

A QUALITATIVE ANALYSIS OF COLLEGE STUDENT USE OF MOBILE PHONES
FOR FAMILY COMMUNICATION

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A QUALITATIVE ANALYSIS OF COLLEGE STUDENT USE OF MOBILE PHONES
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ABSTRACT

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This study looks at how mobile phone technology is influencing the familial relationships students have during college and the transition to adulthood. Using a qualitative in-depth interview method, fifteen college students were sampled regarding their mobile phone use and their perceptions of the technology. In line with preexisting research, this study shows that college students use their mobile phones to maintain a high level of connection with their families for both support and security, but that the technology can also become a distraction. This study also finds that mobile phones are used to manage the transition from living with family to adulthood that takes place while in college because of the support and security mobile phones offer to users. The conclusion is that mobile phones are undoubtedly influencing college student life and family relationships.

Chapter I

Introduction

Modern technology plays a profound role in everyday life in the developed world. It is a well-developed idea in sociology that technology can influence society as well as that society can also influence adaptation and use of a technology. The purpose of this study is to attempt to understand the interplay between technology and a specific aspect of society, the family. To this end, the study will examine how college students use the technology found in mobile phones and smart-phones to communicate with their families. For the purpose of this study, a smart-phone is a mobile phone with an internet connection that allows for email, social networking, and other forms of communication anywhere the user goes. The rationale behind studying this particular technology is that very little sociological research exists on the use of this type of mobile communication, and such a ubiquitous social connection is very likely to elicit changes in human interaction. It is important to study how technology can change social interactions, especially when the technology is new and widespread as are mobile phones.

Chen and Katz (2009) make an especially salient point about mobile phones and family interaction with the observation that “the mobile phone was used by teens to negotiate the boundaries between their childhood and adulthood with their parents” (142). A reasonable hypothesis might be that this mechanism is in play between college students and their families. The time spent in college traditionally functions as a transition

between teenage life and full adulthood (Arnett 2000; Lee, Meszaros and Colvin 2009). One aspect of this study will look at how the fairly new technology of mobile phones might affect the transition to adulthood. The ability to communicate more frequently with family members might help students handle college life better or might be a hindrance to reaching the full autonomy of adult life.

In addition to students having frequent contact with their parents, mobile phones also provide the potential for college students to be in near constant communication with peers. Furthermore, the more recent switch by many students to smart-phones makes frequent communication even easier, since these devices combine a mobile phone with the communication potential of the internet. Mobile internet capabilities allow students the possibility of sharing information with others at any time through social media sites and email. Because interactions can happen almost anywhere, an expectation of constant availability could become the new norm. This could create a different social order as described by Arminen (2007), "Mobile communications may be part of the development of an online society in which everyone is expected to be available all the time and everywhere" (433). The expectations and demands placed on people because of mobile phones are worth studying as they have the potential to significantly change social interactions. Furthermore, very few studies actually address smart-phones since their widespread usage is a recent phenomenon. The accessibility of multiple forms of communication made possible by smart-phone technology has the potential to change social interactions even more than standard mobile phones.

The final issue this study addresses is the meanings college students attribute to their family connections mediated through mobile phones. This issue looks at students'

perceptions and feelings about those familial relationships characterized by interactions predominantly via phones and the internet. There is the possibility for students to feel over-or-under-connected with family because of the comparatively new technology. However, previous studies have mostly failed to address the way students themselves perceive and feel about mobile phone mediated communication.

Chapter II

Theoretical Perspectives

Since this study looks at the intersection of two separate social phenomena, family and technology, it uses two primary theories. One is the Life Course Theory, regarding the roles individuals play at specific times in their lives. The second is the Social Construction of Technology, which examines how technology and the users of technology reciprocally influence each other. There is a lack of theories addressing families and technology directly at this time (Perry and Doherty 2003). Combining these two disparate theoretical perspectives is necessary for the topic of college students using mobile phone technology for family communication since using only one perspective elucidates only part of this societal aspect. After going into more detail on the two perspectives in the next few paragraphs, there are several broader issues pertaining to the technology of mobile phones in general.

The first theoretical framework is Life Course Theory. Life Course Theory is a series of broadly and tenuously connected ideas about how through life all individuals follow relatively similar paths, which are mediated by society (Mortimer and Shanahan 2003). Periods of time in a life course are called stages and are connected by transitions. Drawing from the stages of the Life Cycle (McGoldrick and Carter 1982), the transition between the Family with Adolescents stage and the Between Family stage is of particular interest for this study. This liminal stage of family interactions and relationships is

distinctly different from other stages and times, as described by Arnett (2000), because this in-between state combines aspects of the two stages into what should be considered a new life stage. This transitional position between two states is what this study is attempting to understand, determining how mobile phone technology might be influencing the transition.

Of particular interest within the Life Course Theory is the concept of a trajectory or a path of different roles an individual takes through life (Elder, Johnson and Crosnoe 2003:8). Transitions are the changes in life along a trajectory, and attending college can be considered one of these transitions (Pallas 2003). One focus in this study will be on how the technology of mobile phones mediates the transition into college. Young adults going away to college experience both personal and family level transitions because they relate to and interact with their families differently due to distance, time constraints, and other issues. From Life Course Theory, this study will look at how the technology of mobile phones influences this particular family stage. In all likelihood, the use of communication technology, like mobile phones, will blur this transition somewhat due to college students maintaining frequent contact with their families.

There are three underlying principles of Life Course Theory that are particularly important to this study. One is the Principle of Time and Place, which states that “The life course of individuals is embedded and shaped by the historical times and places they experience over their lifetime” (Elder, Johnson and Crosnoe 2003:12). This principle is relevant when looking at age differences of mobile phone users, since the technology is new and changes rapidly. Second is the Principle of Timing, which states that, “The developmental antecedent and consequence of life transitions, events, and behavioral

patterns vary according to their timing in a person's life" (Elder, Johnson and Crosnoe 2003:12). This principle is important to keep in mind when looking at how individuals use the technology differently, depending on where they are in the college transition. Third is the Principle of Linked Lives, where "Lives are lived interdependently and socio-historic influences are expressed through this network of shared relationships" (Elder, Johnson and Crosnoe 2003:13). This principle is valuable to keep in mind since the college transition is not just happening to college students but also to those associated with college students like families and friends.

The second idea used from Life Course Theory is the life stage Arnett (2000) calls Emerging Adulthood. Arnett argues that in most Western countries there is an extended period between adolescence and early adulthood in which individuals experience some elements of both life stages. This period is highly associated with college attendance, and "About one third of emerging adults go to college after high school and spend the next several years in some combination of independent living and continued reliance on adults" (Arnett 2000:471). Arnett (2000) also makes the point that this is a rather recent phenomenon primarily seen in industrial or post-industrial societies but is spreading due to globalization. Based on Arnett's (2000) insight, it is likely that communication technology, such mobile phones, acts to strengthen this trend in the life course, as emerging adults are able to interact with their families easily yet still maintain a level of autonomy.

The second broad theoretical perspective this study uses is the Social Construction of Technology (SCOT). One SCOT approach is to analyze how users modify the use and definition of technology. This theory focuses on the way a technology

is introduced and used in society and how competing relevant groups within society mediate the process (Pinch and Bijker 1984). The preliminary ideas from the SCOT perspective are less immediately relevant because they focus on how social interactions create and adapt a technology and less with the ways the technology changes social interactions. However, the SCOT perspective relates to mobile phones because the way they promote family relationships is not something inherent to the technology, but that individuals have readily modified the technology to suit their own communication and interaction needs.

More recent SCOT scholarship does take into account the importance of the users of technology. Notably, Oudshoorn and Pinch (2005) look at the co-construction of both technology and its users. The reciprocal interaction of co-construction affects both users and technology, and in the instance of this study, college students and families can potentially influence the uses of mobile phone technology and vice versa. Particularly important to this study is how the users, in this case college students and associated families, are influencing the technology. Of the main themes that arise in this study, one is the desire for a high level of communication and interaction with others, best embodied by mobile phone technology. The consumer demand to have an omnipresent connectivity has likely helped fuel the development of smart-phones and is an example of how users can influence technology. The desire for continued and instantaneous communication expressed by students and other groups in society may affect the shape and use of mobile phone technology.

For this study, the way the technology influences the user is more important than how the user affects the technology. Examining how technology influences users is not to

say technology use is predetermined but only that certain technological attributes lend themselves to certain usage patterns. For example, the portable technology of mobile phones lends itself more towards spontaneous communication than the fixed-location technology of landline phones. One aspect this study will look at is the different contexts in which students use mobile phone technology. A study of a widely used technology focusing on such a small segment of society cannot reveal every aspect of how the technology is used, but understanding mobile phone use in mediating family communication is important.

Chapter III

Literature Review

There are five broad themes regarding college student's family interactions through mobile phones: family communication, transitioning, generational differences, family type, and technology reliance. There is a fair amount of information regarding college students' use of mobile phones for interactions with their family members in the existing literature. However, the existing research is largely descriptive and fails to provide an explanatory framework for how the technology plays a role in this life transition. Much of the existing literature about mobile phones and the family focuses on usage by teenagers or maintaining a work/family balance, meaning previous research may not directly inform on college student-family interactions through mobile phones. There are undoubtedly differences in how a teenager living at home uses a mobile phone and how a student living away from home uses a mobile phone. However, these differences should not make certain comparisons invalid. As this study is taking place, the generation considered in most previous studies is progressing into college age at the time this study is taking place, so the general usage patterns shown by these studies likely remain similar.

The Mobile Phone in Society

Before delving into the specifics of the preexisting literature of mobile phones and family interactions, it is important to comment on the effects mobile phones as a

technology have had on society. Arminen (2007) writes that, “Mobile devices allow new emerging types of communication that enable or contribute to the development of new forms of social action having an impact on the patterns of establishment and maintenance of social networks” (432). Likely, the largest impact is the ability to continually be in touch with others. Turkle (2011) writes extensively about the social impacts on both individuals and society of adopting mobile phone technology to remain in touch almost everywhere. This connectivity can be a positive or negative depending on the situation an individual is in at the time. In the case of an emergency, the ability to contact help is extremely beneficial. The corollary to the beneficial connection is that the distraction of a phone call can detrimentally affect a person working or studying.

Levinson (2004) claims the mobile phone lets humanity enter a new mode of interaction, one different from previous methods of communication (49-52). Communication was in-person for most of human existence, which allowed the full range of human communication but was restricted by physical proximity. Communication then came to include writing, which allowed communication to travel time and space but lost some of the depth of face-to-face interaction. The final stage, according to Levinson (2004), involves the technologies of the television, the internet, and the telephone, with the mobile phone allowing people to leave the home with the full conveniences of the phone (52). Furthermore, the most recent communication technology of the smart-phone combines the phone, internet and even television into a single mobile device and allows for interactions in a way unlike previous modes of communication. In this stage of communication, people can share ideas instantly across long distances; indeed, there is almost no place one can truly avoid communication. This recent development and growth

of mobile phone technology is what makes the topic of college students' communication with their families via this technology important to study, since the technology provides innovative ways to interact, and the outcomes on family relationships and student life are unknown. The more recent technology of the smart-phone combines everything into an entire complex of communication technology, which allows interactions in a way unlike any previous mode of communication. While Levinson is writing before the spread of smart-phones, they are likely highly significant in expanding this newest mode of human communication.

Going beyond basic mobile phones, there are smart-phones, which are essentially hand held computers. Smart-phones combine two of the most significant technologies of contemporary life, the phone and the internet, into a single device small enough to carry in a pocket. Most of the existing studies on mobile phones were done before the widespread use of smart-phones. This lag in research means there are likely differences in the current use of this mobile phone technology. Of particular interest is the fact that all of the social media formats are found on smart-phones, making the technology both a source of interaction and a distracting gadget. There is a host of research looking at the effects of social media and how they function for communication and personal expression (Boellstorff 2008; Turkle 2011). However, this study will only note that the smart-phone acts as a convergence of several communication technologies and that this may greatly affect social interactions.

One particular issue with the ubiquity of mobile phones and their rapid acceptance into society is the difficulty of cultural norms catching up with the technology. The rapid spread of mobile phones to almost every segment of society, along with the pace of

technological change, leads to some difficulty in the study of this technology. As of February 2012, over half of American adults with a mobile phone owned some type of smart-phone, up 11 percent from the previous year (Smith 2012:2). As previously mentioned, smart-phones are a new type of technology not yet fully studied due to the technology changing and advancing so rapidly that social observers have difficulty keeping up. The ability to use the features of a mobile phone along with access to the internet has the possibility to significantly change social life and interactions because of the interaction potential.

Stepping back to observe the mobile phone as a technology through its use to humanity as a whole is also important. The philosopher Hans Jonas (1979) wrote about how technology has ethics and that people should consider the development of new technologies for their ethical and social implications. Individuals use mobile phones for both good and ill. Mobile phones connect distant people instantly wherever they are, leading to a more organic and natural style of interaction even when people are not geographically close. The mobile phone can also function as a trigger in explosive devices used to harm civilians. Any technology can have multiple impacts on everyday life, both for good and bad. Linking the idea of both positive and negative outcomes specifically to college students and family communication, the mobile phone has the positive impact of connecting students with family members but can also serve as a distraction from studying. Mobile phone technology is already entrenched in society and cannot easily be taken back, but future technological developments to mobile phones need to be studied for the possible ramifications they might have on social interactions.

Family Communication

One of the most general findings in studies of family and technology is that technology acts as a way for families to communicate and stay in touch. Communication technologies, like the internet and mobile phones, can serve as facilitators for extending family relationships across large geographic distances (Lanigan 2009; McMillian and Morrison 2006; Stern and Messer 2009). While this idea by itself is not surprising, the implications of technologies strengthening family bonds is interesting in light of popular images of technology negatively influencing family life. The concept that technology can act to maintain or even strengthen familial bonds separated by distance is crucial for this study, because it also informs how a family member going to college can ease the transition toward becoming a full adult.

A common finding in several studies points to technology facilitating and extending communication within families. This appears to be especially prevalent in college age people away from their families for the first time (McMillian and Morrison 2006; Toda, Satoko, Nishi, Mukai, Goto and Morimoto 2008). The studies above show how prevalent the internet and mobile phones are in maintaining family ties even across physical distances. Rather than being limited to the times when individuals are available near a landline phone, contemporary college students can interact with family almost anywhere through mobile phones.

Transitioning

Due to the potential for more family communication, mobile phones can also act to ease the transition to adulthood. This concept points to mobile phone technology changing family life by extending the family into other aspects of social life and in the

case of this study into college life. Rather than college functioning to separate the students from their families as they begin their adult lives, some current research suggests that mobile phone technology is permitting children to stay within a family dynamic longer by relying on communication technology instead of self-reliance (Arnett 2000; Sorokou and Weissbrod 2005). Since the transition to adulthood in the age of mobile phone communication is not very well represented in the literature, additional research needs to be conducted to determine if mobile phone technology is influencing the transition process.

Generational differences in technology use

A main concept from the Social Construction of Technology is that technology has design flexibility. This means that different groups have differing interpretations of how to use a technology (Pinch and Bijker 1984). This theory outlines a generational difference regarding mobile phone use. Devitt and Roker (2008) find that teenagers are much more likely to text to communicate with their families whereas parents are more likely to call. Turkle (2011) also find differences in technology use between younger and older generations. This indicates that there is a disparity in how different generational groups adopt and use mobile phone technology. However, at this time, there is also an underlying similarity as well. Many individuals, regardless of age, feel inundated with the responsibility of communication technology and the social pressure to be available to others at any time that mobile phones make possible (Turkle 2011:202). There is obviously a usage difference between people who grew up using the technology of mobile phones and the internet and those adopting it later in life. This is evident by the comfort of younger users with texting compared to older adults' preference of talking on

the phone. Therefore, it is interesting that the feeling of being overwhelmed by mobile phone connectivity is something present in both groups (Turkle 2011).

Stern and Messer (2009) find that age also plays an important role in the type of technology used. Their study of family communication over distances finds that respondents rely mostly on landline telephones, followed by email and then mobile phones. It is important to note that the sample in the Stern and Messer study are primarily middle-aged individuals with a mean age of 51 and a standard deviation of 15 (Stern and Messer 2009). Devitt and Roker (2009) also find that older people are less comfortable with using mobile phones. These findings show that for older individuals more established communication technologies are preferable. These results contrast with the findings of McMillan and Morrison (2006) that more mobile and younger individuals in their teens and twenties use newer technologies, like mobile phones, to stay in contact with family members. This means that college students are much more likely to be comfortable using newer technology, like cell phones, to interact with their families than are older individuals. Taking these findings, some inter-generational tensions could arise due to the use of mobile phones, which could have an impact on how college students are able to interact with their families.

Some studies find that mobile phones provided a way to communicate with family members about topics that are more difficult to broach face-to-face or when relationships are strained (Devitt and Roker 2008:192). There are also entertainment technology-based opportunities for facilitating inter-generational communication. Aarsand (2007) finds that young children living at home use the generational digital divide to initiate inter-generational communication by showing older family members how to use technology.

While Aarsand's (2007) study focuses on video games, a knowledge differential initiating communication is an interesting idea particularly with regard to technology.

Family Type

The level of closeness within a family before students go to college will of course affect the use mobile phones to communicate with family. In a study of Japanese college students, Toda et al. (2008) finds an association between the level of care, essentially the closeness between parents and children, in a family and mobile phone dependence.

Students from high care families are more likely to be dependent on a mobile phone than those from a low care family. Interestingly, the Toda et al. (2008) also find a positive association between loneliness and high care families. This association suggests that those children from families characterized by high levels of involvement tend to use technology, like mobile phones, as a way to maintain that level of association with their families when they are away from home. This trend may indicate why family members separated by distance often use this technology to maintain communication with each other. Furthermore, the use of technology to keep in touch with distant family members is an example of how the structure of families influences the use of a technology. It would be interesting to investigate other ways the structure and attitudes of families influence the use of a technology.

One study finds that for teenagers still living at home the mobile phone functions as a way to connect with family members when there are strained relationships within that family (Devitt and Roker 2008:192). It is unknown how this relates to college students, as they are not under the direct control of parents while living away from home. It might be that the same type of communication with distant or estranged family

members, such as a non-custodial parent, is easier in college since the student is out of the direct supervision of parents.

Lee, Mezaros and Colvin (2009) carry out a quantitative study of how college students use cell phones to interact with their families. Lee, Mezaros and Colvin (2009) find that college students use cell phones in order to maintain relationships with family members much more than for work related reasons (732). Palen and Hughes (2006) examine parents' utilization of mobile phones to extend the home and family and reveal a similar finding to Lee, Mezaros and Colvin (2009). Palen and Hughes (2006) find that for older children, including those away at college, the mobile phone enables students to maintain emotional connections with family members while away from home. In this instance, the mobile phone serves to maintain a feeling of family togetherness even when separated.

Need fulfillment is one of the main reasons college students stay connected to their families (Nasar, Hecht and Wener 2007; Sorokou and Weissbrod 2005). Sorokou and Weissbrod (2005) show that a major part of communication by college students with family members is due to needing something, such as emotional or material support. Nasar, Hecht and Wener (2007) also find that college students use the phone for a feeling of safety and for emergency contact in instances like a vehicle breakdown, along with an increase in risk taking behaviors because of the perceived safety net offered by mobile phones. These findings are in contrast to studies indicating that younger children use the mobile phone as a way to coordinate family events and keep parents informed of the children's whereabouts (Devitt and Roker 2009; Palen and Hughes 2007). As college students are typically away from home, this day-to-day coordination of plans is

unnecessary, meaning that college students likely use the technology differently than teenagers living at home. The primary use of mobile phone technology by college students appears to be for satisfying students' practical needs rather than for maintaining strong familial bonds as seen with younger children.

Technology does influence families in many ways just as families or any other aspect of society influences technology. While there are no studies directly showing family influence on technology progression, it is a reasonable hypothesis that families can influence and adapt technology to suit specific needs; in order to avoid a simple technological determinism viewpoint, it is important to understand how families can influence the use of mobile phone technology. Since mobile phone technology is relatively new, its style and use is still in flux. Working from the SCOT co-construction of technology perspective from Oudshoorn and Pinch (2003), the ways in which society influences how technology is adapted is as important as how technology influences society.

Reliance on the Technology

The reliance college students place on the technology of mobile phones is another issue in the literature, which is less connected to family specifically but still pertinent to this study. Students using the mobile phone for the majority of communication show one aspect of this reliance. Vincent (2006) states that mobile phones are a combination of a means of communication, the repository of contact information, and an extension of the user's memories in the form of messages and photos. When individuals are unable to use their phones, most people feel lost or at least uncomfortable. Alongside the communication aspect, the mobile phone also contains contact information, text

messages, photos, and personal information, all of which can create a very strong emotional connection and attachment in the user (Vincent 2006:41-42). The communication possibilities engendered by mobile phones also create an emotional attachment to the mobile phone itself (Vincent 2006:42). These various aspects of the mobile phone can be positive, but a high level of attachment, both in emotional and practical use, can create a problem if the technology is unavailable.

Turkle (2011) indicates another style of mobile phone reliance, which is the ability to use communication methods other than calling. Text messaging especially offers a way to step back from the perceived demands of phone calls, which often require an individual to be focused and quick-minded, in that texts instead give time to think and reflect on answers before responding (Turkle 2011:200). Text message communication is perceived to be less demanding of time and attention as well as offering a more polished presentation of self (Turkle 2011:200). Such findings suggest that basic social interactions are becoming much more onerous and difficult perhaps due to communication technology allowing one to bypass traditional interactions more often.

Gaps in the Literature

Several areas of study are missing in the current research on the topic of mobile phone usage. The use of smart-phones is one area in which little research has been done. This gap primarily results from the time it takes to publish research. Most recent publications report on data from the middle of the decade, before smart-phones were widely used. This point is important to the current study, because smart-phones are essentially mobile hand held computers with multiple interactive options, influencing social interactions and daily activities of the individual. The multiple communication

options offered by smart-phones quite likely influence the relationship between college students and their families, creating a new area of study.

Another understudied aspect of mobile phone usage is how college students use mobile phone technology for maintaining family relationships. Most of the existing research focuses on teens and younger children still living at home or on general mobile phone use by college students. The existing literature also lacks the context of how college students feel about their connection with family members when mediated through technology. Studies or information about the family relationships of college students in the literature are very brief descriptive works and do not provide a depth of data about perceptions. Such a lack of valid studies leaves the context in which college students use their mobile phones and the reasons behind such usage unclear. While some gaps are present in the literature on mobile phone use for college student-family relationships, there is a clear need for research on new smart-phone technology and the general context in which students use mobile phones.

Chapter IV

Methodology

Research Questions

This study will examine three primary research questions, all of which involve the perceptions of college students regarding their mobile phone use.

RQ1: How are college students using mobile phones for managing the transition between their family life and college life?

RQ2: How do students perceive the quality and quantity of communication with their families when mediated through the mobile phone?

RQ3: What are the effects on everyday life from the potential for communication at any time provided by mobile phone technology?

Research Question One looks at how mobile phones are influencing the way families communicate and interact across physical distances. What changes do college students perceive in their family relationships due to their use of this technology? There are likely many different ways for mobile phone technology to be used that would change or influence family interactions. Consequently, the study will ask how college students use mobile phone technology to maintain relationships with their families while they transition from life with their families to life as adults. Within the overall theme of Research Question One, more focused questions are investigated.

Research Question Two examines how students feel about the quantity and quality

of communication with their families through the medium of the mobile phone. This area of inquiry includes asking students how they perceive the relationship they maintain with their families through mobile phones when compared with earlier face-to-face interactions. Research Question Two also investigates how users view the technology of mobile phones and how they change the function of the technology to suit their family interactions.

Research Question Three focuses on how mobile phones can potentially influence the respondents' behavior, due to the potential for frequent connection with others. Any such influence would presumably be an instance of the technology affecting the user, in this case by providing a different communication style than is possible without the technology. Questions relating to this potential influence will determine if respondents have perceived any changes in their everyday life due to the continuous availability of mobile phones and to what extent such access has changed their actions.

Methodology

This study used a qualitative research method. One of the goals of qualitative research is to gain an understanding of the context behind the actions people take. Esterburg (2002) states that, "Qualitative researchers try to understand the meanings of social events for those who are involved in them" (2-3). For a study looking at family communication mediated by technology, a qualitative face-to-face interview approach was likely to yield the best results. Because this topic is understudied, quantitative data would not provide a context in which to examine any information gained. Conducting semi-structured interviews of college students provided a better understanding of the context in which they use the technology for maintaining their family relationships. A

quantitative survey would only give a crude sense of how often students use the technology to interact their families, not the context or reason for doing so. In-depth interviews offer a richer understanding of the context in which students use mobile phones and the meanings they attribute to their mobile phone interactions.

The focus of this study was how students use mobile phones for communications with their families during the transition from living with parents to living away at college. To best capture this transition period, younger college students, especially first year students, were the primary subject of this study. While it was important to note that individuals of varying ages attend college, the population this study focused on was traditional college students, defined as students in their late teens to early twenties, who were still in close contact with their families, rather than older or more autonomous college students, who may interact less with family members. A small number of older students were included in the study to act as a comparison for the mobile phone use of younger students.

Since the participant pool for this study was college students who use mobile phone technology, gaining access to interviewees was not problematic. First, to gain initial respondents, fliers were posted around classrooms frequented by entry-level undergraduate students, seeking participants who fit the criteria of the study. Next, snowball sampling from the initial contacts was used to expand the study population. Due to the broad focus of this study, the majority of undergraduate students on campus were eligible to provide research data.

Sample Characteristics

The sample for this study was 15 students from a large, public university in the Southwestern United States (Appendix A). All the respondents in this study were college students currently in an undergraduate program. All respondents used a mobile phone. Five owned a standard mobile phone and ten owned a smart-phone. For this study, a smart-phone is defined as any mobile phone that enables easy mobile internet access. The age range was from 19 to 53 with most respondents being in their early twenties. Two older students were included in the study to act as a comparison to younger respondents who grew up with mobile phone technology. The gender demographics of the study were five men and ten women. Most respondents lived at least three hours away from their families and relied heavily on communication technology to remain in contact with family members. Certain demographic information like race and socio-economic background were outside the range of this study and are not included. This decision was based on data suggesting that race and socio-economic status are not significant variables in contemporary American society when looking specifically at mobile phone use in college age individuals (Smith 2010). Pseudonyms replaced all respondent's names to preserve anonymity. Other identifying factors, like college names and towns of origin, were also changed.

Data Collection

Interview questions were designed to elicit self-reflexivity in the respondents, in other words, to make them consider why they use the technology as they do. The interviews were collected in semi-structured face-to-face interviews held at public coffee shops on or near the college campus. Semi-structured interviews allowed the flexibility

for respondents to talk about what was important to them regarding using mobile phones for their family communications, while still staying focused on answering the research questions. These interviews allowed enough time to gather information outlining how and why students use mobile phones to communicate with family as well as the context the individual student assigns these actions. The gaps in the literature on this aspect of social life were small and the research questions fairly narrow; therefore, the interview questions were focused in such a way that most interviews elucidated the desired points quite clearly. Also, as this study was essentially exploratory research on this particular topic, the generalized insights provided by the data were important for directing future studies on this issue.

Data Analysis

The transcripts were reviewed several times utilizing open coding in order to identify broad, common themes and issues that respondents mentioned in the interviews. Open coding was a way to find broad commonalities since “you work intensively with your data, line by line, identifying themes and categories that seem of interest” (Esterberg 2002:158). These broad themes were condensed and explored with focused coding to account for the commonalities experienced by individuals. Focused coding was done on the previously found themes to compare issues between individuals. Esterberg (2002) described, “Focused coding entails going through your data line by line, but this time you focus on those key themes you identified during open coding” (161). Most of the issues discussed in the findings were commonalities shared by many respondents. When there were differing themes present in the sample, divergent explanations were attempted to account for these findings.

Chapter V

Findings

There were six major themes present in the respondent data: 1) age and generational differences, 2) technology differences, 3) distractions, 4) support, 5) security, and 6) transitions. There were obvious differences in how the respondents, who adopted mobile phones early or later in life, used the technology. There was a large difference in the experiences and technological capabilities of users of smart-phones and users of traditional mobile phones. Mobile phones acted as a method of gaining family support, both emotional and material, for students. Related to family support was the use of mobile phones for transitioning from living with parents to becoming an autonomous adult, and how communication technology can both help and hinder this transition. An important issue to several respondents was the security provided by mobile phones due to the means to contact help in case of emergencies. The final theme many respondents expressed is the mobile phone as a source of distractions in the form of texts, calls, and entertainment while trying to work or study.

Age Differences

One issue was the difference in mobile phone use between younger and older students. Several of the younger students, especially freshmen, found it difficult to avoid using their phones while studying or in class. This younger age group assigned a slightly higher priority to connectivity, and being disconnected was at the least an inconvenience

for younger students. However, even among younger students, this was not a rampant issue. As Kara (Female, 20 years old) put it, “If I’m in class or at work I just put it on silent and leave it in my bag. When I have time to actually get back to people, that’s when I look at my phone.” Older students had fewer issues with disconnecting from the phone. In addition, they found it is less difficult overall to avoid using the phone during work or school time. A quote from Daniel (Male, 25 years old) highlighted this clearly: “Well, I’m pretty good with my school stuff, when I go to class or the library I either turn it off or don’t bring it. I don’t really mess with my phone if I’m studying at all.” No students reported that it was very difficult to stay focused, only that it was a temptation to check their phone. In this instance, it is unclear if the younger respondents truthfully were not letting mobile phone be a distraction, or if they were downplaying the effect the technology had on their productivity.

Younger students were understandably more connected with family members, especially parents, than were older students. One example came from Greg (Male, 22 years old), who said “I’ll probably talk to one of my family members at least once a day on the phone, as opposed to texting, and maybe get about two texts a day from my mom in particular.” Several students recalled that during their early days in college they would have more contact with parents. Kara said of her parents, “When I first came here they would call every day to see how I was, but as time went on they call less often, kind of eased off a little.” It was not unexpected that early in the college transition that students would communicate more frequently with their family members as they handled the transition to adulthood. The above examples suggest that students communicate with their families frequently, which was likely in large part due to technology like the mobile

phone. Without having to rely on pay phones and letter writing as older generations of college students did, contemporary students can use their phone at almost any time to check with their families or ask for support. This means that even some students who had by contemporary standards fairly limited contact with family members may nonetheless communicate with parents more frequently than did previous generations of college students.

The older students, typically senior level students, did not have as strong or dependent relationships with their families. Older students were more self-reliant and had more independence from family connections. That is not to say that older students did not maintain relationships with their families through the mobile phone, only that the relationships were less dependent. Daniel said of his parental relationship, "I think when I started I called my parents more for financial and moral support, you know for help, I guess since I'm older I just call to let them know how I am doing, not really for help." This statement typified how several upper level students in this study related with their families on a more equal basis rather than in dependent roles. As reported above, the findings implied that mobile phones do work to manage the transitional stage during college, since there was more frequent communication early in students' college experiences and then a lessening as the students became more independent.

The two non-traditional students, in this case significantly older than traditional students (39 and 53 years old) and well established in adult life, reported using their mobile phones often for family matters. One student used the phone to check on an elderly mother, while the other used the phone to communicate with her own children and spouse. In these students' cases, they had transitioned from the supported role into the

support role, yet mobile phones remained a very important component of their experience. Even those who did not grow up with the technology appreciated the convenience of mobile phones. Lisa (Female, 53 years old) described communication before and after mobile phones, “phone calls home [before mobile phones] were brief, it was just to hear someone's voice, not to convey any real information. Now I can call my mother and talk for an hour without worrying about it, we have gotten a lot closer.” The other non-traditional student, Henrietta (Female, 39 years old), used her phone to manage the difficulties of having a family during college, “My older son texts me three to four times a day and my younger [son] more often about school and chores, so I'm probably using it at least every two hours. My husband will check in too because our schedules conflict and we have to coordinate our plans everyday.” While these examples regarding older users were not the focus of the study, it was interesting how users can adapt mobile phone technology to handle their specific life needs.

The different uses of mobile phone technology by non-traditional students ties in with the Life Course Principle of Timing. One facet of this principle is that individuals who experience transitions out of order may have problems or transition pile ups (Elder, Johnson and Crosnoe 2003). The two older students in this study were experiencing college at a later point in life than traditional students, and could potentially experience a pile up of transitions and expected roles because of this age difference. Their described mobile phone use shows how technology helps them manage the different role expectations. Henrietta was able to arrange her family schedule while on campus, meaning she was able to manage two different role expectations at the same time because of mobile phone technology. The frequent connectivity offered by mobile phones allowed

more opportunities to fulfill the multiple roles expected of non-traditional students.

Between students in this study and their older family members, there were some interesting differences in mobile phone use. One difference was the ease of use that younger participants described with using mobile phones, as a group raised immersed in the technology. Several respondents mentioned that their family members had only started using aspects of mobile phone technology recently. A typical statement to this effect was from Kim (Female, 21 years old), “Well my parents just learned to text like maybe two years ago.” Another interesting finding was the differing norms about mobile phone use expressed by different age groups. A different standard of acceptable texting protocol was something several respondents tangentially conveyed. Kara talked about her mother's phone etiquette, “My mom likes to use text talk, like the letter R and the letter U in place of words. I like to spell things out correctly, it’s funny to see her do that, I feel like I'm back in middle school.” The previous quote interestingly showed something of a generational difference in the accepted use of a technology. This generational difference was related to the SCOT perspective by showing the interpretive flexibility of technology, since mobile phones were used in different ways depending on the needs of the user.

Considering different age groups as different relevant users gives a better understanding of how the interpretive flexibility of technology is at work in mobile phones. For example, parents and their children as college students are two groups with differing views on how mobile phone technology should be used. Descriptions of parents showed they wanted mobile phones that enabled them to check on their college age children frequently. Students early in college life seem to be copasetic with this desire for contact as it offers the students support. As students advance in self-reliance, they are

more likely to want less mobile phone communication with family members. It is likely that there is some tension between parents and more advanced college students over the desired use of mobile phones, since these two groups have slightly different opinions on how the technology should be used.

The differences in mobile phone use by age can also be applied to the Life Course Principle of Time and Place. This principle is based on the idea that individual life courses are influenced by time and place in which they are lived (Elder, Johnson and Crosnoe 2003). Because mobile phone technology is relatively new and has changed rapidly over the time it has been available, different individuals of different ages will have had different experiences with using mobile phones. This does not mean that individuals are bound by what technology they experienced over their life course, and for example, a middle-age individual might extensively use mobile phones while an adolescent might not use one at all. However, there is a general trend that individuals who grew up using mobile phones are more comfortable using the technology, and that the technology is more embedded in their lived experiences than a late adopter of the technology.

There was no consistent rule for how age affected mobile phone use or family interactions. The respondents in this study varied both within and between age groups. It was surprising the extent of diversity exhibited by such a small sample since many respondents did not conform to the generalized expectations of their age groups. Younger students might have been rather autonomous while graduating seniors might have remained quite reliant on their family connections. The unique circumstances of individual respondents mattered more in their connection with family than age. However,

as a general trend, younger students were more reliant on their families when compared to older students, regardless of the level of closeness in their relationships.

Technology Differences

The most consistent finding of this study was that texting was the preferred means of communication for these college students. Respondents reported text messaging as the most common use of their mobile phone, and many reported texting as their preferred method for communication via the mobile phone. One of the main appeals of texting for respondents was the closed nature of the format. The desire to control the pace and presentation of self that text messaging allowed was a trend also noted by Turkle (2011). Carla (Female, 23 years old) recounted, "I text my family a lot because I feel it's just too much to call because they would talk too much, but texts keep it at a minimum." For student-family communications, text messaging was important for students because they had some control over the quantity of their family interactions, shown by the above quote by Carla. This was one of the most powerful draws for respondents to text messaging over other methods of communication provided by mobile phones. The ability to manage the amount of communication sent and received was a facet of text messages most respondents strongly appreciated.

The appreciation younger students had for text messaging can also be related to the Life Course Principle of Time and Place because these younger individuals grew up using this technology and are usually more comfortable with it than those who started using text messaging later in life. Working from the Principle of Time and Place it is a reasonable assumption that individuals who spent their adolescence socializing and interacting with others extensively through text messaging are likely to continue to use

text messaging technology as they continue in life. While all respondents used text messaging at times, it was younger respondents who reported the most use of this technology.

Phone calls were still important for several of the respondents. One reason for this was the closer connection and ability to share more information than possible with a text message. Jenna (Female, 29 years old) summed up this point, “Well, it depends on what I’m trying to communicate to them. If it’s just something random I want to tell them and don’t need a response I’ll text, but if I need to talk with them about a subject matter I need a response to, I’ll call them.” Greg reported easily switching between both styles of communication, “I would say maybe a little more text messages, but I have no problems calling them and they have no problems calling me. I’ll probably talk to one of my family members at least once a day on the phone as opposed to texting; and maybe get about two texts a day from my mom in particular.” The primary idea from respondents is that while they used both text messages and phone calls, there tended to be a reason behind which method they choose related to what they wanted to communicate. The amount of data and the importance of the information appeared to be a determining factor in which method of communication the students used.

There was a definitive difference in the experiences of students with smart-phones and those without. Of the fifteen participants in this study, ten of them used smart-phones. The primary difference between mobile phones and smart-phones was the ability and ease of using the internet on their phone, leading to different communication experiences for the users. Those respondents who owned a smart-phone often made extensive use of the internet, Lorenzo (Male, 23 years old) even went so far as to say, “I

would say I use the internet on my phone more than my laptop.” There were many communication programs and applications designed for smart-phones that provided a variety of interactions. All ten respondents with smart-phones made extensive use of social media sites, especially Facebook, for their interactions with both their peers and families. The instant messaging aspect of Facebook was an especially valued point for the respondents who used Facebook for their family communications. Smart-phones also allowed for more than just email and social media. Four smart-phone users mentioned Foursquare, a program that allowed people to track an individual’s physical location when they check into the system, for example allowing friends to know when and where you were dining. The use of this particular program was likely an extension of the desire to be in constant contact with peers. Another popular program was Twitter, although the three respondents who reported this did not elaborate if they used this particular application for following others or for posting their own circumstances or both. Another application mentioned by two respondents was Skype, which allowed face-to-face chat through a smart-phone. While some students made extensive use of internet applications, like those previously mentioned, texting was still the most popular method of communication through the mobile phone. The effect of smart-phone technology on student-family interactions was the potential for more forms of interaction, for instance chatting with family members over Facebook.

When asked why they used a phone over other communication technology mediums like a laptop, the respondents’ answers universally revolved around the convenience of the mobile phone. Tom (Male, 26 years old) summed up this point, “Definitely more convenient. I don't mind a computer but it’s just hot and you have to lug

it around.” Respondents in this study preferred their mobile phones for social tasks to a larger traditional computer. The corollary to this finding is that respondents reported they prefer a standard computer for other tasks like school or writing papers. While it is unlikely that full-sized computers will fade away anytime soon, the responses in this study suggested that college students favor small, portable communication technologies for social media and interpersonal communication. This was in line with the SCOT perspective from Pinch and Bijker (1984), in that relevant users define how a technology is shaped and used.

The final facet of technology differences was between mobile phone communication and face-to-face interactions. Most respondents reported they had little to no difficulty in maintaining relationships outside of face-to-face interactions, specifically due to the several interaction possibilities provided by mobile phone technology. Greg's viewpoint on the differences between mobile phone and face-to-face communication was pragmatic: “There is a need to see them [family] in person once in awhile, but as long as we get to talk, we get to talk. So, it doesn't reduce the quality of our conversation, we're still open.” No respondents preferred mobile phone communication to face-to-face interactions, but for long distance interactions, the mobile phone was definitely favored.

Despite mobile phone being adequate for long distances, most respondents felt that face-to-face interaction was preferable to communication over the phone. Jen

(Female, 20 years old) noted:

I would say [communication by mobile phone is] more difficult. I think if anything, communicating with anyone is difficult through the phone versus face-to-face because with texting so many emotions can be lost. You know, you can take certain things the wrong way. So I would say that communication overall is better face-to-face.

Greg was slightly less negative about over the phone communication, “It is a little, it is a little harder because there just is, there's a lot more than can be expressed in person. A lot of non-verbal communication but still you can get the point across through my mobile devices.” This was a personal variable rather than any generalizable trend in students. The only commonality across all respondents on this topic was that the mobile phone was better than communicating via older types of long distance communication such as writing letters.

Several researchers (Lanigan 2009; Levinson 2004; Turkle 2011) pointed to mobile phone users as becoming overly reliant on the technology to the point of changing social expectations. Turkle (2011) went so far as to say, “We expect more from technology and less from each other” (xiii). This viewpoint makes it seem as if technology was alienating individuals from each other even as it offered more communication possibilities. However, the respondents in this study, whether they used a standard or smart-phone, perceived mobile phones simply as a tool for communication. At least regarding mobile phone use for family communication, the respondents did not show the same type of technology obsession as discussed by the researchers above. That is not to say the communication and interaction potential engendered by mobile phones did not affect the experiences and expectations of college students, only that the sweeping changes outlined especially by Turkle (2011) were not evident in this study.

Distractions

Respondents reported that mobile phones had several positive features, such as more frequent family interactions, but they also served as sources of distraction for college students. This distraction came in the form of unwanted calls and texts from their

families and friends or, with smart-phones, the distractions provided by the internet. Mobile phones were a distraction for students, especially in class and during studying. The type and intensity of the distraction varied for each respondent and, while mobile phones were widely liked, almost everyone had some issue or another with mobile phone distraction.

By far, the most common distraction was from text messages, as eleven respondents mentioned this. Kim mentioned her anxiousness over being disconnected, “I’ll admit when my phone is right next to me it’s like I don’t know who is calling me so at my other job I would go to the bathroom to check my phone every once and a while. I always feel like I’m missing a text or missing a phone call.” This anxiety about being disconnected was something several students expressed. It was also difficult for students when trying to study. As Jen put it, “I definitely say it poses a big distraction in class and in the library and in studying and stuff. Obviously, it doesn’t have to pose a distraction like if you show a little bit of self-discipline and put the phone away, but if you can’t show self-discipline, then it distracts you a lot.” The distraction of receiving contact from others reported by the students in this study likely reflected a larger societal trend of mobile phones as distractions, as pointed out by (Turkle 2011). As being in near constant contact with others becomes the norm in society with the expansion of mobile phone technology, distractions from mobile phones can potentially develop into more of an issue in the future. It was not just the allure of messages and the interactions mobile phone offered but outright distractions coming from others. Molly (Female, 25 years old) reported her most common distraction, “It’s friends. Most of them aren’t in college so they get off work and want to hang out, and they can’t understand I need to study and

can't go out.” This example suggested that sometimes the distraction does not just arise from a lack of willpower on the part of students but can come from other people as well. Whatever the reason behind the distraction, the amount of connectivity expected in everyday life was a troubling trend. Referring to Molly’s comment above, it was harder in the age of mobile phone connectivity to avoid communication with others, even when trying to focus on studying, because most people had their mobile phones wherever they went.

Another distraction tied directly to family relationships was a few students reported that they had received phone calls from their families at inopportune times. The most common type of family distraction occurred when a parent wanted to talk with the student and the student was uninterested in having a conversation. Tom shared his experiences regarding parental phone calls, “They just want to tell stories.” There was a disjunction between what the parent wanted and what the student wanted regarding communication. It appears parents wanted to talk and socialize while the students did not. Carla had found a way to deal with her mother's frequent phone calls:

Well knowing that I don't have to answer the phone makes it easier on me because I can see when my parents call and I don't have to answer because they'll talk forever, my mom talks forever and I have to cut her off because I can't deal with that. But yeah, also if I am busy I can't answer the phone all the time and it gives me power, if I do want to talk or I don't.

The above responses are related to a preference for texting over calling among most students because of the brevity and control they could exert on the conversation. Tom exemplified this text messaging preference by saying, “I try to get them to text more. It's easier sometimes. You don't have to stay on the phone as long. I guess they say so much more whenever you're on the phone with them; it's easier having them get it out there

quick and simple.” Students greatly appreciated conversations and interactions with their families but only when convenient for themselves.

A surprising finding in this study was that five respondents, typically higher-level students, reported negative responses regarding being constantly connected. Daniel went so far as to say:

I'll tell you what the most free I ever felt was when I studied abroad and left my phone behind, it was awesome because I did not talk to anyone for six months from here, I didn't have a phone and only email every so often. When I came back, I wanted the phone back but it was nice not being bombarded with texts or voice mails, all that garbage.

This type of response was common, reported to some degree by eight respondents, and cut across age lines. While some respondents wished they were not beholden to others through the phone as much, none gave the impression of being ready to give up using the mobile phone. It appears that respondents viewed having a mobile phone as one more necessary part of life, one that was both rewarding and distracting.

Support

While there was quite a lot of variability in which family members the respondents contact via the phone, the reasons behind the contact were very similar across the sample. Contact was made for reasons of emotional support for the students and their families and material support for the college students. It appears both the students and their families viewed college as a period of diminished ability to support oneself. Because of this perceived lessened self-reliance, many students reported asking for or receiving financial support or knowledge about dealing with issues in everyday life.

Several students mentioned some type of knowledge support, which is when students called older family members for practical answers and advice on everyday issues. Most students, who reported they sought knowledge support, only casually mentioned this issue, typically when referencing help with cars and bill paying. This help was a very generalized type of support in coping with life away from family. Kirk (Male, 19 years old) mentioned that sometimes he needed information from his parents, “It's only at the time I need to know a Social Security number or other pertinent information I don't have access to [that I call my family for answers].” The more common issue of financial support was fairly straightforward since seven of the fifteen students in this study were not employed and depended primarily on money from various family members. Very often, this required short transfers of information, typically text messages. For Carla, this even created some family tension, “Well a lot of it [family communication] has to do with the bank or my medical insurance, important things. I really should text them to see how they are doing. So just important business stuff and they get mad because I only text about the car and stuff.” The support that younger and less advanced college students relied on was expected, but this support did not mean that the dependent students were parasitically leaching money from older family members. The connection and help provided to students can actually improve and mature relationships between college students and their families.

Of particular interest, one student recounted how the need for financial support actually led to a stronger relationship with his grandfather. Tim (Male, 20 years old) reported that:

Before I came here, they were very grandparent, you know how you doing, pinch the cheeks kind of thing. Now it's, we do talk logistics because it is his money, so we began to talk logistics, we have begun to talk and I'm seeing how he's doing, he's telling me about his day, I've become closer, an equal with my grandpa.

In this case, the support situation strengthened and matured the family relationship that was in place. An example like this perfectly highlighted the theme of the transition, discussed later in the findings. It was likely that the interaction described above also was tied to emotional support, an idea linked with material and knowledge support.

Emotional support was much more difficult to research since only a few participants mentioned emotional support specifically. Greg tangentially mentioned emotional support when he said, "If I ever have, like I said, a problem, or I'm just feeling down, or just want to talk, it's definitely good to have the capability to talk them anytime I please." Karen (Female, 19 years old) also talked about the importance of staying in touch with family: "I feel like I'm closer to them now because I'm so far away and I talk to them." The emotional support was dependent more on the individual rather than age and was likely related to idiosyncratic family characteristics. With emotional support, it was not just from parents to college students. Several participants mentioned using the phone to check on their family members to see how they were doing, providing reciprocal support. This was especially common in older college students who no longer had such a dependent relationship with older family members.

The topic of emotional support only arose tangentially in the interviews, typically in mentioning frequent and regular family conversations. It also appeared to be inversely connected to age, as those respondents, who mentioned having more conversations with families, rather than just information exchanges, were younger. There also was a hint of gender norms present in the answers from the respondents. Male respondents were

generally less likely to mention needing to talk with family as well as more male respondents noted longer periods between calling their family members. Most male respondents also reported when they called parents it was for knowledge or financial support, and few mentioned the need for emotional support or contact.

Security

Somewhat related to support but conceptually different was the use of the mobile phone as a source of security. One example of security was the ability to reach others, especially parents, if there was some type of emergency. Molly had an emergency while jogging, "I was jogging for a class and hurt myself. The class was ahead of me and I was all by myself, lucky I had my phone, if I didn't have it I couldn't have called my mom to come get me. I injured my knee to where I couldn't even walk." Additionally, Carla mentioned a car accident:

I had an accident on the highway one time and that's the only time I can think about using my phone for an emergency. I was shaking and went to the side of the road, I did not know who to call so I called my dad and was all upset you know, because I had no way to get my car back and everyone was honking at me. I was shaking and trying to dial like 'who do I call' so I guess at that moment I called my dad, I guess that is who I thought was dependable so that's who I called, like who would answer.

In both of the above cases, the immediacy of reaching help was what set mobile phones apart from other communication methods like pay phones. The immediacy of communication when problems came up allowed students more freedom, since they had what they perceived as a safety net. This finding was in line with the study by Nasar, Hecht and Wener (2007), that the feeling of safety offered by mobile phones could lead to more risk taking behaviors by students as they had help close at hand.

The importance of mobile phones to college students for emergencies was something students only seemed to understand after having need of it. There was likely a commensurate desire for this security from families as well, which might be one driving force in students having mobile phones. There was also a gender division in this theme, as all respondents who reported the value of security were female. It is unclear if this was due to male students not disclosing the need for security, or if generally females valued the security provided by mobile phone technology.

The other main type of security mobile phones provided was a feeling of being connected at all times. Many students reported being uncomfortable when they could not use their phones. One student, Molly, was unsure how to handle problems without her phone, "It's very positive, like during an emergency I have it with me, I can call the police or my mom. If I didn't have it, what would I do?" In this use, the mobile phone worked almost like a security blanket, providing a certain peace of mind for the user. This near fear of being disconnected from others was a trend previous literature suggested was becoming more common due to the prevalence of mobile phones.

Some students perceived the state of constant interconnectedness with their friends and families as their normal state of being. The students who reported this often assigned a negative context on being away from their phones for short times like class or work. Greg mentioned his feeling about having his phone off at work, "It is a little strange with your communication technology you feel without it, like disconnected. Definitely, you definitely feel disconnected." When prompted, most had no idea what they would do to maintain their family relationships if they did not have mobile phone technology. Most students reported a true reliance on their mobile phone, both

emotionally and literally, for living everyday life. This reliance showed a difference in lived experience from college students before mobile phone technology, since previous generations would have needed to be with others or near a pay phone to feel the same type of security described by the respondents in the examples above.

The security offered by mobile phone connectivity is even more important when considering the Life Course Principle of Linked Lives. Due to the almost omnipresent connection available between mobile phone owners, lives are linked not just interdependently but literally through the ability to communicate and share information via mobile phones. It seemed like most students saw this omnipresent connectivity, and the linked interdependence that the connectivity engenders, as a normal part of everyday life. This connection with others, especially family members who can offer support and security, is very important concerning the next section on transitions.

Transitions

Referring back to The Life Course Theory, the period of leaving home for college is a transition (Pallas 2003). The period of time during which students are transitioning places them in a liminal state between two stages of life. Liminality is a concept developed by Turner (1994), looking at the stage of existence between two roles. The liminal state can be applied to college life because students have a mix of roles from other life stages, a general example would be the need to study and the need for housing. Mobile phones can help students manage this liminal state by obtaining support from family members for housing, but the same phone might distract students from studying. All of the above ideas apply to traditional college students; non-traditional students may experience varying degrees of this liminal period.

The research showed the way students used mobile phone technology as a tool in their transition from childhood to adulthood. Generally, for traditional students, college was a time of transition from living at home with parents to living on their own as adults. In the past, a drop in communication and interaction with families, especially parents, marked this transition as many students moved away from home to attend college. With the rapid proliferation and infiltration of mobile phone technology into society over the past two decades, this new way of communicating may have changed this transitional period. The previous themes of support and security were associated with transitions. From the Life Course perspective, college life mediated students' transitions from living with their families to becoming autonomous adults. Reports from respondents suggested that mobile phones allowed more opportunities to stay in this liminal state longer during college since they relied on instant contact with parents or could ignore contact, depending on personal preference.

Several students actually pointed to examples of how their relationships with family members changed for the better because of mobile phones. One particularly strong example from Karen was about forging a closer relationship with family over the mobile phone. She stated that the distance made their relationship even more valuable, "I feel like I've gotten closer to them, even though they live in El Paso and I never get to see them. I feel like I'm closer to them now because I'm so far away and I talk to them." Kara also mentioned maintaining a long distance family bond, "I think it does make our bond stronger, because there is no excuse not to communicate with them now with all these means of communication." The above examples showed how mobile phones could change social and family life. While any phone technology permits communication,

mobile phones allowed a more organic style of communication because of the frequency and ease of communication. This is likely what the above respondents were referring to when talking about becoming closer to family members, since family interactions can take place over mobile phones even when both parties were not at a fixed location. Since students used mobile phones to communicate with families often, the transition may not just toward one of autonomy but one toward a more mature and equal relationship with family members.

Relating back to the idea of support, some older students were cognizant of the transition they experienced in relation to their dependence on their parents. Kim mentioned her past connection with family, “I think I talked to my parents and sisters like everyday then, well my freshmen year.” Daniel also remembered his previous phone use, “I think when I started [college] I called my parents more for financial and moral support, you know for help, I guess since I'm older I just call to let them know how I am doing, not really for help.” Responses like these indicated that at least for some people there was a gradual lessening of family reliance through the course of college. This lessening of family reliance relates back to college as being a time to develop into an autonomous adult. As mentioned earlier, Arnett's (2000) Theory of Emerging Adulthood is relevant regarding students' mobile phone use, as more frequent communication influenced their transitions because there was more opportunity for reliance on parents.

The possibility for more familial interactions offered by mobile phones changed the transitional period of college for the respondents in this study. Combining the two previous and interrelated themes of support and security into the theme of transition, the mobile phone appeared to delay the development of self-reliance associated with adult

life because students could simply communicate with their families for support. This dependence does not mean that contemporary students were fated to be unprepared for life, only that the transition to autonomous adult can be delayed due to mobile phone technology. Furthermore, it could be that gender norms also played a part to some extent in how mobile phones influenced the transitional period. As mentioned early, women reported more instances of using mobile phones for emotional support and security. Therefore, it is likely that there were some differences in the lived experiences of men and women regarding how mobile phones were used to negotiate the transition during college. Regardless of gender differences, mobile phones still significantly influenced how students managed their transitions through college.

Chapter VI

Discussion and Conclusion

The most succinct summary of this research is that individuals use mobile phones as a crutch for both emotions and responsibility. This has positive and negative outcomes for individuals. Mobile phones can serve to improve family connections, or to delay a young student's transition into adult responsibility. Overall, the respondents tend to express positive outcomes from their mobile phone use but, at the same time, they mention issues that appear negative to an outsider.

Research Question One asks how students use mobile phones to transition into adult life. The most significant use of the mobile phone is to increase the quantity of communication that college students can have with their families. College students can call or text at almost any time to ask questions or receive support from family members rather than be restricted to times when people are available on a landline phone. The ability to rely on family for support translates to students not needing to be as self-reliant for issues like money or information. Already clear patterns are evident. For instance mobile phones have the potential to influence the transition to adulthood. A positive influence is by helping the students feel more secure and providing greater knowledge to deal with problems that arise. Negative influences include stunting the development of self-reliance due to the tether of the mobile phone. The influence of mobile phones on the transition process can be both positive and negative. Either way mobile phones are

relevant. The students in the study do show a progression across the age range towards more autonomy, and mobile phones play an interesting role in that dynamic.

Research Question Two asks if students perceive a difference in the quality and quantity of communication with their family when interactions are mediated through mobile phones. The results are nuanced and intriguing, and as this new technology spreads through society, users recognize pros and cons to mobile phone communication. A few students report that both the quality and quantity of communication have increased when using mobile phones. However, many students, especially older and more established ones, report a general decline in quality and quantity of family communication. This decline in family communication is an expected result because as individuals transition into adulthood, the reliance on their families is likely to diminish. While not everyone perceives quality in the same way, there is little doubt that mobile phones allow students more possibilities for communication with their families. Related to the additional interaction options offered by mobile phones is the maintenance of a more organic and natural style of communication that is less formal than other long distance communication styles like pay phones and mail. The general consensus from the respondents is that the ability to communicate with their families engendered by mobile phones is a positive thing regardless of the interactions the individual may have.

Research Question Three asks how mobile phone technology and the potential for constant communication affect social life. As mentioned throughout this study, mobile phone technology offers the potential for communication and interaction with others at almost any time. The answer is that while the influence of mobile phones is strong, the influences on everyday life can be positive or negative depending on the circumstances.

Frequent mobile phone interactions can provide students the familial support they need to help transition into adulthood or provide a lifeline during emergencies. Correspondingly, frequent mobile phone interruptions can disrupt schooling and distract students when they need to focus on studying. In addition to creating a distraction to education, the expectation of being available to others can be a burden to students due to frequent interruptions. There is little doubt that the connectivity offered by mobile phone technology influences everyday life.

Overall, this study demonstrates that mobile phones do influence the way college students maintain relationships with their families. The findings show that the connections the students keep with their families are perceived as strong despite all participants being three hours or more from their families. However, the connections are based more on mediating the transition into full adulthood rather than maintaining strong family ties. The respondents typically view parents as economic caregivers or emergency contacts more than emotional support. Cell phones are also sources of distraction for students, bringing unwanted calls from families and demands for constant contact with others through text messaging.

There are two issues, not related to mobile phone influence on student-family relationships, which arose in this study which should be examined in future studies. One intriguing theme is the reliance on mobile phone technology exhibited by students using their mobile phones as a repository of contact information, entertainment, connectivity, and security. Students universally have a strong attachment to their phones, seeing them as repositories of interpersonal connectivity. Most respondents also mention another issue, an obsession with connectivity, especially the need to share and receive the minutia

of day-to-day life with others in their circle of friends. In the future, the reliance on both mobile phones and the connectivity they engender are likely to affect the social interactions of college students and other segments of society.

This study still leaves several issues unaddressed. The sample is a fairly small one drawn from a single university in a single state. In addition, while there are several younger students in the study, most are fairly advanced in their college careers. Future studies might look at students who are young and beginning college. Furthermore, this kind of study is really looking at the perceptions the students have of how they use mobile phones. A future study might attempt to gain understanding of the socioeconomic background and the level of emotional connection within the family before the student goes to college to see what changes are taking place as well as try to account for how the technology mediates this process. Overall, mobile phone technology is influencing the way college students interact with their families and how students go about everyday life. The students in the study use their mobile phones to create a new way of college life that appears different from previous generations of college students. Most appear to rely heavily on the phone as a way to organize life whether through organizing meetings, interacting with their friends and families, or obtaining information from others. In this case, mobile phones are not a convenient gadget but an indispensable tool for the students in this study.

APPENDIX A

RESPONDENT LIST

Name	Age	School Classification
1-Tim	20	Junior
2-Lorenzo	23	Senior
3-Greg	22	Junior
4-Kim	21	Senior
5-Lisa	53	Senior
6-Jen	20	Senior
7-Jenna	29	Senior
8-Tom	26	Sophomore
9-Kirk	19	Freshman
10-Molly	25	Senior
11-Daniel	25	Senior
12-Kara	20	Junior
13-Carla	23	Junior
14-Henrietta	39	Senior
15-Karen	19	Freshman

APPENDIX B

INTERVIEW GUIDE

Background:

What is your age, major, and classification (Freshman, Senior, etc.)?

What type of communication technology do you have or use in general?

What type of mobile phone do you have (smart-phone or standard)?

What type of communication applications do you use on your phone? (Phone, text, Facebook)

What way do you use the phone more, calls or texts?

Whom do you use this technology to communicate with?

How often do you find yourself using the phone for communicating?

Why do you use a phone over other types of communication technology?

Family specifics:

Which family members do you stay in touch with in college?

How often did you communicate with family before starting college?

How do you use mobile phones to communicate with your family?

Has using this technology changed the way you communicate with your family?

How do you feel the quality of communication is with your family through this technology?

Would you say you have quality or quantity of communication with family?

Do you find it easier or harder to communicate with family members using technology instead of face-to-face?

Do you feel that your connection with your family is stronger because of using technology like this than it would be without?

What other ways do you keep in touch with your family?

Life course changes:

How far away did you move to go to this college, or how far away are family members for you?

Has it made college life easier being able to stay in contact with old friends and family while being in a new area?

Work/school balance:

Because people can reach you most any time with this technology, have you encountered any problems with jobs or college?

Do you feel it is a positive or negative that you can reach or be reached by friends or family at any time?

Concluding Questions:

If you were limited to land phones or mail as it would have been a short time ago, how might that change how you keep in touch with your family?

BIBLIOGRAPHY

- Aarsand, Pal Andre. 2007. "Computer and Video Games in Family Life: The Digital Divide as a Resource for Intergenerational Interactions." *Childhood* 14:235-256.
- Arminen, Ilkka. 2007. "Mobile Communication Society?" *Acta Sociologica* 50:431-437.
- Arnett, Jeffery Jensen. 2000. "Emerging Adulthood: A Theory of Development From the Late Teens Through the Twenties." *American Psychologist* 55:469-480.
- Boellstorff, Tom. 2008. *Coming of Age in Second Life*. Princeton University Press: Princeton.
- Chen, Yi-Fan and James Katz. 2008. "Extending Family to School Life: College Students' Use of The Mobile Phone." *International Journal of Human-Computer Studies* 67:179-191.
- Devitt, Kerry and Debi Roker. 2009. "The Role of Mobile Phones in Family Communication." *Children & Society* 23:189-202.
- Esterberg, Kristen. 2002. *Qualitative Methods in Social Research*. McGraw-Hill: Boston.
- Elder, Glen, Monica Johnson and Robert Crosnoe. 2003. "The Emergence and Development of Life Course Theory." Pp 3-19 in *Handbook of the Life Course* Edited by Jeylan Mortimer and Michael Shanahan. Kluwer Academic/Plenum Publishers: New York.
- Jonas, Hans. 1979. "Towards a Philosophy of Technology" *The Hastings Center Report* 9:40-59.
- Lanigan, Jane. 2009. "A Sociotechnical Model for Family Research and Intervention: How Information and Communication Technologies Affect Family Life." *Marriage & Family Review* 45:587-609.
- Lee, Soyoun, Peggy Mezaros and Jan Colvin. 2009. "Cutting the Wireless Cord: College Students Cell Phone Use and Attachment to Parents." *Marriage and Family Review* 45:717-739.
- Levinson, Paul. 2004. *Cellphone: The Story of The World's Most Mobile Medium and How it has Transformed Everything!* Palgrave-MacMillan.

- Nasar, Jack, Peter Hecht and Richard Wener. 2007. "‘Call if You Have Trouble’: Mobile Phones and safety among College Students." *International Journal of Urban and Regional Research* 31:863-873.
- McGoldrick, M and E. Carter. 1982. *The Family Life Cycle in Normal Family Process*. Guilford Press: London.
- McMillan, Sally and Margret Morrison. 2006. "Coming of Age with the Internet: A Qualitative Exploration of how the Internet has become an integral part of young people’s lives." *New Media Society* 8:73-95.
- Mortimer, Jeylan and Michael Shanahan eds. 2003. *Handbook of the Life Course*. Kluwer Academic/Plenum Publishers: New York.
- Oudshoorn, Nelly and Trevor Pinch. 2003. *How Users Matter: The Co-Construction of Users and Technology*. The MIT Press: Cambridge.
- Palen, Leysia and Amanda Hughes. 2007. "When Home Base is Not a Place: Parents' Use of Mobile Telephone." *Pers Ubiquit Comput* 11:339-348.
- Pallas, Aaron. 2003. "Educational Transitions, Trajectories, and Pathways". Pp. 165-184 in *Handbook of the Life Course*. Edited by Jeylan Mortimer and Michael Shanahan. Kluwer Academic/Plenum Publishers: New York.
- Perry, Y. and Doherty, W. 2003. "Developing Theory about Families and Technology: The Case of Cell Phones" Paper Presented at the Theory Construction and Research Methodology Workshop, National Council on Family relations Annual Meeting, November Vancouver, British Columbia, Canada.
- Pinch, Trevor and Wiebe Bijker. 1984. "The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology might Benefit Each Other." *Social Studies of Science* 14:399-441.
- Smith, Aaron. 2010. "Americans and Their Gadgets" Pew Internet & American Life Project. Accessed 02/24/12 from <http://pewinternet.org/Reports/2010/Gadgets.aspx>.
- Smith, Aaron. 2012. "46% of American Adults are Smart-phone Users" Pew Internet & American Life Project. Accessed 06/11/12 from <http://www.pewinternet.org/Reports/2012/Smartphone-Update2012.aspx?src=prc-headline>.
- Sorokou, Christina and Carol Weissbrod. 2005. "Men and Women's Attachment and Contact Patterns With Parents During The First Year of College." *Journal of Youth and Adolescence* 34:221-228.

- Stern, Michael and Chris Messer. 2009. "How Family Members Stay in Touch: A Qualitative Investigation of Core Family Networks." *Marriage and Family Review* 45:654-676.
- Toda, Masahiro, Satoko Ezoe, Asya Nishi, Takashi Mukai, Mika Goto and Kanehisa Morimoto. 2008. "Mobile Phone Dependence of Female Students and Perceived Parental Rearing Attitudes." *Social Behavior and Personality* 36:765-770.
- Turner, Victor. 1994. "Betwixt and Between: The Liminal Period in Rites of Passage." Pp 3-22 in *Betwixt and Between: Patterns of Masculine and Feminine Initiation*. Edited by Louise Mahdi, Steven Foster and Meredith Little. Open Court Publishing: Chicago.
- Turkle, Sherry. 2011. *Alone Together: Why We Expect More from Technology and Less from Each Other*. Basic Books: New York.
- Vincent, Jane. 2006. "Emotional Attachment and Mobile Phones" *Knowledge, Technology, & Policy* 19:39-44.

VITA

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