

Cracked Out and Plugged In: America's Emerging Culture of Addiction

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Overview and Hypothesis

America is the largest most culturally diverse country in the world and is home to many competing ideologies, practices, habits, norms, and values. Diversity within the US population continues to grow at a higher pace than ever before. At the same time, the largest and most culturally diverse generation called “the millennials” enter America’s workforce and universities (Howe and Strauss, 2000). Typically individuals born between 1982 and 2002 are categorized as, millennials, generation Y, or digital natives (will be used interchangeably throughout text). However vast the diversity of this generation, there remains a 21st century common denominator that exists between this diverse population. Recent U.S. data reports, 84.2% of Americans use the internet on a regular basis (The World Bank, 2014.), and 80-90% ingest caffeine regularly (Various Cited Sources). Even higher rates of usage have been observed in millennials at a 95% caffeine usage (Alison Bryant Ludden and Amy R. Wolfson, 2009) and a 93% internet usage rate according to Pew Research Center. These numbers indicate a far reaching epidemic of usage, but little is known on the affect that the relationship has on the general populous, specifically the millennial generation.

Millennials remain a unique group to study in American culture, they maintain specific qualities such as being; “special, sheltered, confident, team-oriented, conventional, pressured, and achieving.” (Howe, Neil, and William Strauss.2000) However, other qualities identified in millennials offer questions regarding their future competency. Millennials have a tendency to have shorter attention spans, run away from their problems, abide by their own code of conduct, and depend on others. (Much, K., Wagoner, A. M., Breitkreutz, H. L. and Hellenbrand, M, 2014) Additionally, through much research it is known that millennial's suffer from higher levels physical and mental afflictions including, anxiety, social phobias, narcissistic personality disorder, obesity, ADHD, and Asthma than witnessed in previous generations.

Much of this has be attributed to a culture of staying indoors, and overbearing hyper-involved parents commonly referred to as “helicopter parents” (Howe, Neil, and William Strauss.2000 pp 93).

Research is scarce on the topic, and demonstrates the lackadaisical approach sociologists and researchers have taken on the generation’s addictive behavior. Using Edward Khantzians widely accepted Self-Medication Hypothesis (SMH) as a framework, this text attempts to prove that millennials use internet and caffeine in order to alleviate negative characteristics observed present within the overwhelming majority of American millennials. Furthermore, research suggests there remains serious health and social consequences of internet and caffeine addiction, that work to exacerbate concrete underlying problems already observed within the generation such as anxiety, ADHD, narcissism, lack of problem solving skills, and a dependence on others(Stein, Joel, and Josh Sanburn, 2013). With growing numbers and acceptance in society, a culture of addiction emerges where it becomes commonplace and socially acceptable to suffer from dependency, especially when an individual expects little to no risk from the dependence. Addiction to items that an individual considers “non- threatening” creates a new set of norms and values within American culture that promotes abuse and excess (Strahan, Esther Yoder, et al.). This culture of addiction may be a result of the desire for these individuals to “self-medicate” by using substances that they view as harmless to curtail increased feelings of anxiety and inability to focus.

This research intends to demonstrate that millennials use their most widespread dependencies (internet and caffeine) to compensate for negative physical and mental characteristics associated with the generation as per the SMH. Additionally by decoding the negative effects of caffeine and internet dependence, this text demonstrates how these habits exacerbates the detrimental qualities of digital natives. Furthermore, it will investigate if the generation’s low expectancies for negative repercussions for internet and caffeine abuse, and societal acceptance of dependency, has created a “culture of addiction” within America’s youth. Ultimately confirming or disproving the hypothesis that, caffeine and internet addiction in the millennial generation are products of the need to self-medicate against detrimental physical and mental characteristics common of the generation. In turn,

these addictions will prove to exacerbate existing problems that have been observed within digital natives, and create a culture of addiction due to widespread cultural acceptance of caffeine and internet in the US.

The Millennial Experience and its Challenges

Studying Millennials allows for a unique insight on the American experience in present day culture. With technology growing faster than the individual can keep up with, the youth generation demonstrates a higher mastery of the technological skills needed in order to maintain pace with the increasingly global media environment.

Technological advances shape the brains of the digital natives and have allowed for a mastery of new devices that leaves older generations perplexed.

Recently, as Millennials begin to enter the workforce in staggering numbers, there has been a surge of research released detailing strategies for dealing with digital natives. Due to the influx of Millennials in the workforce, describing their characteristics, and uncovering common personality traits have been made priority in some areas of Academia and corporate America.

Most notably and most widely reported is the digital native's ability to understand and use technology to their advantage in a manor unrivaled by previous generations. (Leemann, James (2012)) However, there remains lesser known facts regarding personal experience of Millennials. In *Millennials Rising*, Howe and Strauss detail 7 traits that distinguish millennial youth from any other generation. This includes being; special, sheltered, confident, team-oriented, conventional, pressured, and achieving. Howe and Strauss trace these traits back to a common sense of identity due to being raised in hyper-sheltered environments due to overbearing or "helicopter" parents. Regardless, Howe and Strauss' work was hailed as the landmark example of conditions in the millennial generation. They expect digital natives to be the next "hero generation" comparing them to the greatest generation that fought in World War II. (Howe and Strauss, *Millennials Rising*, 2000) However, other researchers have viewed, millennials hyper-sheltered upbringing in a more negative light

In another study which attempts to add to previous description by Howe and Strauss, Kari Much et al reveal in *Working With the Millennial Generation: Challenges Facing 21st-Century Students From the Perspective of University Staff*,

through interviews with key college professionals, that millennials may not be the "hero generation" they were previously thought to be. The researchers contend that millennials harbor unique qualities that lead to interesting questions regarding the future of the millennial in the US. Analysis done by Kari Much et al concluded that millennial students tend to ignore what may be expected of them, resist being accountable for their actions, and depend largely on others for problem solving. Additionally they lack coping skills, and typically have intense feelings of loneliness and stress. "Rather than running at their problems, millennial tend to avoid them and create a crisis", additionally they note that, "millennials have a tendency to blame others and believe that they are the exception to the rule in regards to school policy" (Much et al). These are not the only trends the researches notice, Much goes on to say, "the millennials have often been described as pressured and hyper-focused on achievement, they also frequently experience increased stress and feelings of being overwhelmed" (Much et al) The researchers determine that much of these characteristics are due to millennials being coddled and lauded by parents and authority figures throughout their childhood. This comes as college consulship report a surge in parental involvement in the college process. This displays a very different view of "helicopter parents" upbringing of millennial, the authors describe a bleaker scenario, where the hyper-influence of parents cause deep seeded issues in the minds of millennials. They report that their interviews;

"yielded two corresponding themes: parental involvement, and expectations problems to be solved by others. Interviewees did not see students as active problem solvers, even when faced with circumstances that require action. Instead, they viewed these students as generally not taking the initiative to seek a solution without consulting their parents. Additionally, even when students consult their parents, the perception is that students believe that others (parents or other authority figures) should solve their problems for them" (Much et al 2010 pp 42)

Many other researchers agree with Much's sentiments on millennial and even chose to add their own observations into the mix. Jean Twenge asserts that digital natives are often "overconfident, have high expectations, report higher narcissism, (and) are lower in creativity" she goes on to state that

they, “received higher grades in high school despite doing fewer hours of homework than previous generations”. (Jean M. Twenge, 2013). Which may indicate a generation that is not only coddled by their parents, but by society as well. This may have devastating cultural effects as Twenge noted, “social/relational issues, such as overprotective and controlling parents (helicopter parents), may inhibit individuation and independent action” (Jean M. Twenge, 2013) Demonstrating that the generation must learn to compensate for, high levels of stress, lack of problem solving skills, low creativity, and a general feeling of exceptionalism

These issues are exacerbated even further when their tendency for extreme narcissism is taken into account. In a Times Magazine article titled “*The Greatest New Generation*” Joel Stein cites a few statistics regarding narcissism in Millennials. He states” The incidence of narcissistic personality disorder is nearly three times as high for people in their 20s as for the generation that's now 65 or older, according to the National Institutes of Health; 58% more college students scored higher on a narcissism scale in 2009 than in 1982” (Stein, Joel, and Josh Sanburn, 2013). Additionally he cites the fact that “that 40% believe they should be promoted every two years, regardless of performance” contributing to the difficulty for millennial's entering the work arena.

Moreover, millennials exhibit greater frequencies of ADHD, depression, anxiety, social phobias, and other mental disorders. This will be explored at length later in this document, but has significantly contributed to the propensity for millennials to compensate for their characteristics.

All of these attributes contextualize the uniqueness of the millennial compared to past generations, this generation has a large amount of weakness to compensate for. As Millennial's age a culture of addiction could emerge that may be a result from a need for self-medication. Has this generation chosen caffeine and the internet in order to compensate for their lack of focus and social skills as self-medication? Are the millennials shortcomings a manifestation of their addictions to caffeine and internet? Or is it a result of them?

Self-Medication Theory as a Basis for Americas Growing Culture of Addiction

The existence of the self-medication hypothesis provides context for addictive habits observed in millennials and serves as a framework throughout the course of this text. Research into this

hypothesis began in the mid-1970s, headed by Edward Khantzian, mainly focusing on the use of heroin as a coping mechanism. However since then, the self-medication hypothesis has undertaken a broader definition and has enjoyed much mainstream acceptance in the media and medical communities (Khantzian 1997). The self-medication hypothesis (SMH) is defined by “The use of drugs to treat self-diagnosed disorders or symptoms”, according to the hypothesis, an individual's choice of drug is not coincidental, but instead a “result of a psychological condition being compensated for” (Khantzian 1985). Further investigation by Khantzian in 1997, yielded results that assert “there is more evidence that psychiatric symptoms rather than personality styles, lie at the heart of drug use disorders”. He goes on to specify two crucial aspects of SMH, “ (1) drugs of abuse produce a relief from psychological suffering, and (2) the individuals preference for a particular drug is based on its psychopharmacological properties”(Khantzian 1997). He goes on to say “Self-medication factors occur in a context of self-regulation vulnerabilities—primarily difficulties in regulating affects, self-esteem, relationships, and self-care. Persons with substance use disorders suffer in the extreme with their feelings, either being overwhelmed with painful affects or seeming not to feel their emotions at all” (Khatzian 1997)

Consequently, this means that in order to compensate for a perceived mental deficiency, an individual will hand select a substance to abuse Taylor made to ease their deficiencies. The implications of this theory to my research is tremendous. SMH provides a theoretical cause for addictive behavior in millennials, given their wide range of observed negative characteristics. Khantzians SMH has enjoyed much wide spread acceptance since its inception, and has also been observed in millennials. A study of substance abuse in teens found that in 2004 drug dependent teens “ manifest relatively high rates of dual diagnosis...of substance use disorders and other mental health disorders” stating that “ Up to 75% of youth in treatment for substance use disorders have other psychopathological problems in addition to substance use...for example depressive, and anxiety disorders, social phobia, PTSD, conduct disorder and oppositional defiant disorder” (Sussman, Steve, Silvana Skara, and Susan L. Ames, 2008, 1802-1828) Demonstrating both the existence of Self-Medication theory in millennials, and also the

existence of common mental disorders among the group.

The negative characteristics that millennials can self-medicate against is a long list, however this text attempts to narrow it down. This list includes but not limited to: ADHD, anxiety, stress social phobias, depression, narcissism, exceptionalism, a lack of creativity, and a tendency to avoid problem solving. According to SMH the drugs abused by this generation will reflect the mental and physical tensions common of the group. Although a wide variety of substances and practices could ease these tensions in millennial, caffeine and the internet are examined as exacerbating factors for these negative characteristics, and also as an outlet of self-medication to ease common stressors. Within this attitude of self-medication, America's culture of addiction reveals itself, especially given the high incidence of addiction in Millennials.

Evidence of Americas Emerging Culture of Addiction

Millennials are observed via research and anecdotal references to have a high level of adolescent addiction, reflecting The US's growing culture of addiction within its youth. One anecdotal account by Ginny O'Keefe, the CEO and founder of the Amethyst House treatment center for addiction in Columbus Ohio, describes a change in society reflected in the demographic of patients receiving treatment at her clinic. "In the past the average population would have been around 35, now the population is younger...between the ages 18 and 23" (Townsend, Tracy.). Her experiences are not uncommon in the US considering that, "In 2007, the proportions of 8th, 10th, and 12th, graders who reported that they had used an illicit drug in the prior 12 months were 15%, 31% and 39% respectively" (Sussman, Steve, Silvana Skara, and Susan (2008): 1802). Additionally "5% of adolescents in the United States qualify for a diagnosis of substance abuse disorder" while New Jersey High school students are found to have substance abuse and dependency rates of "13.4% and 3.9% respectively" (Susman 1802). Proving representations of Americas growing Culture of Addiction likely, as addiction rates soar amongst American adolescents.

Although a large quantity of research has been done in the name of self-medication theory, little has been done in the realm of internet addiction. However, studies have been conducted in order to determine whether the phenomenon of self-

medication exists amongst millennials. In a 2011 study by Esther Yoder researchers attempted to conceive connection between social anxieties and binge drinking habits of university students in the US and in the island of Cyprus. Their research has three very important additions to this thesis, First that "Literature from both US and European studies demonstrate that social anxiety disorder is a major disorder that affects a great many college students" and that social phobias have increased in recent years up from 19% of undergrads to 22% in 2003 (Strahan, Esther Yoder, et al. 2011 pp. 302). Displaying the heightened propensity for social phobias to be present in digital natives. Next, that "The basic finding of this study was of a significant curvilinear relationship between social anxiety and alcohol use for men" (Strahan. 2011. pp 308). Suggesting a concrete link between the millennials' stressors and substance abuse, and also demonstrating concrete evidence of SMH in work in the millennial generation. Lastly Strahan et al's work, "confirms the important role of alcohol expectancies in predicting levels of drinking" (Strahan. 2011. pp 308), where American students attributed more positive effects of alcohol usage than their Cyprus counter parts, and also engaged in dangerous alcohol usage behavior at a much higher rate than Cyprus students. This revelation can be extrapolated into the culture of addiction in Millennials. Due to the fact that millennial who perceive little to no harmful effect of a habit (such as caffeine or internet usage) are more likely to become dependent on the habit. This could prove to be a manifestation of a belief of exceptionalism, and a tendency for narcissistic behavior in digital natives.

Through an analysis of Millennials, it remains clear that addiction emerges in habits that the individual has determined to have little or no negative effects. Habit dependencies can form in millennials from a need to remedy mental detriments under the umbrella of the SMH. Addiction, and mental disorders are on the rise in the millennial generation reflecting society's culture of addiction. This has led to a culture of addiction exacerbated by caffeine, and single serving coffee culture that acts as a possible gateway to an adult life governed by addiction.

Decoding Caffeine Dependence in Millennials Using SMH

Millennials have adopted Caffeine consumption as a remedy for their lack of attention

span, lackadaisical approach to problem solving, high rates of ADHD, and to improve concentration. Positive expectations associated with caffeine usage among millennial has contributed to widespread, cross generational usage of the drug, and perpetuates a belief that substance addiction is acceptable in the US.

Currently adolescents in the US exhibit high amounts of caffeine usage, this is partly due to the advent of energy drinks in the mainstream, and the proliferation of single serve coffee franchise across the US such as Starbucks and Dunkin Donuts. Not to say that generations before digital natives have not enjoyed caffeine usage, but recently, a caffeine culture have surfaced in Americas Youth. In 2009 a sample of US high school students demonstrated that 95% have reported recent caffeine use. (Alison Bryant Ludden and Amy R. Wolfson, 2009). Which is considerably higher than the national rate typically estimated around 80%. This data begs the questions, what is the cause for this discrepancy in caffeine usage? How does this demonstrate an emerging culture of addiction in the US?

Marketing methods by energy drink manufacturers specifically target Americas Youth population. Beverage companies such as Monster and Redbull, rely on niche marketing tactics, such as using campus representatives, and social media to promote products to millennials. This in turn caters to digital native's internet dependency, and "adolescents have more caffeinated product options than in the past" (Alison Bryant Ludden and Amy R. Wolfson, pp. 331). Furthermore, higher caffeine content exist in these new energy drinks, than in the caffeinated beverages of the past. This creates higher propensity for millennials to become reliant on caffeine, and thus they display little to no negative expectations for habitual usage due to widespread caffeine consumption cross-generationally.

Additionally, the proliferation of single serving coffee franchises also feeds into millennial's tendency for caffeine use. According to Loxcel Geomatics Starbucks operates in just over 12,000 US locations as of November 2014 ("Loxcel Starbucks Store Map FAQ, Nov 2014), and "the company's revenues increased at a compound annual growth rate of 11% from \$9,774.6 million in FY2009 to \$14,892.2 million in FY2013" ("Starbucks Corporation SWOT Analysis, 2014). Starbucks attributes much of its prolonged success to the growing single serving coffee culture in the

US. However, much of its success stems from its marketing tactics to younger generations. Starbucks caters to Millennials specifically for a number of reasons, first it caters to their technologically connected lifestyle by providing a location where an individual can relax and use the internet. Next, Starbucks caters to millennials narcissistic tendencies by providing the individual with a personal experienced, by making beverages to order and even writing the customer's name on the cup. Lastly, millennials feel the need to share their Starbucks experience with peers via social media, creating a caffeine culture within this generation.

The proliferation of these single serving coffee franchises may indicate a different narrative within America's youth. This is the tendency for millennials to self-medicate against ADHD, lack of focus, and inactivity by using caffeinated products. It has already established that Millennials exhibit higher rates of ADHD than any other generation, according to the CDC "approximately 11% of children 4-17 years of age (6.4 million) have been diagnosed with ADHD as of 2011" ("Data & Statistics, Centers for Disease Control and Prevention, 29 Sept. 2014). This data supports the claim that a large population of millennials use caffeine in order to self-medicate against their inability to focus and inactivity. "Decades ago, caffeine was even suggested as a possible treatment for attention deficit hyperactivity disorder (ADHD), but was subsequently ruled-out as a first line approach" (Walker, LR, AA Abraham, and KP Tercyak, (2010)). Potentially, caffeine acts to alleviate ADHD symptoms by "compensating for lower levels of mental arousal and to enhance cognitive performance among ADHD-affected individual" (Walker, LR, AA Abraham, and KP Tercyak, pp. 75), and replenishes neurotransmitters associated with ADHD. Furthermore, "Adolescents with ADHD were nearly twice as likely to use caffeine as were adolescents without ADHD" (Walker, LR, AA Abraham, and KP Tercyak, 73), suggesting that there is indeed a self-medication component to adolescent caffeine usage.

These patterns are not limited to millennials with ADHD, Studies shown a correlation between individuals suffering from psychiatric illness, and caffeine usage. Cynthia Larson and Kate Carey detailed this phenomenon in their research regarding the subject. They note that "mental health patients consume more caffeine, on average, than the general population" at a rate of 7 times the

average amount (Larson, Cynthia A., and Kate B. Carey. (1998) pp. 373). This lead, to their hypothesis that some psychiatric patients are using caffeine as a means to cope with their affliction. They even cite the SMH in their text stating, "Caffeine literature has supported the self-medication theory by demonstrating a positive relationship between caffeine consumed and severity of depression, suggesting that depressive symptoms may trigger patients to use caffeine" (Larson 374). The fact that clinically depression is observed in high amounts in adolescence is another factor that explain wide spread caffeine usage in millennials. But, what other negative characteristics common of millennials can caffeine medicate against? Larson also revealed that "Increased consumption of Caffeine by mental health patients may be a response to psychiatric symptoms such as... lack of energy, inability to concentrate" (Larson 374), as research has shown the drug to be "significantly related to better long term memory performance and faster locomotive speed" (Hameleers, P. A. H. M., et al. (2000) pp. 573). Further correlating high levels of caffeine usage in America's youth with Khantzian's self-medication theory in order to combat lack of motivation and focus within the generation.

How Caffeine Dependence Exacerbates Negative Traits in Millennials: A Cyclical Effect

In research, caffeine dependence is observed to demonstrate many negative physical and mental side effects. Many of which coincide with negative traits observed within the millennial generation. It has already been established throughout this text that high levels of, stress, anxiety, and depression characterize digital natives, likewise caffeine has been observed to exacerbate these symptoms in medical studies. Rockett and Putnam stated "female students who reported "addiction" to caffeine showed an excess risk for being chronically depressed and in poor health and/or physically disabled. Caffeine-"addicted" males showed an excess risk for being severely stressed" (Rockett, Ian R. H., and Sandra L. Putnam. (2002) pp.39), evidencing caffeine's ability to enhance stress and depression in millennials. Similarly, Many researchers such as Larson and Kelly conclude similar results, they state throughout their study on caffeine and mental illness that "Caffeine can produce direct effects on a person's psychological state" and that caffeine abuse tends to "exacerbate(s) current symptoms...of anxiety,

depression, and irritability" (Larson 373), further proving the drugs ability to worsen these disorders commonly found in Americas youth. Additionally, A study by Rogers et al states withdrawal from caffeine produces difficulty focusing, and lethargic effects, which also acts to magnify negative characteristics in an individual (Rogers, Peter, et al. (2013). The study goes on to discuss the lack of desired affects in frequent users, and also the harmful effects of withdrawal on motor skills and alertness. Therefore, they conclude, in everyday life medium-high caffeine users are forced to maintain a constant caffeine dosage to operate without the negative effects of withdrawal, further perpetuating a culture of addiction. The fact that caffeine dependence is highly prevalent in millennials, possibly as self-medication, and that it has tendencies to exacerbate anxiety, depression, stress, and lack of focus, illustrates the cyclical pattern of usage that is ripe for a culture of addiction in millennials.

The pattern works as follows: Millennials attempt to compensate for their lack of focus, and motivation, by self-medicating. The most accepted and assessable form of medicating against these traits is caffeine. Dependence forms, thus negating caffeine's "medicinal" benefit, thus causing the need to use more. As caffeine abuse rises in the individual, so do the negative effects of the drug, creating a cyclical culture of addiction that may lead to more serious addictions in the future.

Societal Acceptance of Drug Addiction: Evidence of Growing Culture of Addiction

High levels of addiction within millennials has much to do with widespread acceptance of addictive behaviors such as caffeine use. Adolescents have shown little to no negative expectations regarding harmful effects of caffeine usage, partially due to societies acceptance of usage, partially due to lack of visible side effects of usage. In a large scale study on adolescent caffeine usage in adolescents, the authors concluded through survey techniques that "Examination of adolescents' caffeine expectancies reveals that generally adolescents do not expect much to happen to them when they use caffeine" the author goes on to say that "adolescents are unaware or unconcerned about possible effects" (Alison Bryant Ludden and Amy R. Wolfson, pp.339) In another study pertaining to caffeine addiction in Tennessee high school students, researches revealed that "Regarding welfare, caffeine-"addicted" students of either sex

were more likely than non-"addicted" counterparts to perceive caffeine use to be of little or no harm" (Rockett, Ian R. H., and Sandra L. Putnam. (2002) pp.39). Both studies concluded lack of negative expectations associated with caffeine were very dangerous due to the adverse effects of addiction, withdrawal, and the ubiquity of the drug. The fact that caffeine addiction is "non-stigmatized is very dangerous because it sets the precedent in youth culture that substance dependency is acceptable due to mass usage in the . Caffeine addiction has been shown to have a gateway effect into addiction, dependent behavior associated with the drug translates into future addictions. "Substance use by adolescents may follow certain progressive patterns. Research conducted by Collins and colleagues has shown that caffeine may be an early step (i.e., gateway) drug because "heavy caffeine use" has been shown to be related to a progressive pattern of type of drugs used" (Sussman, 2008, pp 1803). Ludden and Wolfson agree with Sussman's findings after observing planned caffeine use in adolescents, they suggest this "could be evidence of a developing pattern of dependence as these adolescents were also much more likely to report that they used caffeine to get through the day" (Ludden and Wolfson, 2009, pp 337). This demonstrates how expectancies specifically associated with caffeine usage influence future addictive behavior and creates a culture where addiction possess the ability to become epidemic in millennials.

A Discussion on Internet Use in Millennials

Similar to the way millennials use caffeine to cope with intragenerational deficiencies, the internet offers another means for coping. While digital natives have been observed to use caffeine to combat, lack of focus, inactivity, and ADHD, they use the internet to combat other existing issues within the generation such as, lack of problem solving skills, anxiety, depression, high levels of stress, and to escape reality.

Internet addiction is classified as a medical disorder and is defined as a psychological dependence on the internet akin to addiction to food, sex, or gambling. (Kandall, 1998, pp.11) Much like Caffeine, the internet possess the ability to induce dependence in the Millennial, and closely affects the millennial population more than any other generation. The Pew Research Group noted in a comprehensive statistical analysis of millennials that "Over the last five years,

Millennials' use of social networking sites exploded compared to older generations. In 2005, only 7 percent of Millennials used social networking sites; now 75 percent do. In that time frame, Gen Xers' use of social networking sites grew by 43 percentage points, Boomers' (ages 46-64) use increased by 25 percent points"

(<http://www.pewsocialtrends.org>) According to an academic 2001 study into internet addiction by Alex Hall and Jeffery Parsons "IBD (internet addiction) is typically found among those who are young or well-educated individuals. For example, a longitudinal study of the Internet use of 93 families found that teenagers in both White and minority families accessed the Internet more often than did their parents" (Hall and Parsons, 2001). Supporting this, Jonathan Kandalls investigation on the topic yield similar results, he states that "Use of the Internet on college and university campuses has shown explosive growth in the last few years, paralleling, if not outpacing, the strong advances in the society at large" (Kandall 11). He continues on to cite a 1994 University of Michigan study that showed "freshmen and sophomores averaged 10 hr. per week on-line, with 18% on the Internet at least 20 hr. per week" (Kendall 12), which has almost certainly increased since 1994 due to extreme proliferation of internet technology. It remains no secret that digital natives portray high levels of internet usage, however, figures regarding addiction rates and demographics are hugely variable. Hall and Parsons explain that methods in collecting this date have been flawed, but, more recent long term studies concluded after" a six-year study of Internet usage by children conducted from 1996 to 2002, shows that 25% are heavy users, spending more than ten hours online each week and these heavy users comprise of kids from the age of 13 to 18" (Neging, P, 2013). Further adding fuel to the fire, trends in internet growth and addiction show no signs of slowing down, "because Internet use and IBD will likely increase as this technology matures. In fact, a recent survey of 2,689 households found that weekly internet use increased in direct proportion to access and to high-speed capacity" Therefore, this evidence establishes the logical conclusion that Millennials demonstrate higher levels of internet usage and addiction than any other generation and will not slow down any time soon.

Decoding Internet Addiction in Millennials Using SMH

Given that Millennials exhibit higher levels

of internet usage than other generations, the next step to this research is to demonstrate how digital natives use the internet to compensate for physical and mental detriments using the Self-Medication Theory. Interestingly enough, similar patterns to caffeine addiction have been noticed in individuals suffering from IAD, most notably is the propensity for the addictive behavior to be a manifestation of an existing disorder in the individual. Displaying telltale signs of the existence of Khantzian's self-medication through internet addiction. The research of Jonathan Kandall concluded, "An individual exhibiting Internet addiction is often dealing with underlying psychological issues" he reasons that "Internet use aids in the person's avoidance of the problem and creates a buffer between the person's conscious mind and the negative thoughts and feelings the underlying issue generates" and even relates this behavior directly to Khantzian's self-medication theory by claiming "Much like the drug or alcohol abuser who gets high to deal with underlying mood or tension, a process known as "self-medication," the pathological Internet user, by going on-line, exercises a similar coping mechanism" (Kandall 12). Later in his study he emphasizes the vulnerability millennials have to succumbing to internet addiction, he explains "The most important factors contributing to the vulnerability of college students are the psychological and developmental dynamics with which late adolescents and young adults must contend" (Kandall 14). Kandall is not alone in his conclusions, Hall and Parsons noted this vulnerability as well stating "Developmental stressors, coupled with free access to Internet services, may contribute to college student's vulnerability to Internet Behavior Dependence" (Hall and Parsons, 2001). With the confluence of evidence suggesting that internet addiction is the result of self-medication, the next logical step is determining what millennials internet usage medicates against.

The internet provides the millennial with a useful tool in coping with issues within the generation. Considering digital native's high levels of stress and propensity to avoid problem solving, perhaps the most dramatic use of the internet in millennials is as a means to escape reality. In Fisoun and Virginia's study of internet abuse and offline behavior, the authors determined, "When they got stressed out by work or were just *depressed*, internet addicts showed a high tendency

to access the internet in order to escape from reality"(Fisoun, Virginia, et al, 2012), this is not an isolated trend. Hall and Parsons agreed with this sentiment, "College students who excessively use the Internet may be escaping from, rather than embracing, important developmental tasks, leaving themselves unprepared for real-world relationships" (Hall and Parsons, 2001). Millennial's high levels of stress and propensity to avoid problems (AKA procrastination) creates a climate in the youth ripe for internet abuse. Additionally, it is extremely likely that some millennials use the internet to self-medicate against high levels of depression. Dr. Kimberly Young, and Robert Rogers detail this exact phenomenon in their 1998 work titled "The Relationship Between Depression and internet addiction", their findings conclude, "moderate to severe rates of depression coexist with pathological internet use", they attributed this causal relationship with the need for depressive to engage in anonymous online activity in order to feel acceptance, and boost self-esteem. Similarly Hall and Parsons noticed a co-morbidity that exists within internet addicts," Research indicates that Internet addiction is often associated with other forms of mental distress such as depression, impulse control disorder, low self-esteem (Hall and Parson), demonstrating that mental distress and internet addiction tend to go hand in hand. Internet addiction has been observed to be the product of even more general millennial characteristics, "Cross-sectional studies on samples of patients report high comorbidity of Internet addiction with psychiatric disorders, especially affective disorders (including depression), anxiety disorders (generalized anxiety disorder, social anxiety disorder), and attention deficit hyperactivity disorder (ADHD)" (Weinstein and Lejoyeux, 2011, pp277) Weinstein and Lejoyeux specifically cite the fact that "Adolescents with Internet addiction had higher ADHD symptoms, depression, social phobia, and hostility in Taiwan" (Weinstein, 279) All of these afflictions enjoy uniquely high rates in millennials, suggesting that they use the internet as a coping mechanism for these mental traits. It remains clear that in ways similar to caffeine, millennials self-medicate with the internet in a way that promotes excessive use and addictive behavior. The afflictions the internet serves to remedy within the generation are prolific, but most notably, depression, ADHD, social phobias, stress, anxiety, and problem solving difficulties. Again, similar to

caffeine abuse, internet abuse produces adverse effects that act to magnify negative traits in millennial.

How Internet Dependence Exacerbates Negative Traits in Millennials: A Cyclical Effect

It is widely accepted in medical, academic, and mainstream culture that excessive internet use leads to a large number adverse side effects. For the sake of my argument, it is crucial to hone in on adverse effects that would serve to exacerbate existing issues in digital natives. The exacerbating effect of internet use in millennials creates a cyclical pattern (similar to caffeine), where negative traits lead to internet use, and are then amplified due to excess or dependence of the behavior. Internet usage and addiction is observed to have an impact on offline activities specifically in addicts and youth. In order to investigate the previously researched links between internet usage and offline activities in adolescent communities, a commission of Greek researches provided a cross-sectional survey design that included the participation of all 1270 students ages 14-19 on the small island of Kos. Their study has several profound implication related to this text. First, "Those classified as possible internet addicts demonstrated an increased incidence of dysfunctional social behaviour" (Fisoun, Virginia, et al. 2012, Pp 38). Also internet addicts "reported the highest degree of loneliness, depressed mood, and compulsivity while being more vulnerable to interpersonal dangers than others" (Fisoun, 38). Pointed observations by the authors emphasize disruption in youth social structures "The pattern of off-line activities was specifically altered in girls as problematic internet use increased, again with a focus on communication and group activities while creative activates at home or elsewhere suffered" and more generally suggest that "The increase in problematic internet use was highly correlated with problematic offline behaviors in both sexes" (Fisoun, 43). This study seemingly proves that internet abuse exacerbates, feelings of loneliness, depression, lack of creativity, and specifically anti-social behavior in millennials. These results were verified by various other independent sources who agree that excessive time online can result in real life detriments. A convenient study titled *The Determinants and Outcomes of Pathological Internet use (PIU) among Urban Millennial Teens*, describes how the internet acts to magnify traits of digital natives "Millennial Teens may suffer from aggression ,psychopathology

disorder, pathological gambling and gaming and impaired academic performance due to long hours of being online"(Negin Pressca, R Musa, Rabiah Abdul Wahab, 2013) Although, this text does not include these items in millennials common traits, this statement adds weight to the claim that mental disorders can be the manifestation of internet addiction (and as illustrated above, also the cause) . The same study also cited a report by the Ministry of Health in Malaysia that states that one third of their secondary students had high levels of, depression, anxiety and, stress, social phobias, (DAS), the authors claim this as evidence that "this DAS is triggered by PIU (pathological internet use) and many studies conducted have been contributing to only negative outcomes with....problematic internet use" (Negin Pressca, 2013). Therefore, the confluence of past research and data indicate that many of millennials negative traits are manifestations of reliance on internet technology, furthermore, internet abuse acts to exacerbate these traits if they are present in the millennial.

The cyclical effect of internet abuse is akin to the same phenomenon that occurs with caffeine. As the millennial attempts to cope with their underlying issues such as, anxiety, depression, stress, social phobia, inability to problem solve, they turn to the internet and technology to self-medicate and curb the effects of their stressors. In turn, society's acceptance of internet reliance, and low expectations of harmful effects, promote addictive behavior, dependency and excessive use. In result, Internet Addiction mounts in the millennial personality, exacerbating the original trait they were self-medicating against. As a result of the worsening original trait, the millennial again turns to self-medicate with the internet, creating an environment ripe for deep seeded addictive habits. This is the effect that spawns America's culture of addiction in the youth, and allows for higher levels of addiction found in millennials.

Exactly how expectations of usage play a large role in caffeine abuse, internet abuse is no different. The research used in this text yielded one very important common denominator, the expectation of positive effects of abuse in the addicted millennial. Positive or negative expectations of internet and caffeine use are a socially constructed belief, and reflect American culture. It remains common sense that America is dependent on the internet as a society, if it were to fail, society would collapse. Thus, society has no

other choice but to embrace internet usage. Social media perpetuates America's acceptance of excessive internet usage, and makes for a culture climate that encourages abuse from peer pressure. Additionally Older generations view the internet in a positive light, they see the potential of the technology, and therefore encourage the youth to become tech savvy. In result, little to no stigma is placed on excessive internet usage, and create low expectancies of negative outcomes in millennials. Individuals tend to abuse items they view as having little harm, and America's youth obviously see little harm in internet abuse. This creates positive reinforcement and acceptance of addictive behavior in millennials creating higher rates of addiction, and negative common traits. The future implications of maintaining a generation with very addictive behavior are endless. Acceptance of addictive behavior in culture will only grow as technology improves, which begs the question, what are the ramifications of having a culture of addiction in the youth?

Discussion

The overarching goal of this particular investigation was to illustrate the cultural forces involved with high amounts of addiction to caffeine and internet in America's youth. Along the way, interesting parallels were uncovered between millennials common negative traits, and their addictions of choice. This fueled an investigation into theoretical process that contribute to addiction, and Self-Medication theory made the most logical sense. Caffeine and Internet addiction have *very* much in common, and are clear cut winners for items millennials abuse. This abuse leads to a cyclical relationship in the addicted millennial, where their coping mechanism acts to exacerbate the disorder they originally tried to curb. This phenomena, coupled with wide spread acceptance, and low negative expectancy has allowed dangerous addictive behavior to run rampant in the millennial generation.

Ultimately my research has lead me to the conclusion that a culture of addiction exists in the American millennial, where it is accepted for this generation to exhibit addict behavior with minimal stigmatization by society. This has long lasting and far reaching consequences due to the vastness of this generation, and its impact in society's foreseeable future. Already, this impact has been felt, this addictive behavior extends to various facets of American Culture.

Evidence of the culture of addiction is visible in the generation's high rate of abusing prescription medicine, mainly pain killers and study stimulants such as Adderall. This can also be attribute hyper involved helicopter parents allowing easy accessibility the drugs, and over prescribing of stimulants to children. American society is often most damaged by the threat ignored by its citizens, and awareness to enabling of addictive behavior must be curbed in order to prevent the growing rates of addiction to prescription main medications in millennial. If society does not began to emphasize the importance to live a substance and addictive free life style then perhaps in could halt the deadly proliferation of drug cultures within millennials such as the Electric Dance Music (EDM) rave culture.

Policy measures by the federal government aimed specifically at limiting caffeine usage in teens would prove beneficial to the generation. Outdated drug education programs preach rhetoric on drugs far out of the youth's spectrum of possibility. However, highly caffeinated beverages are easily accessible to the majority of America adolescents, and are much less brought up in US school curriculum and culture. Legislation should target schools, beverage companies, and distributors (including coffee franchises) by offering tax incentives for programs that require ID for highly caffeinated items, and promote an addiction free culture in the schools. The vicious cycle of American culture of addiction can be crippled if awareness proliferates throughout the nations' various media. This means being cautious of the overuse and habit forming affects that technology and substance excess promote in upcoming generations.

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