feel bad about myself when they stop calling, texting, instant messaging, or emailing as often.	1.48	.94	0	3	--
(2) I get lonely when no one calls, sends text messages, instant messages, or emails for awhile.	1.55	.98	0	3	--
(3) I eventually feel rejected when friends do not respond to my phone calls, text messages, instant messages, or emails for awhile.	1.59	.99	0	3	--
(4) I feel excluded when my friends call, text, instant message, or email each other but not me.	1.61	.97	0	3	--
Satisfaction with EvEMC in Personal Relationships (mean index):	1.34	.67	0	3	.78
Please tell me how well each of the following statements describes you personally.					
(1) I feel my relationships with my family and friends are stronger now because I own a cell phone.	2.02	.86	0	3	--
(2) Text messaging has strengthened my relationships with my family and friends significantly.	1.65	1.01	0	3	--
(3) Instant messaging has strengthened my relationships with my family and friends.	.82	.97	0	3	--
(4) I feel my relationships with my family and friends are stronger now because of email.	1.00	.95	0	3	--
(5) Because of email I can keep in touch with my family without having to spend as much time talking to them.	1.25	.95	0	3	--
(6) Because of text messaging I can keep in touch with my family without having to spend as much time talking to them.	1.29	1.00	0	3	--

Note: The standard deviations are only provided for non-dummy variables.

Table B-2 Descriptive Statistics: Independent Variables (n=617)

	Mean	SD	Min	Max	^a
Heavy Use of EvEMC:	.67	--	0	1	--
How often do you use...					
(1) A cell phone?	3.78	.52	1	4	--
(2) Text messaging?	3.49	1.00	0	4	--
(3) Email?	3.11	1.16	0	4	--
(4) Instant messaging? (e.g. AIM, Yahoo! Messenger, Goggle Talk, MySpace IM)	1.48	1.32	0	4	--
Attached to EvEMC:	.15	--	0	1	--
How hard would it be to give up:					
(1) Talking on your cell phone?	2.32	.86	0	3	--
(2) Sending/receiving text messages?	2.19	1.04	0	3	--
(3) ending/receiving emails?	1.87	.94	0	3	--
(4) using your instant messenger?	.46	.81	0	3	--
Relationship Maintenance via EvEMC:	2.71	.83	.25	5.5	.74
Thinking just about your 2 or 3...					
a. ...closest friends <u>who do not live in the same general area as you while you're attending college</u> , how often do you...					
(1) Talk to them on your cell phone?	3.14	1.36	0	6	--
(2) Exchange text messages with them?	3.39	1.74	0	6	--
(3) Exchange emails with them?	1.36	1.55	0	6	--
(4) Exchange instant messages with them?	1.51	1.83	0	6	--
b. ...closest friends <u>who live in the same general area as you while you're attending college</u> , how often do you...					--
(1) Talk to them on your cell phone?	4.39	1.34	0	6	--
(2) Exchange text messages with them?	4.64	1.68	0	6	--
(3) Exchange emails with them?	1.61	1.76	0	6	--
(4) Exchange instant messages with them?	1.51	1.97	0	6	--
c. ...closest <u>family members</u> , how often do you...					--
(1) Talk to them on your cell phone?	4.43	1.09	0	6	--
(2) Exchange text messages with them?	3.42	1.93	0	6	--
(3) Exchange emails with them?	2.43	1.63	0	6	--
(4) Exchange instant messages with them?	.66	1.37	0	6	--
Interstitial Copresence (mean indices):					
a. Sense of Experiencing:	2.18	.76	.21	4	.89
(1) <i>Interstitial Byplay</i> (6 items) ^a	--	--	--	--	--
(2) <i>Interstitial Side Involvement</i> (7 items) ^a	--	--	--	--	--
b. Sense of Hyper-Accessibility ^b	2.41	.98	.14	4	.66
Relationship Strain (mean index):					
a. Strength of Sense of Demand from Personal Relationships					
Please tell me how well each of the following statements describe you personally.	.95	.55	0	2.9	.83
(1) I feel that I'm constantly being pulled in multiple directions by friends and family who demand my attention.	1.30	.91	0	3	--
(2) I stress out when I receive numerous phone calls, text messages, instant messages, and/or emails but cannot respond to them immediately.	1.16	.96	0	3	--
(3) Life would be so much less stressful if I didn't have a cell phone.	.82	.91	0	3	--
(4) Life would be much less stressful if I didn't use email.	.59	.75	0	3	--
(5) Keeping up with all of the phone calls, text messages, instant messages, and emails I receive feels like a fulltime job.	.60	.77	0	3	--
(6) I feel like my whole life revolves around my cell phone.	.84	.94	0	3	--
(7) I often feel like I have to answer my cell phone even if it interrupts a meeting or a meal.	.65	.85	0	3	--
(8) Cell phones, text messaging, instant messaging, and email have added to the stress in my family.	.65	.84	0	3	--
(9) People get upset with me when I don't answer their phone calls, text messages, instant messages, or emails.	1.73	.87	0	3	--
(10) I feel like too many people try to get in touch with me because they know I have my cell phone on me.	1.15	.92	0	3	--
b. Strength of a Sense of Inadequately Managing Personal Relationships	.98	.73	0	3	.89
(1) I don't feel I can provide my friends and family the attention I think they deserve.	.82	.88	0	3	--
(2) I can't keep up with all of the demands of my friends and family.	.82	.85	0	3	--
(3) I can't feel I can meet the expectations people have of me.	.92	.91	0	3	--
(4) In trying to meet the expectations of one relationship, I feel like I let down other relationships.	1.19	.97	0	3	--
(5) I feel like my friends and family think I'm avoiding them when I'm unable to answer their phone calls, instant messages, text messages, or emails.	1.10	.94	0	3	--
(6) I feel like I alienate certain friends and family because I just can't find time to respond to their emails, phone calls, text messages, and instant messages.	1.00	.91	0	3	--

Note: The standard deviations are only provided for non-dummy variables.

^aThe descriptive statistics for these items are presented in Table A-1

^bReplication of the dependent variable "perceived accessibility," see Table A-1

Table B-3 Descriptive Statistics: Control Variables (n=617)

	Mean	SD	Min	Max
Male:	.37	--	0	1
Non-White:	.13	--	0	1
Race	4.76	.76	1	5
Age (in years):	20.45	2.12	19	29
Age (birth year)	1987.55	2.12	1979	1990
Relationship Status: Single (Constant Term)	--	--	--	--
(1) Dating Someone	.15	--	0	1
(2) In Serious Relationship (Not Engaged/Married)	.29	--	0	1
(3) Engaged/Married	.05	--	0	1
Relationship Status (before recode):	.88	1.00	0	3

Note: The standard deviations are only provided for non-dummy variables.

Appendix C: Tables of OLS Regression Coefficients, Predicted Values

Table C-1 Predicted Values for the Average Sense of Hyper-Accessibility

	b_0
Strong Sense of Experiencing Interstitial Copresence	1.91***
<i>Minimum = 2</i>	(.258)
<i>Maximum = 4</i>	2.52***
	(.268)

Note: Standard errors are in parentheses.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table C-2 Predicted Values for the Average Sense of Experiencing Interstitial Byplay

	b_0
Heavy Use of EvEMC = 1	1.21***
	(.322)
Attached to EvEMC = 1	1.21***
	(.361)
Strong Sense of Hyper-Accessibility:	
<i>Minimum = 1.5</i>	1.59***
	(.311)
<i>Maximum = 3.0</i>	2.14***
	(.315)
Use of EvEMC for Relationship Maintenance:	
<i>Moderate Use = 2.5</i>	1.96***
	(.303)
<i>Heavy Use = 3.5</i>	2.33***
	(.303)

Note: Standard errors are in parentheses.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table C-3 Predicted Values for the Average Sense of Experiencing Interstitial Side Involvement

	b_0
Heavy Use of EvEMC = 1	1.64***
	(.314)
Attached to EvEMC = 1	1.71***
	(.327)
Strong Sense of Hyper-Accessibility:	
<i>Minimum = 1.5</i>	2.02***
	(.303)
<i>Maximum = 3.0</i>	2.55***
	(.306)
Use of EvEMC for Relationship Maintenance:	
<i>Light Use = 1.5</i>	1.99***
	(.300)
<i>Moderate Use = 2.5</i>	2.31***
	(.295)
<i>Heavy Use = 3.5</i>	2.63***
	(.295)

Note: Standard errors are in parentheses.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table C-4 Predicted Values for the Average Use of Clandestine Boundary Work Tactics

	<i>b₀</i>
Strong Sense of Experiencing Interstitial Copresence:	
<i>Minimum</i> = 2.0	.500 (.318)
<i>Maximum</i> = 4.0	1.36*** (.339)
Heavy Use of EvEMC for Relationship Maintenance:	
<i>Minimum</i> = 3.5	.83*** (.317)
<i>Maximum</i> = 5.5	1.07*** (.339)

Note: Standard errors are in parentheses.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table C-5 Predicted Values for the Disruptiveness of EvEMC for Self-Presentations

	<i>b₀</i>
Strong Sense of Experiencing Interstitial Copresence:	
<i>Minimum</i> = 2.0	1.71* (.817)
<i>Maximum</i> = 4.0	3.11*** (.879)
Heavy Use of Clandestine Boundary Work Tactics	
<i>Minimum</i> = 2.0	1.61 (.860)
<i>Maximum</i> = 3.9	2.83** (.935)

Note: Standard errors are in parentheses.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table C-6 Predicted Values for the Effect of EvEMC on Self-Appraisal

	<i>b₀</i>
Strong Sense of Hyper-Accessibility:	
<i>Minimum</i> = 1.5	1.42*** (.368)
<i>Maximum</i> = 3.0	1.68*** (.380)
Strong Sense of Experiencing Interstitial Copresence:	
<i>Minimum</i> = 2.0	1.61*** (.371)
<i>Maximum</i> = 4.0	2.07*** (.395)
Use of EvEMC for Relationship Maintenance:	
<i>Moderate Use</i> = 2.5	1.10** (.365)
<i>Heavy Use</i> = 3.5	1.08** (.374)

Note: Standard errors are in parentheses.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table C-7 Predicted Values for the Average Level of Satisfaction of EvEMC in Personal Relationships

	<i>b₀</i>
Strong Sense of Hyper-Accessibility:	
<i>Minimum, 1.5</i>	.191 (.264)
<i>Maximum, 3.0</i>	.468 (.272)
Strong Sense of Experiencing Interstitial Copresence:	
<i>Minimum, 2</i>	.265 (.267)
<i>Maximum, 4</i>	.616** (.285)
Heavy Use of EvEMC for Relationship Maintenance:	
<i>Minimum, 3.5</i>	.541* (.267)
<i>Maximum, 5.5</i>	.900** (.286)

Note: Standard errors are in parentheses.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table C-8 Predicted Values for the Effect of EvEMC on Self-Appraisal

Mean Index Score	<i>b₀</i>
Heavy Use of Clandestine Boundary Work Tactics	
<i>Minimum, 2</i>	1.69*** (.384)
<i>Maximum, 3.9</i>	2.12*** (.418)

Note: Standard errors are in parentheses.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Appendix D: OLS Regression Diagnostics

Table D-1 Regression Diagnostics: Heteroskedasticity, Normality, and Multicollinearity

		Heteroskedasticity		Normality	Multicollinearity
		Breusch-Pagan/ Cook-Weisberg (χ^2)	White (χ^2)	Jarque-Bera (χ^2)	Mean Variance Inflation Factor
Chapter 5:					
Sense of Hyper-Accessibility	1	16.6***	73.4**	58.2***	1.1
	2	28.5***	80.8*	45.9***	1.2
Sense of Experience:					
a. Interstitial Byplays	1	8.5**	59.2	8.9**	1.1
	2	10.1***	61.2	6.7	1.1
b. Interstitial Side Involvements	1	4.1	63.0	4.3	1.1
	2	4.1	63.0	4.3	1.1
Chapter 6:					
Clandestine Boundary Work	1	16.1***	58.9	28.3***	1.1
	2	18.6***	70.9	38.3***	1.2
Disrupted Identities	1	.5	97.1**	3.0	1.2
Chapter 7:					
Use of EvEMC for Identity Support	1	.5	53.8	1.5	1.1
	2	1	63.6	.5	1.1
Effect. of EvEMC on Self-Appraisal	1	.2	75.1	9.8**	1.2
Chapter 8:					
Relationship Satisfaction	1	.5	71.3	1.7	1.2
	2	.1	116**	.5	1.2
	3	1.96	102.56	7.79*	1.3

*p ≤ .05; **p ≤ .01; ***p ≤ .001

Table D-2 Correlation Matrix for Dependent, Independent, & Control Variables (N=617)

	Hyper-Access	Exp. Inter Copres	Byplay	Side Involve	ID Support	Self-App	Boundary Work	Disrupted ID	Rel. Satisfaction
Hyper-Access	1								
Exp. Inter Copres	.38	1							
Byplay	.36	.94	1						
Side Involve	.36	.95	.77	1					
ID Support	.26	.44	.42	.41	1				
Self App.	.22	.30	.26	.29	.47	1			
Boundary Work	.19	.49	.45	.48	.31	.31	1		
Disrupted IDs	.15	.40	.38	.38	.39	.34	.40	1	
Rel. Satisfaction	.30	.43	.43	.39	.40	.40	.34	.25	1
Demand	.12	.28	.29	.25	.35	.38	.44	.41	.35
Inadequate	.02	.14	.15	.12	.26	.38	.31	.29	.25
Heavy User	.17	.31	.30	.29	.17	.11	.10	.12	.15
Attached	.22	.27	.29	.23	.28	.21	.13	.18	.25
Relationship Main.	.20	.46	.47	.41	.44	.13	.32	.27	.37
Male	-.03	-.18	-.21	-.14	-.29	-.05	-.08	-.08	.02
Race	.01	.06	.06	.05	.00	-.03	.04	-.04	-.03
Age	-.04	-.26	-.27	-.23	-.15	-.14	-.10	-.03	-.14
Dating	.07	.11	.12	.08	-.03	-.02	.04	-.08	.02
Serious Relationship	.03	-.03	-.05	-.01	.02	-.05	-.08	.02	-.08
Engaged/Married	-.07	-.12	-.14	-.08	-.05	-.14	-.08	-.03	-.10

Table D-2 (Continued)

	Demand	Inadequate	Heavy User	Attached	Relationship Main	Male	Race	Age	Dating	In Rel.	Engaged/Married
Demand	1										
Inadequate	.66	1									
Heavy User	.06	.01	1								
Attached	.08	.04	.21	1							
Relationship Main	.27	.11	.29	.28	1						
Gender	.07	-.06	-.06	-.15	-.20	1					
Race	.04	-.02	-.02	-.03	-.05	.01	1				
Age	.05	-.01	-.15	.01	-.15	.07	-.06	1			
Dating	.09	.02	.06	.00	.02	.01	.06	-.05	1		
In Relationship	.08	-.01	.03	.07	-.05	-.11	.01	.07	-.26	1	
Engaged/Married	.03	-.03	-.05	-.02	-.05	-.01	-.05	.31	-.10	-.15	1

Appendix E: Descriptive Statistics for Focus Group Participants

Table E-1 Descriptive Statistics of Focus Group Participants, Interstitial Copresence

Focus Group #	Name ^a	Hyper-Accessibility	Inter. Byplay	Inter. Side Involvements	Heavy Use ^c	Attached ^c	Relationship Maintenance
1	Velma	1	.7	1.4	0	0	2.5 [‡] (3.3) [‡]
1	Kim	3*	3.3*	3.7*	1	1	2.7 [‡] (3.1) [‡]
1	Marla	2.5*	3*	2.4*	0	0	2.1 (2.8) [‡]
1	Anna	2*	1.8	2.3*	1	0 (1)	2.7 (3.6) ^{‡‡}
1	Christy	1	2*	1.7	1	0	2.4 (3.2) [‡]
1	Gina	2*	1.7	3.3*	1	1	2.3 (3.1) [‡]
1	Jennifer	2*	.5	.9	1	0	2.4 (3.2) [‡]
1	Mandy	2.5*	1.5	1.9	1	0 (1)	2.2 (2.9) [‡]
1	Rachel	3*	2.3*	2.9*	1	0	2.9 [‡] (3.9) ^{‡‡}
1	Kendra	3*	2.2*	1.9	1	0 (1)	2.6 [‡] (3.4) [‡]
2	Mark	3*	1	1.9	1	1	2.0 (2.2)
2	Luke	3*	2.2*	2.9*	1	0	3.4 [‡] (3.2) [‡]
2	Quincy	1.5*	.7	2.3*	1	0	2.2 (2.2) [‡]
2	Jason	3*	2.2*	2.4*	1	1	1.8 (2.0)
2	Matthew	2.5*	2.3*	3.3*	1	0	2.3 (3.0) [‡]
2	Ron	2*	2.2*	2*	1	1	3.5 ^{‡‡} (3.9) ^{‡‡}
2	Rami	3*	2.5*	2.7*	1	1	1.9 (2.2)
2	Seth ^b	1.5*	2*	1.7	0	0	1.3 (0.9)
2	Paul	3*	2.3*	2.9*	0 (1)	0	2.9 [‡] (3.0) [‡]
2	Saul	2*	2.7*	2.4*	1	0	3.6 ^{‡‡} (4.0) ^{‡‡}
3	Jackie	2.5*	1	1.1	0 (1)	0 (1)	3.3 [‡] (3.6) ^{‡‡}
3	Summer	1	1.7	1.9	1	1	2.8 [‡] (3.7) [‡]
3	Jeremy	3*	1.8	2.9*	1	0	2.6 [‡] (3.4) [‡]
3	June	1.5*	2*	2.3*	0 (1)	0 (1)	2.6 [‡] (3.1) [‡]
3	Jenny	3*	2.2*	2.6*	1	0 (1)	3.6 [‡] (4.2) ^{‡‡}
3	Brad	3*	1.5	2.9*	1	0 (1)	2.2 (2.9)
Means:	Group	2.4	1.9	2.3	--	--	2.6 (3.1)
	(Sample)	(2.4)	(1.8)	(2.3)	--	--	(3.2) (2.7)
Min.		1	.5	.9	0	0	1.3
Max.		3	3.3	3.7	1	1	3.6

^a Names have been changed to ensure anonymity

^b Seth was the only participant in the focus groups, and only one of two among the survey respondents, who did not own a cell phone.

^c Variables based upon heavy use of and attachment to cell talk, text messaging, and email only in parentheses (instant messaging was excluded)

* Strong Sense of Hyper-Accessibility/ Experiencing Interstitial Copresence

[‡] Moderate use of EvEMC for relationship maintenance

^{‡‡} Heavy use of EvEMC for relationship maintenance

Table E-2 Descriptive Statistics of Focus Group Participants, Self-Presentation

Focus Group #	Name ^a	Clandestine Boundary Work	Identity Disruptiveness	Hyper-Accessibility	Inter. Copresence	Heavy Use ^c	Attached ^c	Relationship Maintenance
1	Velma	1.3 ^m	2	1	1.1	0	0	2.5 [†] (3.3) [‡]
1	Kim	2.2 ^h	4	3*	3.5*	1	1	2.7 [†] (3.1) [‡]
1	Marla	1.3 ^m	5 ^h	2.5*	2.7*	0	0	2.1 (2.8) [‡]
1	Anna	2.7 ^h	2	2*	2.1*	1	0 (1)	2.7 (3.6) ^{‡‡}
1	Christy	1.1 ^m	3	1	1.8	1	0	2.4 (3.2) [‡]
1	Gina	1.2 ^m	5 ^h	2*	2.5*	1	1	2.3 (3.1) [‡]
1	Jennifer	0.4	3	2*	.7	1	0	2.4 (3.2) [‡]
1	Mandy	0.6	2	2.5*	1.7	1	0 (1)	2.2 (2.9) [‡]
1	Rachel	1.6 ^m	6 ^h	3*	3.1*	1	0	2.9 [†] (3.9) ^{‡‡}
1	Kendra	1.6 ^m	6 ^h	3*	2*	1	0 (1)	2.6 [†] (3.4) [‡]
2	Mark	0.2	0	3*	1.5	1	1	2.0 (2.2)
2	Luke	3.8 ^h	2	3*	2.5*	1	0	3.4 [†] (3.2) [‡]
2	Quincy	1.7 ^m	5 ^h	1.5*	1.5	1	0	2.2 (2.2) [‡]
2	Jason	1.8 ^m	2	3*	2.3*	1	1	1.8 (2.0)
2	Matthew	0.6	3	2.5*	2.8*	1	0	2.3 (3.0) [‡]
2	Ron	1.9 ^m	4	2*	2.1*	1	1	3.5 ^{‡‡} (3.9) ^{‡‡}
2	Rami	1.7 ^m	5 ^h	3*	2.6*	1	1	1.9 (2.2)
2	Seth ^b	1.7 ^m	4	1.5*	1.8	0	0	1.3 (0.9)
2	Paul	1.1 ^m	3	3*	2.6*	0 (1)	0	2.9 [†] (3.0) [‡]
2	Saul	1.4 ^m	1	2*	2.5*	1	0	3.6 ^{‡‡} (4.0) ^{‡‡}
3	Jackie	1.4 ^m	3	2.5*	1.1	0 (1)	0 (1)	3.3 [†] (3.6) ^{‡‡}
3	Summer	0.2	4	1	1.8	1	1	2.8 [†] (3.7) [‡]
3	Jeremy	1.3 ^m	4	3*	2.4*	1	0	2.6 [†] (3.4) [‡]
3	June	0.7	5 ^h	1.5*	2.2*	0 (1)	0(1)	2.6 [†] (3.1) [‡]
3	Jenny	1.3 ^m	6 ^h	3*	2.4*	1	0 (1)	3.6 [†] (4.2) ^{‡‡}
3	Brad	1.3 ^m	4	3*	2.2*	1	0 (1)	2.2 (2.9)
Means:	Group (Sample)	1.4 (1.2)	3.7 (4.1)	2.4 (2.4)	2.1 (2.1)	--	--	2.6 (3.1) (3.2) (2.7)
Min.		.2	0	1	.7	0	0	1.3
Max.		3.8	7	3	3.5	1	1	3.6

^a Names have been changed to ensure anonymity^b Seth was the only participant in the focus groups, and only one of two among the survey respondents, who did not own a cell phone.^c Variables based upon heavy use of and attachment to cell talk, text messaging, and email only in parentheses (instant messaging was excluded)^m Moderate Use of Clandestine Boundary Work^h Heavy Use of Clandestine Boundary Work/ High Level of Disruptiveness

* Strong Sense of Hyper-Accessibility/ Experiencing Interstitial Copresence

[†] Moderate use of EvEMC for relationship maintenance^{‡‡} Heavy use of EvEMC for relationship maintenance

Table E-3 Descriptive Statistics of Focus Group Participants, Self-Conception

Focus Group #	Name ^a	Identity Support	Self-Appraisal	Hyper-Accessibility	Inter. Copresence	Heavy Use ^c	Attached ^c	Relationship Maintenance
1	Velma	1.7 ^m	.8	1	1.1	0	0	2.5 [‡] (3.3) [‡]
1	Kim	2.6 ^h	.8	3*	3.5*	1	1	2.7 [‡] (3.1) [‡]
1	Marla	2.1 ^m	2.5 ^s	2.5*	2.7*	0	0	2.1 (2.8) [‡]
1	Anna	1.4	1.8 ^{md}	2*	2.1*	1	0 (1)	2.7 (3.6) ^{‡‡}
1	Christy	2.0 ^m	0	1	1.8	1	0	2.4 (3.2) [‡]
1	Gina	2.5 ^h	1.8 ^{md}	2*	2.5*	1	1	2.3 (3.1) [‡]
1	Jennifer	2.9 ^h	2.3 ^s	2*	.7	1	0	2.4 (3.2) [‡]
1	Mandy	1	.8	2.5*	1.7	1	0 (1)	2.2 (2.9) [‡]
1	Rachel	3.7 ^h	1.8 ^{md}	3*	3.1*	1	0	2.9 [‡] (3.9) ^{‡‡}
1	Kendra	3.5 ^h	2.3 ^s	3*	2*	1	0 (1)	2.6 [‡] (3.4) [‡]
2	Mark	1.7 ^m	1.8 ^{md}	3*	1.5	1	1	2.0 (2.2)
2	Luke	1.3	1	3*	2.5*	1	0	3.4 [‡] (3.2) [‡]
2	Quincy	1.8 ^m	1.8 ^{md}	1.5*	1.5	1	0	2.2 (2.2) [‡]
2	Jason	.8	1	3*	2.3*	1	1	1.8 (2.0)
2	Matthew	1.3	.3	2.5*	2.8*	1	0	2.3 (3.0) [‡]
2	Ron	3.5 ^h	2.0 ^s	2*	2.1*	1	1	3.5 ^{‡‡} (3.9) ^{‡‡}
2	Rami	2.5 ^h	2.5 ^s	3*	2.6*	1	1	1.9 (2.2)
2	Seth ^b	0	0	1.5*	1.8	0	0	1.3 (0.9)
2	Paul	2.0 ^m	3.0 ^s	3*	2.6*	0 (1)	0	2.9 [‡] (3.0) [‡]
2	Saul	1.3	1.3	2*	2.5*	1	0	3.6 ^{‡‡} (4.0) ^{‡‡}
3	Jackie	2.1 ^m	1.8 ^{md}	2.5*	1.1	0 (1)	0 (1)	3.3 [‡] (3.6) ^{‡‡}
3	Summer	2.2 ^m	1.5	1	1.8	1	1	2.8 [‡] (3.7) [‡]
3	Jeremy	1.9 ^m	2.8 ^s	3*	2.4*	1	0	2.6 [‡] (3.4) [‡]
3	June	1.4	1.8 ^{md}	1.5*	2.2*	0 (1)	0(1)	2.6 [‡] (3.1) [‡]
3	Jenny	1.4	1.5	3*	2.4*	1	0 (1)	3.6 [‡] (4.2) ^{‡‡}
3	Brad	1.1	2.5 ^s	3*	2.2*	1	0 (1)	2.2 (2.9)
Means:	Group (Sample)	1.9 (2)	1.6 (1.6)	2.4* (2.4)	2.1* (2.1)	--	--	2.6 (3.1) (3.2) (2.7)
Min.		0	0	1	.7	0	0	1.3
Max.		3.7	3	3	3.5	1	1	3.6

^a Names have been changed to ensure anonymity^b Seth was the only participant in the focus groups, and only one of two among the survey respondents, who did not own a cell phone.^c Variables based upon heavy use of and attachment to cell talk, text messaging, and email only in parentheses (instant messaging was excluded)^m Moderate use of EvEMC for Identity Support^h Heavy use of EvEMC for Identity Support^s Strong Effect on Self-Appraisal^{md} Moderate Effect on Self-Appraisal

* Strong Sense of Hyper-Accessibility/ Experiencing Interstitial Copresence

[‡] Moderate use of EvEMC for relationship maintenance^{‡‡} Heavy use of EvEMC for relationship maintenance

Table E-4 Descriptive Statistics of Focus Group Participants, Satisfaction with EvEMC in Personal Relationships and Relationship Strain

Focus Group	Name ^a	Relationship Satisfaction	Relationship Strain		Hyper-Accessibility	Inter. Copresence	Heavy Use ^c	Attached ^c	Relationship Maintenance
			Demand	Inadequacy					
1	Velma	.3	.9	1.5	1	1.1	0	0	2.5 [‡] (3.3) [‡]
1	Kim	.7	.5	.5	3*	3.5*	1	1	2.7 [‡] (3.1) [‡]
1	Marla	2	1.7	2.3	2.5*	2.7*	0	0	2.1 (2.8) [‡]
1	Anna	1.5	1	2	2*	2.1*	1	0 (1)	2.7 (3.6) ^{‡‡}
1	Christy	1.8	1.3	1.2	1	1.8	1	0	2.4 (3.2) [‡]
1	Gina	1	1.6	2.2	2*	2.5*	1	1	2.3 (3.1) [‡]
1	Jennifer	1.7	.7	.5	2*	.7	1	0	2.4 (3.2) [‡]
1	Mandy	.8	.5	.4	2.5*	1.7	1	0 (1)	2.2 (2.9) [‡]
1	Rachel	.5	1.3	1	3*	3.1*	1	0	2.9 [‡] (3.9) ^{‡‡}
1	Kendra	2.7	.1	.7	3*	2*	1	0 (1)	2.6 [‡] (3.4) [‡]
2	Mark	2	.3	.8	3*	1.5	1	1	2.0 (2.2)
2	Luke	1.5	1	2.2	3*	2.5*	1	0	3.4 [‡] (3.2) [‡]
2	Quincy	.3	1.6	2.3	1.5*	1.5	1	0	2.2 (2.2) [‡]
2	Jason	2.3	.9	1.2	3*	2.3*	1	1	1.8 (2.0)
2	Matthew	1	.3	0	2.5*	2.8*	1	0	2.3 (3.0) [‡]
2	Ron	2	1.5	1.3	2*	2.1*	1	1	3.5 ^{‡‡} (3.9) ^{‡‡}
2	Rami	1.7	.6	1.2	3*	2.6*	1	1	1.9 (2.2)
2	Seth ^a	.3	.1	0	1.5*	1.8	0	0	1.3 (0.9)
2	Paul	2.8	.6	.8	3*	2.6*	0 (1)	0	2.9 [‡] (3.0) [‡]
2	Saul	1.8	.9	2.2	2*	2.5*	1	0	3.6 ^{‡‡} (4.0) ^{‡‡}
3	Jackie	1.3	1.4	2.2	2.5*	1.1	0 (1)	0 (1)	3.3 [‡] (3.6) ^{‡‡}
3	Summer	1.3	1.2	1.2	1	1.8	1	1	2.8 [‡] (3.7) [‡]
3	Jeremy	1.8	1.1	.8	3*	2.4*	1	0	2.6 [‡] (3.4) [‡]
3	June	1	.9	1	1.5*	2.2*	0 (1)	0(1)	2.6 [‡] (3.1) [‡]
3	Jenny	.2	1.4	1.8	3*	2.4*	1	0 (1)	3.6 [‡] (4.2) ^{‡‡}
3	Brad	1.8	.8	.7	3*	2.2*	1	0 (1)	2.2 (2.9)
Mean:	Group (Sample)	1.9 (2)	.9 (1)	1.2 (1)	2.4* (2.4)	2.1* (2.1)	--	--	2.6 (3.1) (3.2) (2.7)
Min.		0	0	0	1	.7	0	0	1.3
Max.		2.8	2.7	2.3	3	3.5	1	1	3.6

^a Names have been changed to ensure anonymity

^b Seth was the only participant in the focus groups, and only one of two among the survey respondents, who did not own a cell phone.

^c Variables based upon heavy use of and attachment to cell talk, text messaging, and email only in parentheses (instant messaging was excluded)

* Strong Sense of Hyper-Accessibility/ Experiencing Interstitial Copresence

[‡] Moderate use of EvEMC for relationship maintenance

^{‡‡} Heavy use of EvEMC for relationship maintenance

Appendix F: Internet Survey

Early Notification Email

Sent: Tuesday, 9/30/2008, 1:12pm

Title: University of Tennessee, Department of Sociology: Cell Phone and Internet Research



COLLEGE of ARTS and SCIENCES

Department of Sociology
901 McChung Tower
Knoxville, TN 37996
(865) 974-6021
FAX #: (865) 974-7013

Dear [REDACTED],

Members of the Department of Sociology at the University of Tennessee, Knoxville are conducting a study of cell phone and Internet use among college students to understand how students use these devices within their everyday lives. In about seven days, you will be sent an email inviting you to participate in this [REDACTED], web-based survey and a hyperlink to the survey.

We respectfully ask for your participation in this study. Your perspectives on these issues are very important to us. In order for the results of this study to truly reflect the thoughts and feelings of undergraduates at [REDACTED], it is vital that each questionnaire is completed and submitted. Therefore, as an incentive to participate in the study, once you complete and submit your survey, you will automatically be entered into a drawing to win one of four **Apple iPod shuffle and I.Sound Audio Station speakers bundles**.

If you have questions about the study or the procedures, you may contact me via email at anytime, sseiler2@utk.edu.

Sincerely,

Steven J. Seiler
Department of Sociology
University of Tennessee
Knoxville, TN 37996-0490

Initial Email Invitation

Sent: Tuesday, 10/7/2008, 7:27am

Title: University of Tennessee, Department of Sociology: Cell Phone and Internet Research



COLLEGE of ARTS and SCIENCES

Department of Sociology
901 McClung Tower
Knoxville, TN 37996
(865) 974-6021
FAX #: (865) 974-7013

Dear [REDACTED] student,

You are cordially invited to participate in a [REDACTED] study of cell phone and Internet use among college students, developed and managed by members of the Department of Sociology at the University of Tennessee, Knoxville. This study is specifically interested in how **you**, as a college student, use your cell phones and the Internet in **your** daily life. Furthermore, we are interested in what **you** think and how **you** feel about cell phones and the Internet. Once you complete the survey, you will be entered into a drawing to win one of four **Apple iPod shuffle and i.Sound Audio Station speakers bundles**.



The survey will take around 20 minutes and is available on the following [university] website: [REDACTED]. To ensure that all participants are [university] students, you are asked to login using [a university id]. Since the survey is entirely web-based, you can take the survey at your convenience. If you do not finish the survey in one sitting, you can logoff and login as often as you wish until the survey is complete. If you choose to logoff during the survey, your progress will automatically be saved. When you login to survey again, you will continue the survey where you left off. However, all surveys must be completed by October 21, 2008.

Once you complete the survey, your [university id] will be entered into a drawing to win one of four Apple iPod Shuffle and i.Sound Audio Station speakers bundles. Each bundle consists of one silver, 1GB iPod shuffle (<http://www.apple.com/ipodshuffle/>) and one i.Sound Audio Station portable speaker system specifically designed for the Apple iPod shuffle ([http://www.isound.net/ipod\(r\)-speakers/audio-station.asp?sesid](http://www.isound.net/ipod(r)-speakers/audio-station.asp?sesid)). Only completed surveys are eligible for the drawing. The drawing will occur in the Department of Sociology on November 21, 2008. If your name is drawn, you will be notified via email.

Your participation in this study is completely voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty.

If you have questions at any time about the study or the procedures, you may contact the project administrator, Steven Seiler, or project supervisor, Dr. Suzanne Kurth, at (865) 974-6021. If you have questions about your rights as a participant, contact the Compliance Section of the Office of Research at the University of Tennessee at (423) 974-3466.

Sincerely,

Steven J. Seiler
Project Administrator
Department of Sociology
University of Tennessee

Dr. Suzanne Kurth
Project Supervisor
Department of Sociology
University of Tennessee

Reminder Email

Sent: Monday, 10/13/2008, 11:19am
Monday, 10/20/2008, 8:15am
Monday, 10/27/2008, 8:21am

Title: University of Tennessee, Department of Sociology: Cell Phone and Internet Research, Reminder/ Study Ends Soon!/ FINAL NOTICE



COLLEGE of ARTS and SCIENCES

Department of Sociology
901 McChung Tower
Knoxville, TN 37996
(865) 974-6021
FAX #: (865) 974-7013

Dear [REDACTED],

About #### week[s] ago, you received an email inviting you to participate in a [REDACTED] study of cell phone and Internet use among college students, conducted by members of the Department of Sociology. If you have already completed the survey, **please, again, accept our sincerest thanks**, for the survey has been a huge success thus far. As the survey ends in **just [##] days**, we are writing only to ask **those who have not yet completed the survey** to please do so at your earliest convenience. We are especially grateful for your help because your response will contribute greatly to the advancement of our knowledge of the impact of cell phones and Internet on college students.

I would like to remind you again that once you complete the survey, you will be entered into a drawing to win one of four **Apple iPod shuffle and i.Sound Audio Station speakers bundles**. If you have completed the survey, you **have been entered** into the drawing.

As stated in previous email(s), the survey will take around 20 minutes and is available on the following University of Tennessee website: [REDACTED]. To ensure that all participants are [university] students, you are asked to login using your [university id]. Since the survey is entirely web-based, you can take the survey at your convenience. If you do not want to finish the survey in one sitting, you can logoff and login as often as you wish until the survey is complete. If you choose to logoff during the survey, your progress will automatically be saved. When you login to the survey again, you will continue where you left off. However, **all surveys must be completed by October 28, 2008**. Your participation in this study is completely voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty.

If you have questions at any time about the study or the procedures, or if you did not receive the original invitation and would like a copy, please contact the project administrator, Steven Seiler, via email, sseiler2@utk.edu, or the project supervisor, Dr. Suzanne Kurth, at (865) 974-6021. If you have questions about your rights as a participant, contact the Compliance Section of the Office of Research at the University of Tennessee at (423) 974-3466.

Sincerely,

Steven J. Seiler
Project Administer
Department of Sociology
University of Tennessee
Knoxville, TN 37996-0490

The Internet Survey

Dear [REDACTED] student,

I would like to thank you in advance for your willingness to take this survey. Your participation in this project is greatly appreciated and is a direct contribution to a growing body of research on internet and cell phone use among college students.

The survey consists of questions pertaining to how you use your cell phone and the internet in everyday life as well as how you feel about cell phones and the internet. For each question, please select the answer that best represents your feelings or behaviors. Once you have selected your answer, please press the right arrow key in the bottom right-hand corner of the page. Please note that once you have selected an answer and pressed the right arrow key, your answer is saved and you cannot go back to change your answer. As you're taking the survey, you will be notified when you complete 50 percent of the survey and 75 percent of the survey. Aside from basic demographic information, the response categories, address either frequency (e.g., 'very often' to 'never'), attitude (e.g., 'strongly agree' to 'strongly disagree'), or experience (e.g., 'yes' or 'no'). If you choose not to answer a question, please simply select the 'decline' option.

The last question in the survey asks if you would be willing to participate in a one of three follow up focus groups. The focus groups allow for a deeper understanding of the impact of cell phones and the internet on your social life as a college student by allowing you to discuss some of your feelings and/or experiences with your cell phone and the internet. Participation in the focus group is completely optional and in no way affects the completion or submission of this survey. Details about the focus groups will be provided at the end of this survey.

Upon completion of the survey, you will automatically be logged out and your information will be recorded in the survey program. Your netid will be submitted for the drawing for one of four Apple iPod/mini-speaker bundles on November 3, 2008. If your netid is drawn, you will be contacted via email.

To enter the survey, please press "continue." By pressing continue, you also acknowledge that you have been informed about the ethical guidelines and your rights as a respondent. If you have questions at any time about the study or the procedures, you may contact the project administrator, Steven Seiler, or the project supervisor, Dr. Suzanne Kurth, at (865)974-6021. If you have questions about your rights as a participant, contact the Compliance Section of the Office of Research at (423) 974-3466.

Sincerely,

Steven J. Seiler
Project Administrator
Department of Sociology
University of Tennessee

-----[page #1]-----

The first set of questions is about your ownership and use of different electronic devices.

1. Do you own any of the following items? (Yes, No)
- Cell phone
 - Home phone
 - Smartphone/ PDA
 - Laptop Computer
 - Desktop Computer

-----[page #2]-----

2. How many cell phones and/or Smartphones/PDAs do you own and use? (1 - 10)
3. How many of your personal phones/PDAs are paid for by: (1-5)
- Yourself _____
- Your parents _____
- Your work _____
- Other _____
4. How often do you use your cell phone for... (Very Often, Often, Sometimes, Seldom, or Never)
- Sending or receiving instant messages?
- Checking your email?

-----[page #3]-----

5. Do you make most of your phone calls from your cell phone or home phone? (Cell phone, Home phone)
6. Have you ever... (Yes, No)
- Programmed your home phone to forward phone calls to your cell phone?
- Checked your home phone voicemail from your cell phone?
- Used the internet to check your home phone voicemail or missed calls?

-----[page #4]-----

7. Please tell us if you use the following items very often, often, sometimes, seldom, or never. Very often would mean numerous times per day; often suggests once a day or once every other day; sometimes would mean every few days; and seldom would mean once per week or every few weeks.

How often do you use... (Very Often, Often, Sometimes, Seldom, or Never)

 A cell phone?

 Text messaging?

 Email?

 Instant messaging? (e.g. AIM, Yahoo! Messenger, Goggle Talk, MySpace IM)

-----[page #5]-----

8. To the best of your knowledge, how many of your friends do you think... (All, Most, Some, Only a few, or None)
- Own cell phones?
- Have an instant messenger (e.g., Yahoo, AOL)?
- Use text messaging?
- Have email accounts?

-----[page #6]-----

Now we would like to learn about your experiences with your cell phone and Internet.

9. How often do you... (Very Often, Often, Sometimes, Seldom, or Never)
- Turn off your cell phone during the average week?
- Leave your instant messenger on just in case someone wants to contact you?
- Send a text message, instant message, or email to someone if you can't get in touch with her or him on the phone?
- Leave a meeting or class lecture to accept a phone call?

-----[page #7]-----

10. How often do you... (Very Often, Often, Sometimes, Seldom, or Never)
- Send or read a text message, an instant message, or an email while also talking to someone face-to-face?
- Write or reply to emails while talking on your cell phone or text messaging?
- Call or answer a cell phone call during a face-to-face conversation?
- Exchange instant messages or text messages with more than one person at a time?
- Write or reply to an email from one person while exchanging instant messages with another person?

11. How often do you... (Very Often, Often, Sometimes, Seldom, or Never)
- Talk on your cell phone while in a crowd of people?
 - Talk on your cell phone while you're driving?
 - Check your email from a computer other than your own?
 - Check your cell phone for missed calls or text messages?
 - Talk on your cell phone or type text messages while you're at a checkout counter?
 - Call, text, instant message, or email someone just because you're bored?
 - Check your email or instant messenger just to see if anyone has contacted you?
 - Call, text, instant message, or email a friend or family member on your way to or from school or between classes?
 - Send or read text messages, instant messages, or emails during a class lecture, meeting, or presentation you're attending?
 - Do other things online while instant messaging (e.g., play games, browse the internet, or look up information)?
 - Do other things offline while instant messaging (e.g., watch TV or study)?

12. How often have you... (Very Often, Often, Sometimes, Seldom, or Never)
- Used away messages for your instant messenger?
 - Turned off your phone before entering a class or meeting?
 - Read an email from a friend, family member, or romantic partner but told them that you never received it or that you haven't checked your email lately because you didn't feel like replying?
 - Received an email from a friend, family member, or romantic partner and tell them that you replied but you don't know why they didn't receive it?
 - Purposely avoided a friend's, family member's, or romantic partner's phone call and blamed it on your cell phone battery dying?
 - Purposely avoided a friend's, family member's, or romantic partner's phone call, but told them later that you didn't have cell phone service?
 - Purposely avoided a friend's, family member's, or romantic partner's phone call but told them that you didn't hear the phone because the phone was on vibrate or the ringer was on silent?
 - Purposely avoided a friend's, family member's, or romantic partner's text messages and told them you didn't realize you had received the text message?
 - Set your instant messenger to 'appear offline' because you don't want certain friends or a romantic partner to see that you're online and possibly send you an instant message?
 - Set an away message on your instant messenger just so you don't have to acknowledge anyone who sends you an instant message?
 - Purposely ignored a friend's, family member's, or romantic partner's phone call but sent them a text message to let them know you'll call them later?

13. Have you ever set up ground rules with friends, family members, or a romantic partner to establish when you will not answer your phone, when your phone will be turned off, or when your phone will be on vibrate? (Yes, No)
14. How often do friends, family members, or romantic partners violate these ground rules?
(Very Often, Often, Sometimes, Seldom, or Never)

15. Please tell me how well each of the following statements describes you personally.
(Strongly agree, Somewhat agree, Somewhat disagree, or Strongly disagree)
- I feel like I'm a different person when I'm with different friends
 - I feel like I'm a different person when I'm with my friends at UT than when I'm with my friends from my hometown.
 - I act different around my family than I do around my friends.
 - When I receive a phone call, I adjust the way I talk and act (in varying degrees) according to the person calling.
 - The style and length of my instant messages, text messages, and emails as well as the amount of attention paid to spelling and grammar varies depending upon the friend or family member I'm communicating with.

-----[page #12]-----

16. How often do you use the following media for coordinating an event with friends (e.g., where to meet for dinner, what movie everyone wants to see, what time to meet at the club)?

(Very Often, Often, Sometimes, Seldom, or Never)

Cell phone
Text messaging
Instant messaging
Email

-----[page #13]-----

17. On some occasions, we might think something we said or did upset, angered, disappointed, or surprised someone else. In these situations, how often have you used the following media to contact a person (or people) to correct, clarify, or apologize for something you said or did? (Very Often, Often, Sometimes, Seldom, or Never)

Cell phone
Text messaging
Instant messaging
Email

-----[page #14]-----

18. Have you ever... (Yes, No)

Accidentally sent a personal text message, instant message, or email to the wrong person?
Received an unexpected phone call that disrupted a class or meeting?
Had an unexpected cell phone call, text message, instant message, or email result in personal embarrassment?
Had an unexpected cell phone call, text message, instant message, or email result in an argument with a friend or family member?
Had a cell phone call, text message, instant message, or email get you in trouble?
Had a cell phone call, text message, instant message, or email affect the way people perceive you?
Done something absentminded in public because you were involved in a cell phone conversation or typing or reading a text message, instant message, or email?
Drawn criticism or dirty looks because of the way you use your cell phone in a public setting?

-----[page #15]-----

We would now like to learn about how you feel about cell phones and the internet.

19. How hard would it be to give up... (Very hard, Somewhat hard, Not too hard, or Not hard at all)

Talking on your cell phone?
Sending/receiving text messages?
Sending/receiving emails?
Using your instant messenger?

-----[page #16]-----

20. Thinking about all of the media you use, please describe your level of agreement with the following statements:

(Strongly agree, Somewhat agree, Somewhat disagree, or Strongly disagree)

The internet and my cell phone allow me immediate access to others anywhere anytime.
I feel like I am always accessible to anyone no matter where I am.
People get upset with me when I don't answer their phone calls, text messages, instant messages, or emails.
I feel like too many people try to get in touch with me because they know I have my cell phone on me.

-----[page #17]-----

21. Please tell me how well each of the following statements describes you personally.

(Strongly agree, Somewhat agree, Somewhat disagree, or Strongly disagree)

I feel good about who I am as a person when friends and family call, text message, instant message, or email me regularly, but feel bad about myself when they stop calling, texting, instant messaging, or emailing as often.
I get lonely when no one calls, sends text messages, instant messages, or emails for awhile.
I eventually feel rejected when friends do not respond to my phone calls, text messages, instant messages, or emails for awhile.
I feel excluded when my friends call, text, instant message, or email each other but not me.

-----[page #18]-----
22. Please tell me how well each of the following statements describes you personally.
(Strongly agree, Somewhat agree, Somewhat disagree, or Strongly disagree)
I feel that I'm constantly being pulled in multiple directions by friends and family who demand my attention.
I stress out when I receive numerous phone calls, text messages, instant messages, and/or emails but cannot respond to them immediately.
Life would be so much less stressful if I didn't have a cell phone.
Life would be much less stressful if I didn't use email.
Keeping up with all of the phone calls, text messages, instant messages, and emails I receive feels like a fulltime job.
I feel like my whole life revolves around my cell phone.
I often feel like I have to answer my cell phone even if it interrupts a meeting or a meal.

-----[page #19]-----
23. Please tell me how well each of the following statements describes you personally.
(Strongly agree, Somewhat agree, Somewhat disagree, or Strongly disagree)
I don't feel I can provide my friends and family the attention I think they deserve.
I can't keep up with all of the demands of my friends and family.
I don't feel I can meet the expectations people have of me.
In trying to meet the expectations of one relationship, I feel like I let down other relationships.
I feel like my friends and family think I'm avoiding them when I'm unable to answer their phone calls, instant messages, text messages, or emails.
I feel like I alienate certain friends and family because I just can't find time to respond to their emails, phone calls, text messages, and instant messages.

-----[page #20]-----
The next set of questions is about your friends and family and how you communicate with them while you're off at college.

24. Not including romantic relationships, how many people from your hometown do you consider close friends?
(26 or more, 16-25, 11-15, 6-10, 3-5, 1-2, or 0)
25. Not including romantic relationships, how many people at school do you consider close friends?
(26 or more, 16-25, 11-15, 6-10, 3-5, 1-2, or 0)
26. How many family members do you feel very close to?
(26 or more, 16-25, 11-15, 6-10, 3-5, 1-2, or 0)

-----[page #21]-----
27. Thinking just about your 2 or 3 closest friends who do not live in the same general area as you while you're attending college, how often do you...(Multiple times per day, Once per day, A few times per week, A few times per month, Once or twice per month, A few times per year, or Never)

Talk to them on your cell phone?
Exchange text messages with them?
See them face-to-face?
Exchange emails with them?
Exchange instant messages with them?

-----[page #22]-----
28. Thinking about 2 or 3 of your closest friends who live in the same general area as you while you're attending college, how often do you...(Multiple times per day, Once per day, A few times per week, A few times per month, Once or twice per month, A few times per year, or Never)

Talk to them on your cell phone?
Exchange text messages with them?
See them face-to-face?
Exchange emails with them?
Exchange instant messages with them?

-----[page #23]-----
29. Thinking just about your communication with your 2 or 3 closest family members while you're attending college, how often do you... (Multiple times per day, Once per day, A few times per week, A few times per month, Once or twice per month, A few times per year, or Never)

- Talk to them on your cell phone?
- Exchange text messages with them?
- See them face-to-face?
- Exchange emails with them?
- Exchange instant messages with them?

-----[page #24]-----
30. Please tell me how well each of the following statements describes you personally.
(Strongly agree, Somewhat agree, Somewhat disagree, or Strongly disagree)
I feel my relationships with my family and friends are stronger now because I own a cell phone.
Text messaging has strengthened my relationships with my family and friends significantly.
Instant messaging has strengthened my relationships with my family and friends.
I feel my relationships with my family and friends are stronger now because of email.
Cell phones, text messaging, instant messaging, and email have added to the stress in my family.
Because of email I can keep in touch with my family without having to spend as much time talking to them.
Because of text messaging I can keep in touch with my family without having to spend as much time talking to them.

-----[page #25]-----
31. How often do you call, text, instant message, or email close friends or family...
(Very Often, Often, Sometimes, Seldom, or Never)
To elicit character support (e.g., "You have a great personality," "No, nobody thinks you're mean or weird")?
For reassurance of your abilities?
To talk about an embarrassing situation (e.g., "I can't believe I lost my train of thought during my presentation")?
For support after you said or did something you regretted (e.g., "I got upset, told him off, and just left")?
To get their opinion about how others perceive you (e.g., "did everybody think I was a jerk for just abruptly leaving last night")?
Just to hear a familiar voice?
To feel better about yourself?
Just to communicate with someone who knows the 'real you'?
To get their perspective about the way you acted or something you did in a situation?
To remind you of who you really are?

-----[page #26]-----
Finally, we would like to learn a little bit about you. Please be assured that your answers will be kept confidential and will only be used for group comparisons.

-----[page #27]-----
32. Is your hometown within 50 miles of the [university]? (Yes, No)
33. When you're at school, do you live on campus or off campus? (On campus, Off campus)
34. Are you currently employed? (Yes, No)

-----[page #28]-----
35. Based on the number of credit hours, what year are you at []? (Freshman, Sophomore, Junior, Senior, or Other)
36. How many years have you attended []? (1 or less, 2, 3, 4, or 5 or more)

-----[page #29]-----
37. What year were you born? (1900 - 2000)
38. What is your gender? (Female, Male)
39. What percentage of your education and living expenses do your parents or relatives cover?
(0%, around 25%, around 50%, around 75%, or 100%)

40. What is your current status?

(Single/ Never been married/ Divorced, Dating someone, In a serious relationship [but not engaged or married], or Engaged/Married)

41. Which of the following best describes your race?

(American Indian, Asian, Black, Hispanic, White, or No Answer)

You are almost done! We would now like to know if you would be willing to participate in a brief follow-up focus group conducted by members of the Department of Sociology during the spring semester. Each focus group participant will receive a \$25 cash incentive at the conclusion of the focus group session. Participation in the focus group is completely optional and in no way affects the completion or submission of this survey or your eligibility for the drawing for one of the four Apple iPod shuffle and i.Sound Audio Station speakers bundles.

We will be conducting three focus groups between January 15 and January 31, 2009. The purpose of the focus groups is to follow up on the results of this survey. Whereas the survey captures general perspectives and behaviors, the focus groups allow for a deeper understanding of the impact of cell phones and the internet on your social life as a college student by allowing you to discuss some of your feelings and/or experiences with your cell phone and the internet. Therefore, this component of the research project is just as important as the survey itself! Accordingly, your willingness to participate in the focus group would be greatly appreciated.

Each focus group will consist of 8 to 10 students randomly selected from the students who check "yes, I am willing to participate in a follow-up focus group during the spring semester for a \$25 cash incentive" below. If you check this category and your NetID is randomly selected, you will be notified via email. Each focus group will meet only one time for two hours on the University of Tennessee campus. The focus groups will be scheduled for different days and times to accommodate most students' schedules during the spring semester. The focus groups will be conducted by a qualified member of the research team. A silent note-taker will be present to document our group conversations. The moderator of the group will simply open the discussion with a few general questions similar to those you answered in this survey. All participants must actively participate in the discussion. However, the discussion will remain relatively informal.

Nobody will be asked personal questions and every participant has the right to decline to answer a question without penalty. Since 8 to 10 students will be participating in each focus group, total confidentiality cannot be guaranteed. However, similar to the survey results, all notes taken by the note-taker and the moderator will be stored securely and will be made available only to the researchers in the Department of Sociology conducting this study. At no point will any written or oral report include specific reference to any participant in this study.

All participants in the focus groups will receive the \$25 cash incentive regardless of their answers to the questions during the focus groups. The only requirements for the incentive are to arrive on time, participate in the discussion, and stay until the conclusion of the focus group.

Again, if you have questions at any time about the study or the procedures, you may contact the project administrator, Steven Seiler, or the project supervisor, Dr. Suzanne Kurth, at (865) 974-6021. If you have questions about your rights as a participant, contact the Compliance Section of the Office of Research at (423) 974-3466.

42. Would you be willing to participate in a follow-up focus group during the spring semester for a \$25 cash incentive?

Yes, I am willing to participate in a follow-up focus group during the spring semester for a \$25 cash incentive.

No, I do not wish to participate in a follow-up focus group during the spring semester for a \$25 cash incentive.

43. We realize that you may have other comments or opinions that you weren't able to express in this survey. We invite you to write any comments you have in the space below.

-----[page #33]-----

You have now completed the survey! I would like to thank you so much for contributing to this study. Your response will help us better understand how college students feel about and use their cell phones and the internet. Your NetID has now been submitted for the drawing for one of four iPod shuffle and i.Sound Audio Station speakers bundles. If your NetID is drawn, you will be contacted via email.

-----[END]-----

Appendix G: The Focus Groups

Email Invitation Template



COLLEGE of ARTS and SCIENCES

Department of Sociology
901 McClung Tower
Knoxville, TN 37996
(865) 974-6021
FAX #: (865) 974-7013

Dear _____,

You are cordially invited to participate in one of three focus groups to follow up on the campus-wide survey of cell phone and Internet use among college students conducted by the Department of Sociology at the University of Tennessee that you completed in October. Your name was selected from the survey participants who indicated that they would be willing to participate in a focus group.

I am pleased to report that, thanks to you and nearly 700 other [REDACTED] students, the survey was a wonderful success. However, the focus groups – the second and final stage of the study – are just as important to this research as the survey. Whereas the survey captured general perspectives and behaviors, the focus groups provide opportunities to get your thoughts and hear about your experiences with your cell phone and the internet.

All three focus groups will meet in the Black Cultural Center's library on the University of Tennessee, Knoxville campus. Each focus group will consist of 8 to 10 [REDACTED] students and will meet only one time for two hours. The focus groups will be conducted by a qualified member of the research team. A silent note-taker will also be present to take notes on our group conversations. The moderator of the group will simply open the discussion with a few general questions similar to those you answered in this survey. The discussion will remain relatively informal; however, we do ask that participants contribute to the discussions. Nobody will be asked personal questions and every participant has the right to decline to answer a question without penalty. Since 8 to 10 students will be participating in each focus group, total confidentiality cannot be guaranteed. However, similar to the survey results, all notes taken by the note-taker and the moderator will be stored securely and will be made available only to the researchers in the Department of Sociology conducting this study. At no point will any written or oral report include specific reference to any participant in this study.

As an incentive to participate in the focus group, **you will receive \$25 cash at the conclusion of the focus group session.** You will receive the \$25 cash incentive regardless of your answers to the questions during the focus group. The only requirements for the incentive are to arrive on time, participate in the discussion, and stay until the conclusion of the focus group.

We currently have openings in two of the three focus groups:

- Focus Group #1, scheduled for 6:00pm to 8:00pm on Monday, January 26, 2009 (**## seats remaining**)
- Focus Group #2, scheduled for 6:00pm to 8:00pm on Tuesday, January 27, 2009 (**## seats remaining**)
- Focus Group #3, scheduled for 6:00pm to 8:00pm on Tuesday, February 3, 2009 (**## seats remaining**)

If you are willing to participate in one of these focus groups, please simply reply to this email **by 11:00 pm on (day), January ##**. In your reply, please include your first and last name and the date of the focus group you would like to participate in. If you do not have a preference, please type 'no preference.' Once your email is received, I will reply to confirm your seat.

If you have questions about the study or the procedures, you may contact the project administrator, Steven Seiler, or the project supervisor, Dr. Suzanne Kurth, at (865) 974-6021. If you have questions about your rights as a participant, contact the Compliance Section of the Office of Research at (423) 974-3466.

Sincerely,
Steven J. Seiler
Project Administrator
Department of Sociology

Dr. Suzanne Kurth
Project Supervisor
Department of Sociology

Reminder Email Template



COLLEGE of ARTS and SCIENCES

Department of Sociology
901 McClung Tower
Knoxville, TN 37996
(865) 974-6021
FAX #: (865) 974-7013

Dear _____.

I just wanted to send you a quick reminder that our focus group will be meeting tomorrow night (Tuesday, January 27) from 6:00pm to 8:00pm in the Black Cultural Center. The Black Cultural Center is located at 1800 Melrose Avenue, which is right beside (behind) Hess Hall and cater-cornered from the entrance to the turn-around for the library. I've attached a map, just in case. The meeting room in the Black Cultural Center is the library, which is located just off the lobby area. If you have any trouble finding the building, please call the front desk at the Black Cultural Center (865-974-6861). Also, there is a reception desk near the main entrance. If you have a hard time finding the room, please just ask the receptionist. She or he will be able to point you in the right direction.

You don't need to bring anything to the focus group. We'll have refreshments in the room. We just ask that you arrive on time and stay until the end of the meeting. We assure you that the meeting will end no later than 8:00pm.

Again, we thank for your willingness to participate in the focus group. We look forward to meeting you tomorrow evening. If you have any questions or concerns between now and then, please do not hesitate to email me at sseiler2@utk.edu.

Best regards,

Steven J. Seiler
Project Administrator
Department of Sociology

Informed Consent Statement



COLLEGE of ARTS and SCIENCES

Department of Sociology
901 McClung Tower
Knoxville, TN 37996
(865) 974-6021
FAX #: (865) 974-7013

FOCUS GROUP INFORMED CONSENT FORM IRB#: 7699B

(Participant's Name)
Focus Group # of 3
##, 2009
6:00pm – 8:00pm
Black Cultural Center, Library

The purpose of this focus group is to follow up on the [REDACTED] survey of cell phone and internet use among college students conducted by the Department of Sociology at the University of Tennessee that you completed in October. Your name was randomly selected from the survey participants who indicated that they would be willing to participate in a focus group.

Whereas the survey captures general perspectives on and behaviors associated with cell phone and internet use, the focus group allows for a deeper understanding of the impact of cell phones and the internet on your social life as a college student. It is designed to allow you to discuss some of your feelings about and/or experiences with your cell phone and the internet.

This focus group will last approximately two hours. Participation in the focus group is completely voluntary. Nobody will be asked personal questions, and every participant has the right to decline to answer a question without penalty. Because 8 to 10 students will be participating in the focus group, total confidentiality cannot be guaranteed. However, similar to the survey results, all notes taken by the note-taker and the moderator will be stored securely and will be made available only to the researchers in the Department of Sociology conducting this study. At no point will any written or oral report include specific reference to any participant in this study.

As an incentive to participate in the focus group, you will receive \$25 cash at the conclusion of the focus group session. You will receive the \$25 cash incentive regardless of your answers to the questions during the focus group. The only requirements for the incentive are to arrive on time, participate in the discussion, and stay until the conclusion of the focus group.

This focus group is a component of an independent research project conducted by members of the Department of Sociology at the University of Tennessee, Knoxville. It is in no way affiliated with any class or course of instruction at the university.

If you have questions at any time about the study or the procedures, you may contact the researcher, Steven J. Seiler, or the project supervisor, Dr. Suzanne Kurth, at (865) 974-6021. If you have questions about your rights as a participant, contact the Compliance Section of the Office of Research at (423) 974-3466.

By signing your name below, you are acknowledging that you understand your rights as a participant as well as the conditions and guidelines of the focus group stated herein.

PARTICIPANT

Name: _____ Signature & Date: _____

PROJECT ADMINISTRATOR

Name: Steven J. Seiler Signature & Date: _____

APPROVED
By Brenda Jackson

AUG 22 2008

Focus Group Discussion Guide

Focus Group # of 3
Start Time: __:____

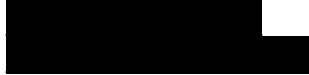
FOCUS GROUP GUIDELINES

Focus Group # of 3

#####, ##### #, 2009

6:00pm – 8:00pm

Location:



Moderator: Steven J. Seiler

Note-taker: 

Participants:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

I. Introduction (5 Minutes) *BEGIN RECORDING*****

- **Welcome to the Focus Group**
- **Introduction**
 - Introduce [REDACTED] and Myself
- **Purpose of the Study**
 - To understand how people use their cell phones and the Internet in their daily lives and, in particular, within their relationships -- friends, family, romantic partners, etc.
 - Relatively little research on the impact of these communications on everyday life
 - College students are the most connected demographic in America
- **Consent Form/Confidence Statement**
 - IRB approval
 - Consent Statement
 - Confidentiality
 - Incentive
- **Some Guidelines:**
 - If you tend to get off the track, someone will usually pull the group back to the question or topic at hand – I’ll jump in if I have to, but usually one of you will take care of that for us.
 - If the group runs out of things to say, just remember that what we’re interested in are your feelings and experiences with your cell phone and internet, as it relates to your everyday life, and we want to hear as many different things about them as possible. So, what usually happens is that someone will think of something that hadn’t come up yet and that will restart the discussion.
 - If your experience is a little different from what others are saying, then that is exactly when I want to hear from you. Often someone says, “I guess my experience is different from everyone else’s...” and then they find out that the same things have happened to other people too, but no one else would have mentioned it if someone didn’t start the ball rolling.
 - If someone hasn’t really joined in, or you seem to be hearing from the same people all the time, try asking a question to someone who hasn’t spoken as much. We have everyone say a bit about themselves in the first part of the discussion, so listen to what the others say at the start. Then, later on, you can use this information to ask someone a question that will draw them back into the discussion
 - We want to hear as many stories as possible. Even if you think your experience is just like everyone else’s, don’t just say, “I agree.” We want to hear your story, because there’s always something unique in each person’s own experiences.
 - We need to hear as many different things from as many of you as time allows there really aren’t right or wrong answers in this area – if there were, we’d go to the experts and they’d tell us the answers. Instead, we’re here to learn from your experiences.

II. Data Collection/ General (15 minutes) *END AND BEGIN RECORDING*****

- **How many people have their cell phones with them? Do you own more than one?**
(Hyper-Accessibility)
 - **Optional Questions:**
 - How many are on silent?
 - How many are on vibrate?
 - How many forgot to put you phone on silent or vibrate?
- **How many people use Instant Messaging? What messaging service(s) do you use?**
(Clarify why IM stats.)
 - **Optional Questions:**
 - How often do you use them?
 - What do you use them for?

III. Warm-Up Questions/ General (10 minutes) *END & BEGIN RECORDING*****

- **Why do you love or hate about cell phones and the Internet?**
 - **Optional Questions:**
 - What about text messaging? Instant messaging? Email?

IV. Topic 1: Interstitial Copresence *END & BEGIN RECORDING*****

➤ About Others:

- How do you feel about...
 - people talking on their phones while driving?
 - people talking on their cell phones or texting in public?

➤ About Yourself:

- Do you talk ever talk on your phone when you drive? (*Int. Side Play*)
- How do you manage cell phone conversation in public?
 - How do others react when you do?
- Have you ever exchanged messages with someone in the same room? (*Int. Byplay*)

V. Topic 2: Identity Support & Self-Appraisal *END & BEGIN RECORDING*****

➤ Identity Support:

- When you've embarrassed yourself do you ever call, txt, IM, or email someone?
 - Optional Questions:
 - Why?
 - Does it make you feel better?
 - How do you think you'd feel at those time if you didn't have access to the internet or cell phone?
 - What do you think you would have done?

➤ Self-Appraisal:

- How do you feel when someone doesn't answer your calls or doesn't reply to your text messages, instant messages, or emails?
 - Additional Questions:
 - How do you react if they don't respond?
 - Have you ever found out that they just talked to one of your other friends?

VI. Topic 3: Multiphrenia *END & BEGIN RECORDING*****

- How long have you gone without your cell phone? Without the Internet?
- What was it like?

VII. Topic 4: Relational Boundary Work & Disrupted Identities *END & BEGIN RECORDING*****

➤ **Relational Boundary Work**

- Has a cell phone call, text message, instant message, or email ever resulted in an argument?
 - Optional Questions:
 - What is your relationship with this person?
 - Was the argument ever resolved?
- Do you ever intentionally not answer the call or reply to a message from a friend or family member? How do you handle these situations?
 - Optional Questions:
 - How do you avoid the call or message?
 - How do you explain missing the call or not replying to the message?
 - Have you ever lied about why you did not answer or reply quickly?

➤ **Disrupted Identities**

- Have you ever accidentally sent or received an email, instant message, or email to the wrong person? Tell us about it.

VIII. Topic 5: Relationship Satisfaction *END & BEGIN RECORDING*****

- Do you think these things have strengthened, weakened, or had no effect on your relationships with my family and friends?
 - Optional Questions:
 - How have they strengthened your relationships?
 - Have they, or do they, cause any problems in your relationships?

IX. Conclusion *END & BEGIN RECORDING*****

- Any Final Thoughts?
- Thank you for your participation
- Explain where the results will be presented
 - If you would like to read the final report, please stay in touch...
 - Presented at the Southern Sociological Society's annual conference and other national and regional conferences...
 - The study will also appear in a few academic journals within the next year or so
- Remind them of the confidentiality statement
- Hand out the envelopes with the cash incentive and sign the Receipt of Incentive Form
- Have wonderful night

*****END RECORDING*****

SEATING ARRANGEMENT

6. _____

7. _____

5. _____

8. _____

4. _____

9. _____

3. _____

Moderator

2. _____

Note-taker

1. _____

10. _____



Appendix H: Internal Review Board, Human Subjects Approval



THE UNIVERSITY of TENNESSEE

Institutional Review Board
Office of Research

1534 White Avenue
Knoxville, TN 37996-1529
Phone: 865.974.3456
Fax: 865.974.7400

August 22, 2008

IRB#: 7699 B

TITLE: Self-Concept, Self-Presentation, and Everyday Forms of Electronically-Mediated Communication: Negotiating the Self in Interstitial Space

Seiler, Steven
Sociology
901 McClung Tower
Campus 0490

Kurth, Suzanne
Sociology
921 McClung Tower
Campus - 0490

Your project listed above was reviewed and has been granted IRB approval under expedited review.

This approval is for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #3 below).

Responsibilities of the investigator during the conduct of this project include the following:

1. To obtain prior approval from the Committee before instituting any changes in the project.
2. If signed consent forms are being obtained from subjects, they must be stored for at least three years following completion of the project
3. To submit a Form D to report changes in the project or to report termination at 12-month or less intervals.

The Committee wishes you every success in your research endeavor. This office will send you a renewal notice (Form R) on the anniversary of your approval date.

Sincerely,

Brenda Lawson
Compliances

VITA

Steven Seiler was born in Elgin, Illinois on May 17, 1976. In 1994, he graduated from Springs Academy High School in Conyers, Georgia. After spending some time as a Christian missionary in Maui, Hawaii, Thailand, and Malaysia, he enlisted in the U.S. Navy in 1996. While in the military, he was stationed on the USS Santa Barbara (AE-28) and the USS Harry S. Truman (CVN-75) where he participated in such missions as Operation Desert Storm, Southern Watch. Upon honorable discharge in 2000, he began his studies at Truett-McConnell College in Cleveland, Georgia. Once he received his Associate's Degree in General Studies in December 2001, he transferred to the University of Georgia where he majored in Sociology and Political Science. In 2003, after graduating with honors from the University of Georgia, he pursued a Master's of Science in Sociology and a Graduate Certificate in International Research at Virginia Tech. He began his doctoral work at the University of Tennessee in 2005 and received a Doctor of Philosophy in Sociology in 2010.

While attending Virginia Tech, he worked as a Teaching Assistant under Dr. Michael Hughes, Dr. Peggy DeWolf, and Dr. Clifton Bryant. He assisted with courses such as Military Sociology, Sociology of Death, and Sociology of the Family. As a Graduate Teaching Associate at the University of Tennessee, he independently taught courses in Social Justice and Social Change, Power and Society, and Social Psychology. In addition, beginning in 2006, he taught courses in General Sociology and Social Problems as an Instructor at Pellissippi State Technical Community College.