

## **Smartphones: Fulfilling the Need for Immediacy in Everyday Life, but at What Cost?**

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### **Abstract**

*Smartphones fulfil the demand for immediate access to social worlds. We conducted focus groups of college students to explore their perceptions and attitudes regarding uses and abuses of Smartphone technology. Overall, respondents believe more negatives than positives exist and the powerful positive of “being in the loop” keeps them “attached” to their devices. We discuss the theoretical and practical implications of Smartphone technology in addressing society’s immediacy demands, and the costs associated with it.*

**Key words:** smartphones, immediacy, addiction, boundaries

### **1. Introduction**

Technology has evolved exponentially over the past thirty years to become an integral part of the everyday lives of people. Widespread use of cell phones for information, entertainment, business, and interpersonal communications has made cell phones one of the central technologies of the twenty-first century. The Pew Research Center, a self-described “fact tank” has engaged in research on questions, ideas, attitudes and trends shaping America and the world for nearly 25 years (About the Pew Research Center, 2013) and its Pew Internet and American Life Project has been tracking Internet use and cellphone activities of Americans for close to 15 years (Project History, 2013). In its initial report the emphasis of the American Life Project was on tracking on-line life or Internet use (Rainie, Lenhart, Fox, Spooner, & Horrigan, 2000); six years later user demographics and mobile phone activities dominated the Project report (Rainie & Keeter, 2006). More recently the Project reported that 85% of American adults owned cell phones and had used cell phones for an ever growing list of activities including taking pictures (82%), sending and receiving text messages (80%) and accessing the Internet (56%) (Duggan & Rainie, 2012). Only one year later, those numbers had increased to 91% and 63% respectively (up 50% from a 2009 report) (Duggan & Smith, 2013).

#### **1.1 The Impact of the Internet**

Whereas it is hard to argue that society has not benefited from the Internet in areas such as education (Abachi & Muhammad, 2013), commerce (Angelides, 1997), and entertainment (Lipschultz, 2000), the reviews are mixed with regard to its impact on our social and psychological lives. Fifteen years ago, Carnegie Mellon University researchers posed the paradox that the Internet, a tool designed to connect people, may also lead to a disconnection of people from family and friends resulting in loneliness and depression (Kraut, et al, 1998). In the fifteen years since that study was published, an explosion of research on the positive and negative effects of the Internet on adolescent and college aged individuals has been conducted, although much of the published research seems to have focused on its negative impact.

Previous studies providing support of the Internet’s impact did so in discussions of the Internet as a research tool critical to academic success (Nalwa & Preet Annand, 2003), a means for expanded opportunities to meet new people (Chou, 2001; Katz & Aspden, 1997; Parks & Roberts, 1998; Weiser, 2001), an essential tool for transitioning to college (Morgan & Cotton, 2003), and as potentially improving self-esteem based upon size and use of Internet social networks (Manago, Taylor, & Greenfield, 2012; Moody, 2001).

Much of the research drawing negative conclusions has focused on psychological determinants of heavy users (Armstrong, Philips, & Saling, 2000; Chou, 2001; Modayil, Thompson, & Varnhagen, 2003; Reynolds, Ortengren, Richards, & de Wit, 2006; Seidman, 2013; Wang, 2001), the subsequent negative impact on psychology well-being (Chou & Edge, 2012; Hamissi, Babaie, Hosseini, & Babaie, 2013; Huang, 2006; Kross, et al, 2013; Moody, 2001; Morgan & Cotton, 2003; Weiser, 2001) and primarily, investigations of the presumed addictive nature of the Internet (Beard & Wolf, 2001; Griffiths, 2000; King, Delfabbro, Griffiths, & Gradisar, 2012; Nalwa & Preet Annand, 2003; Salehan & Negahban, 2013; Song, Larose, Eastin, & Lin, 2004; Tsai & Lin, 2003; Whang, Lee, & Chang, 2003; Young, 1998), including a 10 year meta-analysis of research on Internet addiction spanning 1996-2006 (Byun, et al, 2009). Thus, research results as a whole have provided no conclusive evidence as to the Internet's impact, other than suggesting that user determinants and the tool itself are both likely to contribute significantly to the impact on the user.

## **1.2 Introducing the Smartphone**

With no clear evidence to guide our understanding of the overall impact of the Internet on our lives, society has forged ahead embracing the role of technology by expanding our opportunities for social communication, and more specifically our need for immediacy. This technologically fixated mindset for increased social communication has developed into a global trend that spans race, gender, generation, and socioeconomic status (Aoki & Downes, 2003; Katz, 1997; Turkle, 2011). More recently, the role of technology has changed from passive provision of tools for social communication (i.e., computers and the Internet) to meeting society's demand for a sleeker, faster, more efficient device to quench this thirst for greater and more immediate accessibility to our social worlds.

The Smartphone emerged in the mid-90s with all of the features that would meet this new demand (Sager, 2012). Smartphone technology allows the user to talk, text, surf the Internet, initiate and end relationships, and take and make photographs available to others, all in one social communication device (Wei, 2008). These devices are hand held, pocket size, and powerful in their ability to connect users to their social worlds. The proliferation of cell phones and memberships on social network sites such as Facebook, Instagram, and Twitter, like computers and the Internet before them, have led to an increased ability to connect with others whether it is across miles, city blocks, or a crowded room. The same issues that presented themselves with the introduction of the computers and the Internet are evident in the use of Smartphones, some researchers suggest Smartphones have an even greater impact on users because of their mobility and the immediacy factor (Bianchi & Phillips, 2005; Takao, Takahashi, & Kitamura, 2009).

Verbal and written conversations from the banal to intimate have become fair game in public arenas creating more permeable boundaries of intimacy than in previous decades. The immediate reinforcement gained through electronic communication creates a greater reliance on public intimacy to drive private relationships. Whereas some researchers believe this blurring of boundaries has already occurred (Addo, 2013; Peters & ben Allouch, 2005; Salehan & Negahban, 2013; Sutter & Holtgraves, 2013; Turkle, 2011; Turner, Love, & Howell, 2008; Walton & Rice, 2013; Wei & Leung, 1999), our question was whether the main users of Smartphone technology and internet social network sites feel the same way.

## **2. Project Purpose and Design**

The purpose of this research project was to explore the perceptions and attitudes of undergraduate college students regarding uses, abuses, and blurring of boundaries associated with the generation and maintenance of interpersonal relationships via Smartphone technology. In this project, we collected conversational data and analyzed the transcripts of six focus groups discussing the pros and cons of Smartphone technology to see how college age individuals view these pros and cons, their own use of technology, and the potential for addiction to technology.

The focus group research design consists of making decisions regarding participants, questions to ask, group moderation style, and making sense of the information obtained (D. Morgan, personal communication, July 20, 2011).

### **2.1 Participants**

The strength of the focus group method comes from hearing not only what the respondents think, but why they think that way.

The process of discussing similar interest topics reveals a varied set of experiences, emotions, and beliefs. Although focus groups lack the depth of single interviews, there is more flexibility in the method and participants often report that small groups tend to be less threatening than one-on-one interviews.

In this project, we collected conversational data from focus groups of volunteer members of the student body of a small, northeastern, United States college. The undergraduate student population at this institution overall is varied for its size along race (approximately 70% white, non-Hispanic), geography (38 different states and 3% from foreign countries), and sex (55% female, 45% male). A little less than half of the student population lives on campus while the others live off campus in varied living arrangements. Although the focus groups were not as diverse as the population, they were adequate for purposes of the study and met preferred homogeneity for discussing a topic of equal interest to all.

Students signed up on the Psychology department Participant Pool website for the opportunity to participate in a study entitled *Call Me, Text Me, E-mail Me ... Wherever I am!* Group size varied between 6 and 10 students with all participants reporting as low to medium cell phone users. We continued to run groups until saturation of responses occurred which was after six groups. A total of 48 students participated. For participating, students earned the chance to win 1 of 2 one hundred dollar prizes in a drawing at the end of the study.

## 2.2 Questions

We developed a set of questions based upon the authors' discussions with an "expert" volunteer panel of students self-identified as high and experienced users, as well as a review of the literature regarding survey and interview questions used in research addressing similar topics. We employed a funnel structure with compromised structure for asking the interview questions. A compromised funnel structure begins with early questions that are broad; less structured, and emphasize the participants' interests. Later questions asked are narrower; more structured and emphasize the researchers' interests (D. Morgan, personal communication, July 20, 2011). There were seven questions, with follow-ups as needed, in the final list which is presented in the Interview Guide below.

### Interview Guide

- In a few minutes I am going to ask you to show us your phone, describe it, and tell us why you got this particular phone. But for now, use the cards in front of you to write down three things from your point of view that would go into selecting the "ultimate" phone.  
Follow up: If you wrote either for texting or the Internet, please be more specific.
- Who uses Smartphones and social networking sites most and for what?  
Follow up: Let's get a little more specific, "I'm going to hand out what I call a *With Whom Do I Connect Diary* and I'd like you to 'guesstimate' how you'd fill it out. The handout listed a broad range of possible choices for which Smartphones could be used for social communication. Participants were asked to rate the choices from most to least likely to use a Smartphone to connect.
- Some people say their lives are better while others say they are worse because of all the new technology that enhances social communication. What do you think?
- How does your texting and social networking levels affect your friend, family, and love relationships?
- Some people say that others are addicted to Smartphone technology and that it is not good. Think of someone you would say is "addicted" to his or her Smartphone. What is this person like? Can you actually be addicted to Smartphones?
- Should there be some kind of limits placed on the use of Smartphone technology via various social networking avenues or under certain situations or in specific circumstances?
- Now, turn your card over and write down one thing that you really want me to remember and pay attention from everything I've heard today. [Go around the table one at a time.]

## 2.3 Moderating

One of the most critical aspects of the focus group is selecting the appropriate moderator. The first author of this research is well versed in group dynamics and has over twenty years in the classroom with students similar to the group participants. She received professional training in the art of focus group moderation during a four week period prior to engaging in this project and acted as the moderator for the groups. The moderator gave opening instructions for the participants, informing them of the format of the groups and explaining the informed consent and audio recording release forms.

The moderator then told the groups that her role was to give them questions to discuss and each participant's role was to talk with the other group members regarding their thoughts, feeling, and beliefs in response to the questions. The moderator intervened only if the participants seemed to be at a standstill, one participant dominated conversation or one participant did not have the opportunity to share. A student co-author was present at all groups to operate the recording instruments, collect paper work, and act as an extra set of eyes and ears during the sessions.

## **2.4 Organizing and Analyzing the Conversation Data**

We had all recordings transcribed by a professional secretary. Two of the authors independently listen to the audio recordings and reviewed the transcripts in the initial analysis. We reviewed each question by dividing the responses into categories, searching for common language, descriptions, and ideas. In both cases our analyses of the recordings were descriptive in nature. Although we had some preconceived ideas of what we might find, we allowed for emergent ideas to come from the participants' responses. We each summarized our interpretations of the transcripts and then compared them. We discussed differences, although there were only minor ones, and came to agreement as necessary. Finally, a third author used Brown's (1991; 1993) model for conceptualizing addiction to test for fit and adherence to the model, whether it be in language or ideas.

## **3. Results**

Based upon the transcript summaries and analyses, we identified several common themes running throughout the focus group discussions. To be considered a theme, the topic area has to be discussed significantly in 4 of 6 groups. We identified five themes: target connections and use, pros of technological connecting, cons of technological connecting, Smartphone addiction, and Smartphone limitations.

### **3.1 Target Connections and Use**

Participants said they were most likely to use their phones to connect with friends and family, and to access entertainment and social networking sites. When asked to discuss their lists of the people they connect with most via their Smartphones participants made statements such as, "My number one are my parents", "I have parents, brothers and sisters at the top, because I don't see them for weeks at a time and if I do see them it's through Skype", "I have friends and entertainment at the top because I still live at home". They were least likely to use their phones to connect with strangers whether directly or through social networking sites. For example some participants stated that, "My least [for the communication hierarchy] is strangers. If I don't really know them, I am not going to really communicate with them in any certain way." It is worth noting that in discussing a follow up question about the definition of a stranger, many respondents acknowledged that having this discussion shows them that they do connect with strangers through their Smartphones more than they had thought. For example, one participant made the observation that, "I consider some of the people in my class strangers and they try and get in contact with me so a lot of the times they do get in contact with me through Facebook, and though I still consider them a stranger I will answer their question using technology" and another stated "I actually kind of talk to strangers a lot. It's not on Facebook, but it is on Daily Mile which is like Facebook but you only talk about working out...it's like a support group".

### **3.2 Pros of Technological Connecting**

Respondents identified accessibility, convenience, and immediacy as significant positive factors associated with Smartphone technology. "Having a Smartphone opens you up to new experiences". When talking about applications some participants made statements such as "I have an iPhone...but I also have banking on my phone, I have Facebook, I have the weather app, and Photoshop. I have different workouts on there and a calorie counter type app which is convenient sometimes" and "everything is right at your fingertips." Additionally they attributed their ability to keeping in touch with friends and maintain relationships, particularly long-distance relationships to having Smartphones. For example one participant stated that "I have been in a long distance relationship for two and a half years so we basically rely on Facebook, Skype and texting to talk to each other...if we didn't have those it probably wouldn't work."

### **3.3 Cons of Technological Connecting**

Respondents gave a range of reasons as to how Smartphones have made their lives more difficult. At the top of the list was that communication is not the same as face-to-face. Miscommunication of meaning through text messaging was a common theme in the focus groups.

Participants identified inability to directly interpret emotions as a major drawback of texting, e-mail, and posting on social networking sites. One respondent commented, “the thing we lose from texting is that we don’t have the ability to read the language. People emphasize what they say. You can look at something but not really understand what is being said. You can’t figure it out by just oneword; words have more meaning when you talk.” They believe that Smartphones can impede straightforward communication, negatively affect grammar skills, and reduce face-to-face time with others. With regard to time, participants said that “people ending up wasting a lot of time on their phones” and “they develop a skewed perspective on time”, especially expected response time to messages of all types.

One participant, in explaining the importance of staying in the loop, stated that “if you don’t see what everyone posted, at the end of the weekend you’re like what happened over the weekend while I was gone?” In discussing the impact of Smartphone technology on relationships, participants reported the most positive aspect of Smartphones in relationships was “the ability to maintain the relationships”. However, respondents also said maintaining relationships via phone can cause “unnecessary drama” and “issues in relationships, especially in romantic relationships, because after all, it’s not official until it’s Facebook official.” “You can begin and end relationships with technology, but that’s not always the best”. “Too much gossip exchanged, so it can ruin a relationship”. The participants appeared to accept that with regard to relationships and technology, “ultimately the good outweighs the bad”.

### **3.4 Can You Be Addicted to Your Smartphone?**

Across all focus groups the sentiment was the same, some people are “addicted” or “attached” to their phones. Comments such as “some people’s phones are glued to their hands”, “some people are always uploading pictures”, and “some people always seem to need to post private information” indicate an understanding of the question regarding the addictive nature of cell phones. Descriptions of addicted behavior included comments such as “when you are constantly updating what you are doing every minute”, “when you constantly have it in your hand”, “when you always have your charger with you”, and “when you have to check when a sound or vibration goes off”. Some defined being addicted to technology in a temporal sense. One participant stated, “I think that if you can’t sit through a 50 minute class without texting or checking Facebook, that is an obsessed person.” Another said, “It’s this feeling you need to know things so you need to be interacting with people like on Facebook or texting...” “I always get this anxious feeling when I can’t check it, like I’m going to miss out on something.” An additional discussion of these anxious feelings lead to further comments such as “I panic if I don’t have my phone with me at all times”, “I have to have it [my phone] in reach”, and “I never turn my phone off for fear of missing out”.

Whereas, most participants did not put themselves in the addiction level of use when the topic was first introduced, based upon the discussion that had taken place many recognized and admitted that maybe they are addicted. Several participants while expressing negative feelings toward some of the social networking sites admitted they still participate in those sites because the “fear of missing out” was too great to not do so. Finally, participants that admitted addictive like behavior argued and agreed with statements such as “I don’t have a choice”, justifying addictive behavior with statements such as “technology is taking over so you have to keep up!” Finally, several respondents cautioned that the moderator saying she should not ask this question using the word addiction, because it “makes people anxious and defensive, and people are likely to disagree with the idea even if it is true”.

### **3.5 Do We Need Limitations for Smartphone Use?**

Respondents agreed, in general, that there should be some limitations placed on cell phone use, but there was no clear consensus as to how this could be accomplished. Current privacy laws in the United States do not cover social networking sites and the respondents did not feel there should be. However the majority of respondents believed that people who use Smartphones and social networking sites should be more aware of the boundaries, or lack of boundaries when engaging on the Internet and should have more self-control. “You need self-control and respect to know what the right time and place is to use technology”. “Our generation is used to having phones, so it would be hard to limit their use”. Participants agreed that people who “push the intimacy boundaries”, “talk about inappropriate things”, or “use their phones irresponsibly” deserve the consequences.

#### **4. Discussion**

Technology has become an integral part of peoples' everyday lives. Some people might even say that the use of Smartphone technology in particular is a necessary part of life in order to maintain a productive lifestyle, intimate social interactions, and gain professional advancement. Through the analysis of transcripts of six focus groups discussing Smartphone technology and relationships, we begin to see how college age individuals view their own use of technology and need for immediacy. There appears to be a significant overall trend toward high frequency Smartphone use as a means for maintaining "connectedness". The phrase "staying connected" covers a wide range of modes in order to achieve this overall goal of being in the loop. However, in this study staying connected meant staying *socially* connected as opposed to keeping up with global news or the stock market. This persistent desire to know what other people are doing might not be a newly developed aspiration but individuals most certainly have a more convenient way to access this information with the advent of Smartphone technology. With Smartphones we can literally carry around information with immediate accessibility in one hand or in our pockets which is the epitome of convenience.

##### **4.1 Convenience and Immediacy: Problems and Pitfalls**

Many people are able to find a happy medium between face to face interaction, talking on the phone, texting, and connecting on social media websites. Some people are able to altogether avoid the pitfalls involved in the everyday use of technology and use it to socially, professionally and financially benefit their lives. Smartphone technology meeting the demand for convenience has many advantages and may even lead to a more efficient lifestyle for its users. Unfortunately a by-product of meeting convenience demands is the emerging immediacy mentality which is somewhat maladaptive and is of greater concern. Many of the individuals in the focus groups were quick to admit that they not only attend to their Smartphones when they ring or are notified that someone is trying to get in touch with them, but are constantly and mundanely checking to see if there *might* be a message. They are fully aware that their Facebook newsfeed has not changed in the last 5 minutes; however, they feel compelled to check anyway.

Many individuals believe their attachment to their Smartphones is legitimate as it may be their central means for maintaining long distance relationships. Technology has closed the gap between persons and loved ones whether it is a romantic partner or family members that live far away. An overwhelming majority of the focus group participants said that they rely on Smartphones and primarily texting in order to maintain these relationships. Having immediate access does not come without some costs, however. There is a high propensity for miscommunication and misinterpretation of tone when talking via technology. As acknowledged by the focus group participants, sending and receiving e-mail and text messages with fewer cues for interpreting intent between communicators can and often does result in unnecessary relationship conflict. In this sense, technology may lead to needless stress in the lives of individuals. The respondents were also quick to stress, however, that they view themselves as a non-confrontational generation thus, the costs are acceptable. Young adults in this study appear to understand some of the costs associated with primarily communicating via technology, but the convenience and immediacy of Smartphone communications outweighed additional expressed concern with the decline in their face to face interaction; and were not enough to deter them from relying on and using technology as their primary means of communication.

##### **4.2 Brown's Addiction Model Adapted for Problematic Smartphone Use**

Previous research and evidence from the current focus groups seem to suggest a trend towards overuse of and reliance on Smartphones and social media, especially among individuals in the college age generation. As previously noted by other researchers, such behaviors might even be classified as addictive. We believe that applying an early model for identifying addictive behavior would prove useful in evaluating whether Smartphone addiction is possible (Brown, 1991). Brown's model for addiction, developed with regard to gambling addictions, is rooted in seven comprehensive criteria: cognitive salience, behavioral salience, euphoria, tolerance, withdrawal symptoms, conflict, and relapse or reinstatement (1991; 1993). One or more of the criteria outlined by Brown's model must have a negative effect on the individual's personal life in a seemingly uncontrollable way for it to reach the level of an addiction (1991; 1993). Adapting these seven criteria to Smartphone use necessarily leads to asking different questions. As we reviewed the transcripts we looked for responses that addressed the following questions:

- Is the participant's mental life (cognitive self) dominated by thinking about the use of a Smartphone, texting, and the Internet (fear of missing out)?
- Is the participant's life and activities (behavioral self) dominated by the use of a Smartphone, texting, and the Internet (staying up later, missing meals, missing meetings, classes, or engagements, etc.)?
- To what extent does the use of the participant's Smartphone, texting, and the Internet promote a positive sense of well-being that other things do not (do Facebook "likes", being added as a friend, or receiving a text significantly improve one's sense of well-being)?
- Does the participant need to increase the use of her or his Smartphone, texting, and the Internet to satisfy the desire for the "positive feelings" associated with its usage (do you increase the number of social networking sites you subscribed to, because one isn't enough, does the number of "friends" and "followers" bring out your competitive side)?
- When the participant has to go without using his or her Smartphone, texting or the Internet does it lead to either physical or psychological discomfort (do you get anxious in power outages, what is your level of anxiety when you cannot find your phone, your battery is low)?
- To what extent does the participant feel guilty about the extent of her or his Smartphone usage, texting, and the Internet with regard to other activities? Has the use of a Smartphone, texting, or the Internet caused problems with people in a participant's personal life or other interpersonal communication (relationship difficulties)?
- If a participant has been forced (or has chosen) to reduce his or her Smartphone, texting, or Internet use, when the participant returns to those activities does she or she do so with vigor or is the re-engagement gradual (how long can you go without your phone and what is your behavior like once you get your phone back)?

The focus group participants who were interviewed for this research described many of the individual criteria for addiction outlined in Brown's model when describing their own behavior. Almost all of the participants admitted to high use of their Smartphones (contrary to their original self-descriptions as low or medium users) and most individuals were hyper focused on one or two aspects of their phones, for example texting, texting and Facebook access, Facebook and email, etc. Sadie Plant (2001), in her essay on the effects of mobile telephones on the social and individual lives of people addresses the salience issue by drawing attention to the social dynamic of cell phone use and how we as a society have integrated the use of cell phones into our interpersonal interaction time.

She suggests that there are three different types of social responses to public cell phone use: a) flight, where users immediately remove themselves from their social situation in order to answer the phone, b) suspension, where users stay put, but stop whatever they are doing for the duration of a call and effectively cut themselves off from their environment, or c) persistence, where users stay put and engaged with the actual world, as far as possible, carrying on with whatever they were doing before they made or took the call. The participants in the focus group indicated that they or someone they know engage in one or more of these behaviors on a regular basis, and although it can be annoying at times, it is tolerated. The inability to do none of Plant's responses and remain engaged in the present activity with the present company illustrates how we as a culture have adapted to the progressively invasive nature of cell phone use in personal and public forums.

The fact that this type of behavior is widely practiced and accepted as a normative occurrence is a metaphorical tip of the hat to the fact that technological addiction exists and must be accommodated within our society. Sherry Turkle addressed this issue of social impact and personal change in her book *Alone Together* (2011). She introduced the idea of the "tethered self", that there is a part of us that is drawn and attached to technology. This is noticeable and again, socially accepted in society, "...people come together but do not speak to each other. Each is tethered to a mobile device and to the people and places to which that device serves as a portal" (Turkle, 2011, p.155). This is yet another example of how society has adapted to the constant use of cell phones in public settings.

The attachment discussion point was brought to the attention of our focus group participants. It was commonly stated that phones were "always around", "right next to my bed", and that "everyone is on their phone at the table" or "I just like having it next to me". The participants stated that this was annoying at best but that it was also the norm, many admit to constantly checking their Facebook and text messages, reporting the "notification sound kind of makes me feel good that somebody wants to tell me something", and that it "made them anxious" if they were unable to check it.

It was often said that it caused interruptions in class, homework, socialization and sleep. These behaviors fall under behavioral salience, withdrawal symptoms, and euphoria in Brown's addiction model. When the thoughts and actions of checking text messages or checking Facebook to stay in the loop cause constant disruptions to daily life, this meets the criteria for addiction. Expressed less often, but notable is some participants' descriptions of feeling anxious at the thought of not being able to access the information on their phones; and further expressing that the feeling wouldn't go away until they could check in. Others describe relationship conflicts and breakups caused due to miscommunication over texting or social media. Finally a few admitted to periods of abstinence from use of social media; however, all seem to return to recreational use eventually. All of these behaviors are indicative of addictive behaviors surrounding the use of cell phones in everyday life of the college age individual.

### ***5. Immediacy Addiction and its Impact on Intimacy***

Work, busyness, need for control, power, and need for immediacy have become accepted, if not encouraged, forms of addiction in American society. What is common among these addictions is that they prohibit, or at least redefine intimacy, a critical aspect of relationships. Intimacy is developed and maintained through honesty, self-disclosure, trust, and the setting of healthy emotional boundaries. The boundaries of genuine intimacy that at the same time encourage healthy closeness and separateness are quickly eroding with the advent of the Smartphone and the immediacy factor by which it is primarily defined. Smartphones are not the problem, excessive need for immediacy and the eroding of intimacy boundaries are. American society's need for immediacy is approaching addiction levels and Smartphones may be the tool that will get us there. Although this erosion of boundaries has led to greater connectedness in many cases, increasingly the result has been disconnection from self and others, which has changed the politics of intimacy in American society. True intimacy, once defined by reciprocity, private dialogue, transparency and vulnerability, has become pseudointimacy, a public product shielded by personal addictions and protected by the larger society.

Because traditional definitions of addiction refer to the quality or state of being devoted or habitually or excessively self-surrendering to something and do not delineate between biological and metaphorical addictions, we must look to the literature to answer these questions. As outlined in the introduction of this paper, empirical evidence at worst is weak and at best, mixed as to whether or not these activities can truly be referred to as addictions or instead should be labelled as "high engagement" activities, an alternative term suggested by Charlton (2002). The individual is a fluid factor in the development of an addiction versus high engagement. The line between literal and extended or metaphorical cases of addiction (such as the aforementioned cases of addiction to work, busyness, and immediacy) in ordinary thinking about these matters would seem to correspond roughly to whether or not the impulses an individual experiences are grounded in physiological conditions or not. Perhaps there are other emotions or psychological conditions that dispose a person to experience impulses similar to those of the literal addict; impulses that are resilient, urgent, and connected with the person's conception of pleasure and pain. If so, these conditions will raise precisely the same issues concerning impairment and impediments to intimacy that are raised by strict cases of addiction. Thus, we must ask ourselves two questions regarding the conversations in these focus groups and their impact on future behavior. (1) Has the need for immediacy reached the level of an addiction, therefore possessing the same potential for impeding intimacy in relationships? (2) How do Smartphones as a tool contribute to this immediacy addiction?

Individuals across all focus groups concurred that they are a non-confrontational generation. They use technology for communication because it makes confrontation easier. They asked the question "How far can Facebook and other social networking sites go?", but had no answers. They used words like "attached" when describing how strongly connected to their phones they are. They acknowledged that people can be addicted and some of the respondents admitted it was true of them. The majority of respondents agreed that overall technological communication has more negatives than positive. The one overriding positive -- "being in the loop" -- is viewed as very powerful, maybe even addictive, and is what keeps them on social networking sites and their Smartphones. Just as Kraut, et al (1998) reported about the computers and the Internet fifteen years ago, Smartphones both connect and disconnect us from others and ourselves. Thus, the greatest cost associated with the need for immediacy may be emergent addictive behavior that negatively impacts the way we communicate and intimately interact with others.



## References

- About the Pew Research Center. *The Pew Research Center*. Retrieved from <http://www.pewresearch.org/about/>.
- Abachi H.R., & Muhammad, G. (2013). The impact of m-learning technology on students and educators. *Computers in Human Behavior, 30*, 491-496. doi:10.1016/j.chb.2013.06.018
- Addo, A. (2013). The adoption of the mobile phone: How has it changed us socially? *Issues in Business Management and Economics*(3), 47-60.  
Retrieved from <http://www.journalissues.org/articles/1374099846.pdf>
- Angelides, M.C. (1997). Implementing the Internet for business: A global marketing opportunity. *International Journal of Information Management, 17*, 405-419. doi:10.1016/S0268-4012(97)00024-8
- Aoki, K., & Downes, E. J. (2003). An analysis of young people's use of and attitudes toward cell phones. *Telematics and Informatics, 20*, 349-364. doi:10.1016/S0736-5853(03)00018-2
- Armstrong, L., Phillips, J.G., & Saling, L. L. (2000). Potential determinants of heavier internet usage. *International Journal of Human-Computer Studies, 53*, 537-550. doi:10.1006/ijhc.2000.0400
- Beard, K.W., & Wolf, E. M. (2001). Modification in the proposed diagnostic criteria for Internet addiction. *Cyberpsychology & Behavior, 4*, 377-383. doi:10.1089/109493101300210286
- Bianchi, A., & Phillips, J. G. (2005). Psychological predictors of mobile phone use. *Cyberpsychology & Behavior, 8*, 39-51. doi:10.1089/cpb.2005.8.39
- Brown, R.I.F. (1991). Gaming, gambling and other addictive play. In J. H. Kerr & M. J. Apter (Eds.), *Adult play: A reversal theory approach* (pp. 101-118). Amsterdam: Swets & Zeitlinger.
- Brown, R.I.F. (1993). Some contributions of the study of gambling to the study of other addictions. In W. R. Eadington & J. A. Cornelius (Eds.), *Gambling behavior and problem gambling* (pp. 241-272). Reno, NV: University of Nevada.
- Byun, S., Ruffino, C., Mills, J., Douglas, A.C., Niang, M., Stepchenkova, S., ... Blanton, M. (2009). Internet addiction: Metasynthesis of 1996-2006 quantitative research. *Cyberpsychology & Behavior, 12*, 203-207. doi:10.1089/cpb.2008.0102
- Charlton, J.P. (2002). A factor-analytic investigation of computer "addiction" and engagement. *British Journal of Psychology, 93*, 329-344.
- Chou C. (2001). Internet heavy use and addiction among Taiwanese college students: An online interview study. *Cyberpsychology & Behavior, 4*, 573-585. doi:10.1089/109493101753235160
- Chou, H. G., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of other's lives. *Cyberpsychology, Behavior, and Social Networking, 15*, 117-121. doi:10.1089/cyber.2011.0324
- Duggan, M., & Rainie, L. (2012). Cellphone activities 2012. *Pew Research Center's Internet & American Life Project*. Retrieved from <http://www.pewinternet.org/Reports/2012/Cell-Activities.aspx>
- Duggan, M., & Smith, A. (2013). Cellphone activities 2013. *Pew Research Center's Internet & American Life Project*. Retrieved from <http://www.pewinternet.org/Reports/2013/Cell-Internet.aspx>
- Griffiths, M. (2000). Does internet and computer "addiction" exist? Some case study evidence. *Cyberpsychology & Behavior, 3*, 211-218. doi:10.1089/109493100316067
- Hamissi, J., Babaie, M., Hosseini, M., & Babaie, F. (2013). The relationship between emotional intelligence and technology addiction among university students. *International Journal of Collaborative Research on Internal Medicine and Public Health, 5*, 310-319. Retrieved from <http://www.iomcworld.com/ijcrimph/files/v05-n05-06.pdf>
- Huang Y. (2006). Identity and intimacy crises and their relationship to Internet dependence among college students. *Cyberpsychology & Behavior, 9*, 571-6. doi:10.1089/cpb.2006.9.571
- Katz, J.E. (1997). The social side of information networking. *Society, 34*(3), 9-12.
- Katz, J.E., & Aspden, P. (1997). A nation of strangers? *Communications of the ACM, 40*(12), 81-86.
- King, D.L., Delfabbro, P.H., Griffiths, M., & Gradisar, M. (2012). Cognitive-behavioral approaches to outpatient treatment of internet addiction in children and adolescents. *Journal of Clinical Psychology, 68*, 1185-1195. doi:10.1002/jclp.21918
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being. *American Psychologist, 53*, 1017-1031.
- Kross, E., Verduyn, P., Demiralp, E., Park, J., Seungjae Lee, D., Lin, N., ... Ybarra, O. Facebook use predicts declines in subjective well-being in young adults. *PLoS ONE, 8*(8), e69841. doi:10.1371/journal.pone.0069841
- Lipschultz, D. (2000, April). On reinventing entertainment. *Internet World, 6*(7), 72-84.
- Manago, A.M., Taylor, T., & Greenfield, P.M. (2012). Me and my 400 friends: The anatomy of college students' Facebook networks, their communication patterns, and well-being. *Developmental Psychology, 48*, 369-380. doi:10.1037/a0026338
- Modayil, M.V., Thompson, A.H., Varnhagen, S., & Wilson, D.R. (2003). Internet users' prior psychological and social difficulties. *Cyberpsychology & Behavior, 6*, 585-590. doi:10.1089/109493103322725360
- Moody, E.J. (2001). Internet use and its relationship to loneliness. *Cyberpsychology & Behavior, 4*, 393-401. doi:10.1089/109493101300210303

- Morgan, C., & Cotton, S. (2003). The relationship between Internet activities and depressive symptoms in a sample of college freshmen. *Cyberpsychology & Behavior*, 6, 133-142.  
doi:10.1089/109493103321640329
- Nalwa, K., & Preet Annand, A. (2003). Internet addiction in students: A cause of concern. *Cyberpsychology & Behavior*, 6, 653-662. doi:10.1089/109493103322725441
- Parks, M., & Roberts, L. (1998). 'Making moosic': The development of personal relationships on line and a comparison to their off-line counterparts. *Journal of Social and Personal Relationships*, 15, 517-537.
- Peters, O., & ben Allouch, S. (2005). Always connected: a longitudinal field study of mobile communication. *Telematics and Informatics*, 22, 239-256. doi:10.1016/j.tele.2004.11.002
- Plant S. (2001). On the Mobile: The effects of mobile telephones on social and individual life. Motorola. [https://web.archive.org/web/20070127165250/http://www.motorola.com/mot/doc/0/267\\_MotDoc.pdf](https://web.archive.org/web/20070127165250/http://www.motorola.com/mot/doc/0/267_MotDoc.pdf) (accessed October 23<sup>rd</sup>, 2013 via the WaybackMachine (archived 25 June 2008).
- Project history. *Pew Research Center's Internet & American Life Project*. Retrieved from <http://www.pewinternet.org/Static-Pages/About-Us/Project-History.aspx>
- Rainie, L., & Keeter, S. (2006). Americans and their cell phones. Retrieved from <http://www.pewinternet.org/Reports/2006/Americans-and-their-cell-phones.aspx>
- Rainie, L., Lenhart, A., Fox, S., Spooner, T., & Horrigan, J. (2000). Tracking on-line life. Retrieved from <http://www.pewinternet.org/Reports/2000/Tracking-Online-Life.aspx>
- Reynolds, B., Ortengren, A., Richards, J.B., & de Wit, H. (2006). Dimensions of impulsive behavior: Personality and behavioral measures. *Personality and Individual Differences*, 40, 305-315. doi:10.1016/j.paid.2005.03.024
- Sager, I. (2012, June). Before iPhone and Android came Simon, the first smartphone. *Bloomberg Business Week*. Retrieved from <http://www.businessweek.com/articles/2012-06-29/before-iphone-and-android-came-simon-the-first-smartphone>
- Salehan, M., & Negahban, A. (2013). Social networking on smartphones: When mobile phones become addictive. *Computers in Human Behavior*, 29, 2632-2639. doi:10.1016/j.chb.2013.07.003
- Seidman, G. (2013). Self-presentation and belonging on Facebook: How personality influences social media use and motivations. *Personality and Individual Differences*, 54, 402-7. doi:10.1016/j.paid.2012.10.009
- Song, I., Larose, R., Eastin, M.S., & Lin, C. (2004). Internet gratifications and internet addiction: On the uses and abuses of new media. *Cyberpsychology & Behavior*, 7, 384-394. doi:10.1089/1094931041774703
- Sutter, N., & Holtgraves, T. (2013). Perceptions of public mobile phone conversations and conversationalists. *Telematics and Informatics*, 30, 158-164. doi:10.1016/j.tele.2012.09.001
- Takao, M., Takahashi, S., & Kitamura, M. (2009). Addictive personality and problematic phone use. *Cyberpsychology & Behavior*, 12, 501-507. doi:10.1089/cpb.2009.0022
- Tsai, C., & Lin, S.S.J. (2003). Internet addiction of adolescents in Taiwan: A interview study. *Cyberpsychology & Behavior*, 6, 649-652. doi:10.1089/109493103322725432
- Turkle S. (2011). *Alone together: Why we expect more from technology and less from each other*. New York, NY: Basic Books.
- Turner, M., Love, S., & Howell, M. (2008). Understanding emotions experienced when using a mobile phone in public: The social usability of mobile (cellular) phones. *Telematics and Informatics*, 25, 201-215.  
doi:10.1016/j.tele.2007.03.001
- Walton, S.C., & Rice, R.E. (2013). Mediated disclosure on Twitter: The roles of gender, and identity boundary permeability, valence, disclosure, and stage. *Computers in Human Behavior*, 29, 1465-1474. doi:10.1016/j.chb.2013.01.033
- Wang, W. (2001). Internet dependency and psychosocial maturity among college students. *International Journal of Human-Computer Studies*, 55, 919-938. doi:10.1006/ijhc.2001.0510
- Wei, R. (2008). Motivations for using the mobile phone for mass communications and entertainment. *Telematics and Informatics*, 25, 36-46. doi:10.1016/j.tele.2006.03.001
- Wei, R., & Leung, L. (1999). Blurring public and private behaviors in public space: policy challenges in the use and improper use of the cell phone. *Telematics and Informatics*, 16, 11-26.  
doi:10.1016/S0736-5853(99)00016-7
- Weiser, E.B. (2001). The functions of Internet use and their social psychological consequences. *Cyberpsychology & Behavior*, 4, 723-743. doi:10.1089/109493101753376678
- Whang, L.S., Lee, S., & Chang, G. (2003). Internet over-users' psychological profiles: A behaviour sampling analysis on internet addiction. *Cyberpsychology & Behavior*, 6, 143-150.  
doi:10.1089/109493103321640338
- Young, K.S. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyberpsychology & Behavior*, 1, 237-244. doi:10.1089/cpb.1998.1.237