AN EXPLORATORY STUDY OF INTERNET AND SOCIAL

MEDIA ADDICTION IN MILLENNIALS

by

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INTRODUCTION

Though a moderate amount of research has been done on the causes and effects of heavy Internet use, Internet addiction remains a topic that has proven very difficult to define. It is no secret that the Internet has become an integral thread in the fabric of the developed world, but with studies showing negative side effects of heavy Internet use, some have expressed concerns of widespread Internet addiction in the developed world.

Symptoms similar to those exhibited by people with depression, low self-esteem, anxiety and hostility are often seen in subjects who are believed to be addicted to the Internet (Yen, Yen, Wu, Huang, & Ko, 2011). Some research on Internet addiction has shown side effects similar to impulse-control disorders, but the way this compulsion is defined varies across studies (Charlton, 2002). While this problem seems to be widespread across developed countries, research shows Millennials to be most affected by this condition. College students in particular seem to be at a greater risk than other demographics of becoming addicted to the Internet. Additionally, while many specific activities commonly associated with Internet addiction, such as gambling, cybersex and online gaming, have been explored, other more recent phenomena have not.

One facet of Internet addiction that remains nearly untouched is that of social media addiction. A few recent publications have acknowledged this phenomenon (Cabral, 2011; Kittinger, Correia, & Irons, 2012; Andreassen, Torsheim, Brunborg, & Pallesen, 2012). However, few have been able to tangibly explain its effect on society today. This paper will explore the phenomenon of excessive social media use and evaluate it according to Brown's "six facets required for the existence of addiction" (Charlton, 2002). Doing so will help to answer the research question, can excessive social media use

truly be defined as an addiction, or is it merely a habit? A deprivation study will serve as a basis for answering an additional research question, what themes are observed when Millennials are forced to abstain from social media? In this study, respondents first abstained from all social media for four days and then answered several other questions about social media in general, their normal social media usage and the effects the abstention had on them. These questions (see Appendix B) centered on the physical, emotional and psychological issues of abstaining from social media.

REVIEW OF LITERATURE

A review of the current literature on Internet Addiction and social media showed that while many have thought broadly about these phenomena, few have been able to define them or clearly separate an addict from a highly engaged user. Though empirical studies have been performed and measurement tests have been validated to study Internet addiction, there is still little clarity on what exactly an addict looks like and how to treat their problem. Social media addiction, on the other hand, has barely even been uncovered, with but a few academic studies currently published that explore this subject. There is a great deal of literature that looks at Internet addiction in general—and even a respectable amount that looks at certain activities associated with Internet addiction—but there is virtually no research available that truly explores themes associated with heavy social media use.

Internet Addiction

While Internet addiction has been broadly recognized and has raised widespread attention and concern, it has yet to be clearly defined. A few have attempted to define it, some using specific criteria to attribute it to people such as those "who lose control over

their actions in life and, in general, spend more than 38 hours a week online" (Liu & Kuo, 2007). Others have developed broader definitions for this dependence, defining it as being "characterized by excessive or poorly controlled preoccupations, urges or behaviors regarding Internet use that lead to impairment or distress" and as "an impulse-control disorder which does not involve an intoxicant" (Weinstein & Lejoyeux, 2010, pg. 1; Young, 1996, p. 237). The latter definition is based upon shared qualities addictions to gambling and to online shopping, both of which are considered obsessive and compulsive behaviors. Because these two activities and Internet addiction all lack dependence upon a chemical, they are defined as impulse-control disorders.

Young (1996), a pioneer in the study of Internet addiction, performed the first empirical study into the causes and effects of Internet addiction and found that the Internet itself was not addictive, but rather that people are addicted to certain highly interactive Internet applications. Young found that these applications, which were ones that enabled users to meet and socialize with others, seem to be the true cause of addiction to the Internet. Participants who were found to be dependent upon the Internet also generally felt that virtual relationships were intimate and confidential, and that they were less threatening than in-person relationships. These Dependents cited that their overuse of the Internet caused problems consistent with other established addictions, such as alcoholism and gambling. Young (1996) classified the problems experienced by Dependents into five categories—academic, relationship, financial, occupational and physical.

More than half of respondents experienced severe impairment in the academic, relational, financial and occupational categories. In each of these categories, at least 85

percent of participants cited moderate to severe impairment. A primary finding was that Dependents progressively exchanged in-person relationships for independent Internet use, causing relationship issues. Problems with productivity at work and accumulating large Internet usage fees also existed. The only category in which the impairment level was low was at the physical level, with 75 percent citing no physical impairment and no respondents citing severe physical impairment. The physical impairment that did exist was primarily due to a lack of sleep or disrupted sleep patterns. Even having experienced significant negative consequences, 54 percent of participants "had no desire to cut down the amount of time they spent on-line." 46 percent tried and were unsuccessful in spending less time online; they hoped to avoid negative consequences but ultimately failed to conquer their dependency (Young, 1996).

Thus, these Dependents showed difficulties with impulse-control consistent with other disorders such as pathological gambling. The largest problem with Internet use was the participants' incapability to regulate their usage, as spending excessive amounts of time online often caused problems in their lives. Going back to the impairment classification, 98 percent of students surveyed experienced moderate to severe academic problems, as they replace productive activities with personal Internet use. Young (1996) found that these students could not control their usage, which caused grades to suffer, leading to academic probation, and in some cases, expulsion from their colleges. One important distinction to reemphasize here, however, is that these statistics were taken from the group deemed dependent upon the Internet. These findings thus speak only to the severity of the side effects of Internet addiction; they say nothing of the prevalence of the phenomenon.

<u>College Students</u>

Much of the research has used college students as subjects, as Millennials are considered at high risk for behavioral addictions (Christakis, Moreno, Jelenchick, Myaing, & Zhou, 2011). Cotten (2008) found that in the U.S., the Internet is used most frequently by 18 to 29-year-olds, who account for 88 percent of usage. When looking at populations above this age range, he also found that Internet usage rates are inversely related to age. Additionally, because college students have a great amount of free time at their disposal, they are a prime group in which to observe the prevalence, causes and effects of social media use (Charlton, 2002). For these reasons, and because this paper attempts to explore the issue of excessive social media use in Millennials, many of the findings that will be mentioned in this essay use college students as principal subjects.

According to Christakis (2011), problematic Internet usage is estimated to affect between one percent and 26 percent of college students in the U.S. and 6 percent to 19 percent globally. These estimates, however, have limited validity due to the use of small, unvaried and non-random sample populations, as well as measures that have not yet been validated (Christakis, 2011; Cotten, 2008). Additionally, findings from many prominent studies contradict this estimate, as studies show a wide variance in estimated addiction rates.

The comparison between the U.S. and global problematic usage rates can also be misleading, as Internet addiction has been found to affect certain countries' student populations far more than those in the U.S. China, for example, has been found to far surpass the U.S. in prominence of Internet addiction in students (Zhang, Amos, & McDowell, 2008). This same study found that 14 percent of Chinese students were

"heavily addicted," while only 4 percent of Americans were. Additionally, this study

showed that 64 percent of Chinese respondents were "slightly addicted," while 23 percent

of the American students fell into this category.

Another limitation of current research on Internet addiction is that most large

studies on this subject are merely exploratory, not explanatory (Cotten, 2008). Some

recent studies on Internet addiction, however, have utilized the validated Internet

Addiction Test (IAT), developed by Young and used internationally (Christakis, 2011).

The IAT measures responses to twenty questions (see Appendix A) such as "You find

that you stay online longer than you intended," and separates scores into "average" users,

users with "occasional problems," and "addicted" users (Young, n.d.).

A study of University of Wisconsin and University of Washington undergraduates

used the IAT and found that four percent of students exhibited "problematic Internet

usage" by scoring in the "occasional problems" or "addicted" range of the scale

(Christakis, 2011). Additionally, 70 percent of respondents in this study reported

spending more time on the Internet than they had planned to, suggesting a possible

disadvantage to the widespread access to the Internet that students today have. One study

of university students found that 65 percent of students were online for more than three

hours a day, and a large-scale survey (nearly 28,000 students at 103 institutions) found

nearly 7 percent spent more than 40 hours on the Internet each week (Cotten, 2008). This

concern of excessive Internet use by college students is further validated by the fact that

as many as 98 percent of college students have profiles on social media networks, with

most accessing these sites daily (Christakis, 2011).

This same study also found that moderate-to-severely depressed students were approximately 24 times more likely to show problematic Internet usage than were their fellow students. This tie between symptoms of depression and "problematic Internet usage" further suggest that this "problematic use" is truly an addiction, given the association of depression with other behavioral addictions like gambling (Christakis, 2011). Consequentially, this study suggests U.S. college campuses take a preventative stance on Internet addiction, raising awareness through campaigns and even utilizing treatment in some cases.

<div align="center">Risk Factors</div>

The association of Internet addiction with depression also brings up the question of risk factors. Links exist between Internet addiction and a variety of other factors, including "being a male, drinking, dissatisfaction with family, and experience of recent stressful event[s]" (Lam, Peng, Mai, & Jing, 2009). One primary finding is that males have a greater tendency to be addicted to the Internet than females. Additionally, the link that Internet addiction has with "stress-related variables" such as the ones listed above suggests that people affected by those issues use the Internet as a coping mechanism (Lam, Peng, Mai, & Jing, 2009). Similarly, adolescents with social anxiety often favor online friendships with strangers over face-to-face relationships, using the Internet as a substitute for personal interaction (Liu & Kuo, 2007). Internet addiction is also believed to be linked with adolescents' intolerance of frustration and emotional discomfort, and those suffering from Internet addiction also have greater hostility both online and in the real world (Ko, Yen, Yen, Chen, & Wang, 2008; Yen, Yen, Wu, Huang, & Ko, 2011). Findings also suggest that Internet addiction is related to high implicit (damaged) self-

esteem (Stieger & Burger, 2010). Thus, individuals with these emotional attributes may very well be at a higher risk than others of becoming addicted to the Internet.

<u>Specific Activities</u>

While Internet addiction can be looked at wholly, it can also be broken down and evaluated more specifically by activity. Online gambling, cybersex and online gaming are all thoroughly studied online activities in which addiction is considered prominent and can thus be studied as examples of Internet addiction.

<u>Online Gambling</u>

According to Griffiths (2003), the Internet has provided vast growth opportunity to the field of gambling, introducing more opportunities and a greater social aspect. Technology has made gambling more convenient, and factors such as accessibility, affordability and anonymity (known as the Triple A Engine) make Internet gambling seductive (Griffiths, 2003; Putnam, 2000). While some believe that online gambling fuels Internet addiction, others argue that the Internet is merely a channel used to advance a gambling addiction (Griffiths, 2003). Griffiths is one proponent of this argument, reasoning that the Internet is simply a venue for gambling addicts to engage in their preferred behavior. An Internet addict, then, differs from an online gambling addict in that an Internet addict is dependent upon the Internet itself, while an online gambling addict simply relies upon the Internet as a medium through which he pursues his gambling addiction.

<u>Cybersex</u>

Cybersex addicts are defined as those who "spend 15-25 hours per week online viewing and interacting with sexual material" (Putnam, 2000). The Triple A Engine,

developed by Cooper and by Young, also affects Cybersex addicts (Griffiths, 2000). Like online gambling addicts, for cybersex addicts, accessibility, affordability and anonymity actually instigate online compulsive behavior (Putnam, 2000). However, according to Putnam, addiction to cybersex differs from online gambling addiction in that people who did not previously exhibit sexual compulsion have now developed compulsive problems. Putnam also argues that this is because of personal vulnerabilities and factors unique to the Internet. Cybersex addiction, where people actually develop problems, thus differs from online gambling addiction, where people merely use the Internet to fuel an already-held addiction. While some people do have sexual compulsivity that is simply manifested online, these people form a different group from those who only have sexual compulsivity online. This is the key difference with online gambling addicts, as there is not a group similar to the latter group of people with sexual compulsions. Putnam thus suggests that cybersex addicts may in fact be addicted to the Internet itself.

<div align="center">Online Gaming (MMORPGs)</div>

Online gaming, specifically involving massively multiplayer online role-playing games (MMORPGs), is the last activity related to Internet addiction that this paper will explore. MMORPGs are endless real-time social games that involve a system of objectives and accomplishments (NG & Wiemer-Hastings, 2005). They argue that concerns about addiction have been raised because of the devotion necessary to be successful in these games. Mehroof and Griffiths (2010) found that Internet addiction was primarily manifested in either "online chat or fantasy role-playing games." Gaming addiction has not yet been recognized as a DSM IV diagnosis, but studies have shown that people with poor social skills and low self-confidence are more likely to become

addicted to online gaming, likely because MMORPGs allow users to remain anonymous while creating a virtual life and social interactions (NG & Wiemer-Hastings, 2005; Mehroof & Griffiths, 2010). Though these users often prefer their virtual social life to real world social interactions, this fact alone does not necessarily mean they are addicted (NG & Wiemer-Hastings, 2005).

Only when a user experiences negative symptoms from abstaining from an activity does it qualify as an addiction; without these negative consequences, the person is just highly engaged (Charlton & Danforth, 2010). Many online gamers have cited that they would simply seek social activity through other online venues if they were unable to participate in MMORPGs (NG & Wiemer-Hastings, 2005). Thus, these people do prefer to socialize online rather than in the real world, but they are not addicted to the MMORPGs themselves. It has not been proven whether or not these people are actually addicted to the Internet; it is only clear that certain personality traits are linked with a preference toward online rather than real world social interaction (Mehroof & Griffiths, 2010). Research has shown, however, that some people who are highly engaged with online gaming may be in the process of becoming addicted to MMORPGs (Charlton & Danforth, 2010). This threat is most prevalent in adolescents, as younger gamers "have a tendency towards more intensive gaming," possibly causing a greater threat of addiction (Smahel, Blinka, & Ledabyl, 2008).

Some users, though, may be addicted to the games themselves. Everquest is one fantasy game that has received significant criticism for causing online gaming addiction. One player said, "The game almost ruined my life, it was my life. I ceased being me" (NG & Wiemer-Hastings, 2005). In one study of online gamers, 40 percent of

respondents believed themselves to be addicted to MMORPGs (Smahel, Blinka, & Ledabyl, 2008). However, because of the limited research that has been done in the area, it is impossible to draw solid conclusions about the relationship between online gaming addiction and Internet addiction.

Internet addiction has thus been studied from quite a few different angles, with a heavy focus on Millennials and a few specific activities that seem almost synonymous with Internet addiction itself. These highly interactive Internet applications engage countless users and have even been shown to cause addiction to the Internet. One relatively new such type of interactive application is social media, a subject into which little exploration has been made. Only recently have concerns been roused about addiction to social media, and no qualitative research has been done to attempt to understand this phenomenon on a personal level.

Social Media Addiction

In order to analyze the addictive potential of social media, it is important to first identify why people use social media. According to Kittinger, Correia, & Irons (2012), social networking sites are defined as "web-based systems that allow members to connect electronically with other members with similar interests, and to make their connections and interactions public to other members." Two-thirds of adults who use the Internet are on social media, and social networking is the fourth most common Internet activity (Smith, 2011; Kittinger, Correia, & Irons, 2012). The majority of social media users utilize these sites primarily for social purposes, with two thirds of users recognizing that "staying in touch with current friends and family members is a major reason they use these sites" and half saying the same about reconnecting with old friends (Smith, 2011).

<u>Millennials</u>

Social media sites are especially important to Millennial college students, who have been shown to spend a great deal of time online and use the Internet often for social purposes. 83 percent of people aged 18 to 29 use social networking sites (Duggan & Brenner, 2013). One study showed that college students who were found to have problematic Internet use according to Young's Internet Addiction Test more commonly reported experiencing "problems related to their Facebook use" (Kittinger, Correia, & Irons, 2012). Not surprisingly, time management was the major issue that these students experienced. Another study attempting to determine whether or not Millennials are in fact addicted to social media revealed that subjects reported experiencing salience, tolerance, the intrapsychic element of conflict and relapse associated with their social media use (Cabral, 2011). According to Cabral, the association of these aspects of addiction with social media use shows that Millennials prioritize social media above other activities and need to use social media more to achieve satisfaction. Subjects of this study acknowledged that they needed to cut back on using these networks but found that it was difficult to do. This finding relates to themes seen in Internet addiction research, suggesting that Millennials are in fact addicted to social media.

<u>Technology</u>

With the permeation of technology into every aspect of Millennials' lives today, social media has truly become essential to Generation Y. In his book *The Shallows*, Nicholas Carr argues that the Internet technologies now "guide people's behavior and shape their perceptions" and that because of this, today's society exists in a world of interruptions. These interruptions are no accident, however; in fact they exist because of

people's compulsion to constantly be connected. Carr proposes his belief that these disruptions are changing the way people think and process information and that the Internet is in part responsible for an extensive loss of ability to focus. Because of a widespread and constant reliance on Internet technology, people are no longer able to avoid distractions, and what is more—they do not want to. Interruptions have become the norm, and focus has become next to impossible (Carr, 2010; Mott, 2013).

Because of the availability of access to social media networks on mobile devices, people are able to check their pages anytime, and however many times, they wish. According to a new study by analytics firm IDC, smartphone users "check their Facebook pages an average of 14 times each day" (Subbaraman, 2013). People now check Facebook while exercising, shopping, dining with family and even while driving. With notifications popping up throughout the day, it is next to impossible for many people to stay away from their social networks for more than a few hours. Social media has thus become a constant presence in today's society, with Millennials being the most attached. For this reason, it is not something easily given up. All of this begs the question, is social media truly an addiction, or is it merely a habit?

Addiction versus Habit

To evaluate whether social media is in fact an addiction, one must first consider the definitions of both habit and addiction, then evaluate social network usage according to the aspects required for addiction to exist. In 1903, the *American Journal of Psychology* defined a habit as a "fixed way of thinking, willing, or feeling acquired through previous repetition of a mental experience" (Andrews, 1903). Today, the Macmillan Dictionary defines a habit as "something that you do often or regularly, often

without thinking about it" (Definition of habit by Macmillan Dictionary). These definitions seem to align with the way social media is integrated in people's lives today, especially Millennials. Because Millennials now have virtually unrestricted access to their social networks online through social media smartphone applications, social media has become such an integral part of life that most people do not even realize how often they use it.

Whenever a notification pops up or a free moment arises, many Millennials hop on social media, seemingly automatically. Thus, social media seems to be very much habitual, as it occurs regularly and often without intention. Even when evaluated by a definition created over a century ago, the habitual nature of social media holds up. Millennials today are very much fixed on their social media use, and they certainly have become this way over time, through incalculable repetition of the subconscious mental processes behind checking social media. Some call it the "fear of missing out," while others cite boredom as the reason they are constantly online, but regardless of the reason, it seems that social media use has become habitual for many Millennials today.

If this is true, then can this constant involvement with social media be considered an addiction, or more specifically, a form of Internet addiction? Brown outlined six criteria that are necessary to establish a behavioral addiction; these include salience, euphoria, tolerance, withdrawal symptoms, conflict and relapse and reinstatement (Charlton, 2002). Charlton (2002) conducted research that used these six criteria as a basis for determining whether or not study participants were addicted to the Internet. His findings suggested that a subject with Internet addiction might not necessarily meet all of Brown's six criteria; in fact they may meet just a few and still be considered addicted.

Charlton also experienced difficulty in determining whether his subjects were truly addicted to the Internet or whether they were just highly engaged. This has been a theme in much of the research that has been done on Internet addiction, with many study participants walking a fine line between high engagement and addiction. For that reason, this study involves social media deprivation in an attempt to explore themes and symptoms consistent with Internet addiction.

METHODOLOGY

This study was part of a larger data collection on social media habits. Students were asked to abstain from social media for four days. Respondents were students at Texas Christian University and were enrolled in various classes including digital marketing and new media. A subset of the larger respondent set was taken. A sample of 28 students enrolled in a digital marketing course in the Neeley School of Business were asked to abstain from all social media during four days in February 2013. Respondents could not access any social media platform on their mobile devices nor on their computers. First, they completed a survey that identified their social media usage. After abstaining, respondents were asked to complete a series of questions (see Appendix B). The answers were subjected to an interpretive thematic analysis. Nearly every participant had active accounts on Facebook and Twitter, and many also cited Instagram, Pinterest and LinkedIn as additional sites they used.

RESULTS

Participants were asked to describe the ways they use social media. Many participants expressed that they use social media when they are bored at work, in between classes, waiting in lines or during other down times. Several participants also admitted

that social media serves as an "escape" from class or homework. As one female participant put it, "Social media plays the role of my escape from whatever I am doing. I can easily get lost for hours searching people on Facebook, reading people's conversations on Twitter and judging people's photos on Instagram." A few trends emerged from abstention results and pointed to social media use being mostly habitual rather than addictive. A few participants, however, did exhibit symptoms from the abstention consistent with Internet addiction, experiencing a few of Brown's criteria for the establishment of a behavioral addiction.

Role Played in Lives

When explaining the role that social media plays in their lives, the results were split. While some participants admitted that they spend a great deal of time every day on social media sites, some indicated that social media played only a minor role in their lives. The ones who cited that they spend multiple hours on social media during a typical day said that this time is spent primarily on Facebook and on Pinterest, as these sites offer a great deal of possibilities to explore. Participants indicated that on the whole, they use social media primarily to keep up with news from friends and to stay in touch and up-to-date with what is going on in their social circles. One respondent summed up this idea by saying, "Social media allows for me to stay up to date with that is going on with all of my friends. It's just a fun way to communicate with friends and stay in touch with people that you went to high school with that you may not see a lot anymore" (male).

Effects of Abstention

After abstaining from social media for four consecutive days, a strong majority of participants actually enjoyed the abstention. Many said that though they missed being

connected and knowing what was happening, they actually relished the break from the distraction of social media. As one participant put it, "Abstaining from social media proved to be less mentally taxing, as I did not experience online overload" (female). Another said, "I do not actually like social media because I waste so much time on it, so not being able to log on was refreshing… I think that the time that I spend staring at a computer screen dulls me… I feel just a little bit sharper" (male). Many respondents felt refreshed and freed from the constant presence of social media in their lives. The lack of negative side effects experienced by most during the abstention suggests that the majority of participants use social media habitually. Still, a few seemed to truly be addicted. These findings will be further explored later in this paper.

Themes

Abstention results showed a few strong trends that point toward the recognition that most people use social media habitually. These trends include the enjoyment of the abstention, the use of social media as a time filler, a lack of increased productivity and the feeling of connection that social media offers.

Time Filler

One strong trend that emerged from responses was the use of social media as a time "filler." Many respondents said that they primarily accessed their social media accounts during downtime, such as in between classes or while waiting in line. One participant said, "I use social media to occupy time. For instance, I operate on Twitter much more often when I am waiting in some sort of line and trying to make time go by a little faster" (male). Responses indicated that students use social media most when they are bored, not necessarily in place of other important activities. Quite a few participants

also cited that they get on social media at specific times of the day, such as when they wake up or go to sleep. These responses seem to point to social media use being a habit, rather than an addiction that gets in the way of other important things.

Productivity

One of the major concerns voiced about social media use is the lack of productivity that results from it. Many respondents said that going into the study, they felt that they would be far more productive without the distraction of social media. After the abstention, some respondents did in fact feel more productive. These people said that it was due to a break from the online overload that they normally live in, which goes back to Nicholas Carr's arguments in *The Shallows*. With a plethora of ways to waste time on social networking sites, some said they normally use these sites to procrastinate when they should be doing other things. Without social media as a distraction, they were able to accomplish things more efficiently.

This was not a strong trend though, as the majority of respondents said that they did not replace the time they normally spend on social media with productive activities; they simply spent their time doing things like looking at other websites, watching television or texting. One participant said, "I don't think I felt more or less productive because I maintained about the same productiveness as usual. Usually if I need a study break I will get on Facebook for a few minutes, but instead I would just watch TV for a moment or two" (male). Additionally, a surprisingly large number stated that they normally did not struggle with social media negatively impacting their productivity level, so there was little change during the abstention. The strongest trend here was that when forced to abstain from social media, people replaced the time they would normally spend

on those sites with other social activities. Many said that they spent the extra time texting, talking on the phone, spending time with friends in person, or otherwise socializing. This brings up a strong point that was emphasized throughout virtually all responses, that is, the feeling of connection that social media offers.

Feeling of Connection/Fear of Missing Out

Though most participants enjoyed the break from social media, many did feel a lack of connection to their friends who they did not physically spend time with during the abstention. Many respondents felt that that they were missing out on social news by not being able to check their online feeds, as they normally use their social network accounts to keep up with friends' life events, such as finishing a marathon or becoming engaged. Several respondents also cited difficulty in holding conversation with friends, as others were talking about things that happened that they had all seen on social media. Similarly, people also said that they had difficulty bringing up topics to talk about with friends, as they often initiated conversations based on things they had seen on their social networking sites.

One aspect of this lack of connection that many participants alluded to is the fear of missing out. This phenomenon, dubbed "FOMO" by Millennials, was a strong theme when respondents discussed the lack of connection they felt during the abstention. They said that they often use social media to find out their friends plans, specifically about parties and other social events, and it was difficult to keep up during the abstention. Many also said that they enjoy seeing what their friends are doing on the weekends through posts and photos, and they missed being able to stay informed and know what everyone was up to.

In effect, Millennials use social media as a way to keep up with their more distant friends, the ones they do not socialize with on a regular basis or talk to often in person. Because social media offers a very easy, convenient way to keep up with hundreds of people at once, there is really no offline substitute for what these sites offer. While most participants said that their more close, personal relationships were either not affected or were strengthened by the abstention, many still felt disconnected from their larger social world. One participant said, "I felt much less connected to people that I don't have the opportunity to see on a daily basis because social media often gives me an outlet to reach interact with my friends in different locations" (male). Respondents indicated that they used social media primarily to keep up with the people that they do not talk to regularly, but that they still wish to know about their major life events.

Despite this feeling of a lack of connection, respondents did note that they felt more connected to those they physically spent time with, that they felt more "present" and were better able to build relationships. One referred to social media as a distraction that normally keeps him from interacting with his friends face-to-face. Another said that he noticed that the time he spent in-person with friends, rather than on social media, felt "more genuine than online connections." A few participants even noted feeling uncomfortable and becoming frustrated when spending time with friends because their friends were constantly checking social media even while spending time together in-person. One respondent said, "I feel that without social media it was definitely more apparent how in-person relationships have changed. I felt that because of social media and the use of smart phones that I was unable to connect as deeply with people because they were always distracted" (male).

Habit versus Addiction

Many participants experienced effects from the abstention that pointed to social media being more of a habit than an addiction. One even stated this, saying, "While I was abstaining, I found myself constantly opening up the apps on my phone… I found that spending time on social media was not as deliberate as I had originally thought, as it was much more habitual than anything else" (female). This is consistent with the resulting themes of social media as being a time filler and something that people access during certain times of the day. Because participants mainly reported accessing the sites during their downtime or when they were bored, their use of social media seems more habitual than addictive in nature. Additionally, the fact that participants simply replaced social media with other social activities shows that people care about the connection that social networking sites offer them, not necessarily the networks themselves.

The ease with which most people replaced social media with other activities seems to disqualify their use of social media as being an addiction. The vast majority of participants experienced very minor or no negative side effects, thus disqualifying their behavior as being an addiction. As seen in current research on Internet addiction, significant negative side effects must occur in order for addiction to exist. Because most participants actually experienced positive effects from the abstention, it is impossible to conclude that they are addicted. This is, however, only the result for the majority of the participants. A few participants did show significant negative side effects and did seem to exhibit addiction.

When asked whether or not they thought they were addicted to social media, a few participants self-reported that they believed they were. Not surprisingly, these were

the same respondents who exhibited negative side effects from the abstention. The most significant side effect that these people experienced was withdrawal, which brings us back to Brown's six criteria for the establishment of a behavioral addiction—salience, euphoria, tolerance, withdrawal symptoms, conflict and relapse and reinstatement. Because Charlton found that people with Internet addiction might only meet a few of these criteria, it is not unreasonable to apply this same idea to subjects with social media addiction. While withdrawal was by far the largest negative side effect experienced, it was not the only one.

These few subjects also admitted experiencing euphoria when they logged onto social media, and they craved this feeling when they were unable to log on due to the abstention. Participants also experience salience, as they reported social media being their primary focus, taking precedence over other things. This salience was apparent in responses because participants admitted being unable to focus on other things, placing social media as their highest priority. Additionally, they said that they sometimes "get lost" on Facebook or Pinterest for extended periods of time. Because three of Brown's six criteria for establishing a behavioral addiction were met, and because Charlton found that subjects with Internet addiction may only meet a few of the six criteria, we can thus determine that these few participants are in fact addicted to social media.

<div align="center">DISCUSSION</div>

This study thus identified themes that help to explain the habitual use of social media by the majority of users, while applying behavioral disorder criteria to suggest

that a few participants are addicted to social media. Despite a few limitations, this study has significant implications for social media users and also gives clear direction for further research.

Overview of Results

The overall results from this study showed that the majority of participants use social networking sites habitually rather than as an addiction. The findings showed that the primary reason participants use social media is for the feeling of social connection that it offers. Millennials appreciate that social media allows them to feel as though they are in touch with even their more distant friends, as they are able to find out about life events and other important happenings conveniently and all in one place. Findings also showed that Millennials use social media as a time filler during downtime. They use it when they are bored or when they have a spare few minutes, which further shows that most use it habitually and are not actually addicted. These findings have significant implications for Millennials and for marketers trying to reach them.

Implications

The findings from this study make sense when compared with results from studies on Internet addiction. In those studies, the majority of participants were highly engaged with the Internet, but not actually addicted to it. Only a small minority was truly addicted, experiencing significant negative side effects without it. Similarly, only a few participants in this study really exhibited symptoms that met criteria for addiction. Though only a minority of participants experienced this addiction, a major finding was made in the habitual quality of social media usage. This is a significant implication for social media users because it is possible that addiction may occur in those who first use

social media habitually. Current research does not explore this possibility or the habitual attribute of social media at all, and this is a significant area in which further research may be conducted.

These findings have significant implications for marketers, who must now try to reach consumers who are increasingly online. Because Millennials today value the feeling of connection that social media offers, brands must now find ways to integrate marketing messages into these networks. Good brands will find ways to engage consumers and use Millennials' desire for social connection online to their advantage, developing messages or applications that allow consumers to fill their need for socialization while also engaging with the brand. Because Millennials are constantly online and have access to their social networks virtually all the time, brands now have a significant opportunity to reach consumers at new times and in new ways that were previously impossible.

Limitations

Despite the significant implications of this study, a few limitations do exist. First, as in any self-reported study, there may have been error due to false reporting by participants. Additionally, because this study was performed as part of a class assignment, participation was not voluntary. This could have caused a higher than usual number of participants to report false results; however, because the trends observed were very strong, it seems unlikely that this meaningfully skewed the results. The sample size of this study was also small at 28, and the college from which the sample was taken typically serves students of relatively high socioeconomic status. This has significant implications in that smartphones are highly prevalent at the university, which could cause

social media use to be higher than in an average population of Millennials. Finally, because this was a required assignment for class credit, the responses were not anonymous. Therefore, participants may have been influenced to respond in a certain way, knowing their professor would not blindly read their responses. Nevertheless, because of the very strong trends observed in the study, it does not seem that these limitations profoundly affected the results observed.

Direction for Future Research

Because of the overall lack of research on social media addiction, more empirical research should be conducted to study this phenomenon in general. Millennials are a prime group in which to study this merely because of the concentration of social media use that occurs within this age group. Additionally, future studies should include college students as a sample, because of the amount of free time they have to use social media if they so choose. The findings from this study also merit the exploration of the habitual nature of social media. Further research on social media use as a habit would help to further define the reasons people use social media and would likely help in the identification of early tendencies toward social media addiction.

Additionally, research that explores how people become addicted to social media would be helpful in diagnosing and treating the addiction. It is unclear from the current research and this study how precisely people become addicted to social media. It is possible that people may start out as habitual users and then become addicted, or it may be that people with addictive personalities are those most susceptible. Whatever the cause, this is certainly an area that merits future exploration. Thus, future research should begin with an empirical study on social media addiction in Millennial college students,

and other directions for research are the habitual nature of social media and the causes of
the addiction.

APPENDIX A

Internet Addiction Test (IAT), Developed by Kimberly S. Young

To begin, answer the following questions by using this scale:

0	1	2	3	4	5
Does not apply	Rarely	Occasionally	Frequently	Often	Always

	Question	Scale					
1	How often do you find that you stay on-line longer than you intended?	1	2	3	4	5	0
2	How often do you neglect household chores to spend more time on-line?	1	2	3	4	5	0
3	How often do you prefer the excitement of the Internet to intimacy with your partner?	1	2	3	4	5	0
4	How often do you form new relationships with fellow on-line users?	1	2	3	4	5	0
5	How often do others in your life complain to you about the amount of time you spend on-line?	1	2	3	4	5	0
6	How often do your grades or school work suffers because of the amount of time you spend on-line?	1	2	3	4	5	0
7	How often do you check your email before something else that you need to do?	1	2	3	4	5	0
8	How often does your job performance or productivity suffer because of the Internet?	1	2	3	4	5	0
9	How often do you become defensive or secretive when anyone asks you what you do on-line?	1	2	3	4	5	0
10	How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?	1	2	3	4	5	0
11	How often do you find yourself anticipating when you will go on-line again?	1	2	3	4	5	0

12	How often do you fear that life without the Internet would be boring, empty, and joyless?	1	2	3	4	5	0
13	How often do you snap, yell, or act annoyed if someone bothers you while you are on-line?	1	2	3	4	5	0
14	How often do you lose sleep due to late-night log-ins?	1	2	3	4	5	0
15	How often do you feel preoccupied with the Internet when off-line, or fantasize about being on-line?	1	2	3	4	5	0
16	How often do you find yourself saying "just a few more minutes" when on- line?	1	2	3	4	5	0
17	How often do you try to cut down the amount of time you spend on-line and fail?	1	2	3	4	5	0
18	How often do you try to hide how long you've been on-line?	1	2	3	4	5	0
19	How often do you choose to spend more time on-line over going out with others?	1	2	3	4	5	0
20	How often do you feel depressed, moody or nervous when you are off-line, which goes away once you are back on-line?	1	2	3	4	5	0

Total up the scores for each item. The higher your score, the greater level of addiction is.

20 – 49 points:
You are an average on-line user. You may surf the Web a bit too long at times, but you have control over your usage.

50 – 79 points:
You are experiencing occasional or frequent problems because of the Internet. You should consider their full impact on your life.

80 – 100 points:
Your Internet usage is causing significant problems in your life. You should elevate the impact of the Internet on your life and address the problems directly caused by you Internet usage.

<u>APPENDIX B</u>

Homework Assignment – Social Media Usage

NAME: _____

Please review the directions and record your work in this document by saving it with your name. HANDWRITTEN DOCUMENTS ARE NOT ACCEPTABLE!!! You will turn in one hard copy to me and upload a soft copy to drop box on E college. This is due Monday February 25, 2013.

FIRST COMPLETE THE LINK THAT WILL BE SENT TO YOU VIA EMAIL.

For FOUR (4) consecutive days, I would like for you to **TOTALLY ABSTAIN** from all social media (e.g. any of the social networks that you belong to, - Facebook, LinkedIn, Pinterest, Instagram, blogs, Twitter and so forth). Then I want you to answer the following questions. Please take this seriously and not fake it. Use as much typing space as you see fit.

DATES YOU ABSTAINED: _____

1. Describe the ways you use social media (e.g. Facebook, Twitter, Pinterest, Instagram, etc.) that you have active accounts for.
2. What role does social media play in your life? Explain.
3. How do you feel after abstaining from all social media? Consider physical, emotional and mental aspects.
4. Did you feel that you were more or less connected to people? Explain.
5. Did you feel that you were more or less productive? Explain.
6. Did you feel that you were missing anything? Explain.
7. What did you miss most? What did you miss least?
8. What else did you do instead of spending time on social media?
9. How do you view social media? As a habit? Is it a good habit or bad habit? Explain.
10. Do you think you are addicted to social media? Explain. If so, what implications do you think this has for you?
11. Have you ever thought about deactivating your Facebook account? Twitter? What did you ultimately do and why?
 If you did deactivate your account, did you reactivate? Why or why not?

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ABSTRACT

This paper examines the prevalence and themes of Internet and social media addiction in Millennials. It first examines current research on Internet addiction and social media addiction, then looking at habit versus addiction. This paper also involves responses from a deprivation study performed with Millennial college students as participants. Several themes emerged from the qualitative responses in this study, adding significant knowledge to the issue of social media addiction. While significant research exists on Internet addiction as a whole, this paper is one of the first to examine social media addiction specifically.