Special Section: Revolting Media



"Look Up":

The Cell Phone Manifesto

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## **Abstract**

The world around us is slowly insulating itself through rapid technological advancements. At the forefront of this change is the onset of a dangerous smartphone addiction. As of 2017, 46% of Americans say they could not live without their smartphones, and this glaring statistic is the impetus behind this call to action to take steps towards cell phone regulation. With substantial scientific research, society is slowly beginning to understand the omnipresence of cell phone addiction; however, society has not yet fully understood the gravity of this issue. Excessive smartphone usage has shown linkages to other behavioral addictions and ultimately creates an imbalance in the brain. An intentional regulation of smartphone technology, especially for younger children and young adults, will prevent future generations from developing the same cell phone addiction and alleviate the numerous perils and side-effects that accompany the overuse of cellular phones.

## **Keywords**

smartphone, addiction, regulation, behavioral addiction, technology

Put the phone *down*. Try to read the entirety of this piece without glancing, nay, touching a nearby cell phone. This may be an impossible ask, as adults on average touch their cell phones 2,617 times per day, but that's just the "average user." The top ten percent of extreme cell phone users touch their phone more than 5,400 times daily. Whether on the street, at the gym, in the classroom, on transportation, in the home, or beyond, take a moment to zoom out. Everyone in on their cell phones. For young adults especially, mobile devices cause more harm than benefits, both from a scientific and a social standpoint. Over 81% of American adults now own, and spend more than four hours a day on smartphones; the ways in which society interacts with

this "machinery" are therefore becoming increasingly important. As technology becomes more and more advanced, society continues to grow more and more addicted to the physical device that is a cell phone. Since mobile phones have already embedded, solidified, and over-saturated themselves in everyday culture, where does one draw the line, before it's too late? A rigorous regulation of smartphone technology, especially for younger children and young adults, will prevent future generations from developing the same cell phone addiction and alleviate the numerous perils and side-effects that accompany the overuse of cellular phones.

To begin with, let's look at the general assertion that cell phones are harmful. It is important to present some of the different examples that provide context for such an assertion.

- (i.) Cell phones interfere with everyday life. They have become a part of people's routines, displacing previously made active time with scrolling and texting.
- (ii.) Cell phones limit face to face interactions. The device stays glued to your hand and your eyes follow suit.
- (iii.) Cell phones are distracting. As soon as the screen illuminates out of the corner of your eye, you tend to lose focus. Even in conversation, your phone takes precedence.
- (iv.) Cell phones are lowering the age barrier to entry for media use.

  Children are substituting cell phone use for play and are increasingly active on social media.
- (v.) Cell phones promote instant gratification. With high-speed internet features, rapid texting, flashy notifications and more, rapid cell phone use diminish values of patience. "Like! Click! Purchase! Share!" If one of these actions does not take place within seconds, is it even worth it anymore?
- (vi.) Cell phones are health risks. Not only do the small screens cause eye strain, but they also affect sleep patterns, due to the blue light emitted, which can decrease levels of melatonin.<sup>3</sup> In addition, cell phones emit radiofrequencies and cause back related problems, as

- people tend to hunch over when operating their devices. In fact, there are more germs on the average cell phone than a toilet seat.<sup>4</sup>
- (vii.) Cell phones are an excuse: an excuse not to respond, an excuse not to show up, an excuse to avoid eye contact. Cell phones have become an excuse not to be present in any given situation.
- (viii.) Cell phones limit physical activism. With the rapid diffusion of social media, our world has entered the sphere of "hashtag activism." No longer is it necessary to be out in the trenches, protesting or campaigning for a movement, you can simply tweet or post the hashtag of the movement and feel that you have fully participated.
- (ix.) Heavy use of cell phones has been linked to mental health problems.<sup>5</sup> The more you hide behind your device, the more you prevent yourself from sustaining real relationships. In addition, the constant scrolling on social media sites can cause you to seek out 'mood repair' as the current culture of social media is to display only your most 'perfect' parts, hiding the full story of what you're feeling or experiencing.
- (x.) Cell phones are much like drugs: addicting and all-consuming.

  Research summarized below will uncover the linkages between cell phone use and other behavioral addictions.

With this list in mind, we can start to uncover the structural properties of cell phone addiction. Cell phones alone will soon become the most powerful and versatile tools routinely carried by ordinary people. <sup>6</sup> Beyond the reasons presented above, substantial research now exists that show linkages between excessive cell phone use and other addictions. This research is important in realizing the gravity of the issue of cell phone addiction and in understanding the reasoning behind this call to regulate cell phones all together. Cell phones, first and foremost, change the way people walk. When pedestrians use cell phones, they experience reduced situation awareness, which increases unsafe behavior. This increased cognitive distraction is an example of a symptom that is often heard when examining effects of drugs on pedestrians. <sup>7</sup> For example, walking and texting can interfere with working memory

and result in 'walking errors.' This dual-task has been found to impact executive function to the point where it may compromise safety.<sup>8</sup>

In addition, young adults do not even realize their level of dependence on their cellular devices. Media use has become such an integral part of their day-to-day lives that cell phone addiction has become second nature. Emotional instability is related to problematic cell phone use as well, oftentimes causing individuals to turn to their cell phones as a means of coping. These, much like other substance addictions, the incessant checking of emails, surfing the web, tweeting, and sending of texts can potentially act as a mediator for a more unstable individual. These are actions to distract us from other daily challenges: to provide solace through the world that is open to us through our fingertips on a smartphone. This notion of 'escapism' through a device is problematic, because the alleviation of stress or anxiety through this obsessive cell phone use is only temporary for a user. This is a sentiment typically shared with drug abuse, as using drugs only provide a temporary feeling of relief for the user, before spiraling back into a bad place.

Beyond being used as a coping mechanism, cell phones are sometimes used compulsively, which is a trait found in other behavioral addictions. Younger people tend to experience a high sense of irritability when waiting for a response to a text message and describe the possibility of no cell phone access as "anxiety provoking." On the other hand, compulsive cell phone use can become a means of feeling socially connected to others. Young adults in particular tend to seek out reassurance of their social media identities through their phones, and these devices assist in facilitating young adults' social lives. This need for validation can turn into social anxiety, which is another trait traced in other addictions. Cell phones are typically held in easily accessible places so that we can instantaneously reach for our phones to avoid direct communication with people around us. This difficulty of abstaining from looking at your cell phone in social situations is linked to compulsivity, again, found in most behavioral addictions.

Not only do young adults demonstrate dependence on their mobile devices, but they also experience attachment, due to the extreme proximity of their cell phones each day. Young adults constantly sleep beside their phones, operate them while driving,

and physically bring them, in hand, wherever they may go during the day. This attachment has caused young adults to experience "separation anxiety" when they are without their phones. Scientists even describe those who hyperventilate after realizing their phones are missing as having "nomophobia," the fear of having no mobile device. <sup>15</sup> All roads lead to addiction. A study examining the feeling of "separation anxiety" and cell phone use revoked another characteristic of a behavioral addiction. Mobile devices have come to symbolize more than just a cell phone. This attachment has been found to remain, even when the phone is in 'silent mode,' potentially giving cause to "phantom phone signals." Phantom signals are benign hallucinations experienced by people who are addicted to their cell phones. <sup>16</sup> For example, if you glance down at your device because you think you've received a message, even though there is no message on the screen, then you have experienced a phantom phone signal. Intensive phone usage makes people more vulnerable to potential phantom phone signals, which can be thought of as a form of hallucination, a frequent side-effect of substance addiction.

If the previous research findings were the be-all and end-all of current scholarship surrounding cell phone addiction, we could still make a substantial case to regulate cell phones. However, recent findings have found that smartphone addiction creates an imbalance in the human brain. 17 Researchers used internet and smartphone addiction tests to find out the extent to which their use affects daily routines, social life, productivity, sleeping patterns, and feelings. The findings reported that technology-addicted teenagers had higher scores in the feelings of depression, anxiety, insomnia severity, and impulsivity. 18 Beyond these important emotional markers of addiction, the researchers also found increased neurotransmitter levels in technology-addicted individuals. Specifically, the researchers measured higher levels of gamma aminobutyric acid (GABA), a neurotransmitter in the brain that inhibits or slows down brain signals, and higher levels of glutamate-glutamine (Glx), a neurotransmitter that causes neurons to become more electrically excited. <sup>19</sup> In plain terms, previous studies have found the same neurotransmitters to be involved in vision and motor control, and the regulation of various brain functions, including anxiety.<sup>20</sup> This direct scientific evidence is crucial in further cementing an argument to intervene in excessive cell phone use.

If direct action is not taken now to amend this addiction, cell phones will do much more to damage the social fabric of society. China, for instance, is taking the whole concept a few steps further. The Chinese government is building an omnipotent "social credit" system that is meant to rate each citizen's trustworthiness. By 2020, everyone in China will be enrolled in a vast national database that compiles financial and government information, and distils it into a single number, ranking each citizen.21 Citizens using the "social credit" system are encouraged to show off their credit scores, especially those who have good scores, to make friends, and even find significant others. In reality, China's biggest matchmaking service, Baihe, teamed up with Sesame to promote clients with good credit scores, giving them prominent spots on the company's website. Though this global surveillance system might seem far away for many, it is actually in its incipient stages here in the United States. In New York, Skedaddle is launching the "Kudos Project" which is supposed to get rid of tipping in the service industry. This project allows customers to rate every transaction they make, and those ratings are immediately published to a database that allows for anyone using the service to see the ratings and follow an employee from one job to another. 22 These ratings range from Uber drivers, to one's restaurant waiters, to grocery store cashiers, and more. The credit system in China and the "Kudos Project" in New York are thought to build trust amongst all citizens and incentivize workers to receive amenities based on their rankings, but can quickly lead to a dystopian universe in which one's particular "ranking" or "rating" could dictate one's entire destiny.

These devices are capable of much more than society currently realizes. Are young adults even capable of making choices without a cell phone present to reassure them? As cell phone addiction intensifies amongst young adults, society must take a stand. Cell phones are significantly lowering the access barrier to adolescents and are damaging the public sphere. Nowadays, one can access public discourse and express dissent through social media from one's cell phone. Cell phones allow for universal access to the 'online' public sphere, for those who own devices, whereas in the past the public sphere was primarily available to the interests of bourgeois society. <sup>23</sup> Conversely, it appears that this might not be the case. When one has such a privatized and controlling device, tethered to particular systems, does one truly have

increased access to the public sphere? Cellular devices establish an oppressive hierarchy of corporations over device users, determining social norms and ideals to which users must conform. For example, social media create a more apparent example of which societal ideals are most important and which products users should consume. Social media 'scrollers' believe that they are freely contributing to a public sphere; however, they are subscribing to norms imposed by this hierarchy. Therefore, a question society must consider amidst the presence of a cell phone addiction is: "Is this, in fact, the end to the public sphere altogether?" It is evident that the public sphere is not what society thinks it is.

In thinking about the best way to address these concerns, I want to think about young adults as the most vulnerable victims of cell phone addiction. Adolescents are in a growing phase in which their brains are still developing and, if this addiction continues, cell phone abuse could interfere with their proper brain growth. In proposing a five step "Recovery Plan," society would finally be able to point young adults in the right direction, sans cell phones, to prevent susceptibility to a dangerous cell phone addiction moving forward.

The first step to recovery would be to call upon the government to regulate mobile phones for young adults under the age of eighteen. If the research presented previously substantiates the claim that cell phones are addictive, then the government should have cause to decide the extent to which its citizens interact with the phones. Just like any other drug, cell phones should be controlled by the government, so that teenagers and younger children can reach their full potential, without the harmful side effects that come with excessive cell phone usage. Similar to how alcohol is restricted among teenagers because of safety and brain stability issues, the government would be able to decide how young adults could interact with cell phones, or not have them at all. This regulation would be a mandate that provides a timeframe in which young adults are allowed to operate their phones during the day and other rules governing access to social media accounts. Young adults no longer feel secure, as phones have assumed the "enemy object" position. Sports, play, sleepovers, birthday parties, classrooms, lunch-time, and recess are all affected by cell phone abuse. Having too much access to these devices is warping the way young

adults understand friendship, body image, inclusion, and more. Why would a parent want his or her child to play in a virtual playground, when there's one outside waiting for him or her? Exploring an intentional cell phone regulation imposed by the government would be a powerful first step in addressing the addiction.

In order to functionally ensure this regulation, the second step to recovery calls on the cell phone industry to instate this change. Apple and Android software developers would be called upon to engineer a button that shuts off certain features of the cell phone at certain times. For example, each device would track a young adult's usage, and after an approved upon length of time is over, the phone would turn off. In addition, these companies could pre-program a software similar to "SelfControl" in which users under a certain age would be restricted from accessing certain sites, such as Facebook, Instagram, Twitter, and Snapchat. Media industries are protective of their free-speech rights, under the First Amendment, but shifts in public opinion could help increase the likelihood of this regulation.<sup>24</sup> If the public were more aware of the harmful nature of cell phone addiction, then perhaps the industries themselves would preempt policy initiatives and implement guidelines for their users. Corporations could invent a sensor to identify age-appropriate content and activities, and pre-program devices to prevent certain young adults from accessing particular content. Having this push from the larger corporations would be a big step forward in standardizing cell phone usage for teens.

Next, school regulation must be implemented across the nation. The classroom is a dangerous area to introduce mobile devices, because cell phone addiction truly undermines scholastic achievement. <sup>25</sup> Some elementary and middle schools have already taken the decision to ban cell phones from entering the building for this reason. That particular system is set up well, as students who are caught using cell phones on certain school properties are issued detentions. The reasoning behind this is that using technology has been found to be inversely associated with Grade Point Average (GPA). <sup>26</sup> Students use phones to remove themselves from present classroom activities and distract from the work at hand. When a student infiltrates the learning environment with a cell phone, it becomes increasingly difficult to break the association that child has created with the room being a place in which he or she

uses his or her cellular device. Attention impulsiveness was also a factor found to have a significant relationship with cell phone addiction, which is a trait that intensifies an adolescent's inability to focus on the subject at hand.<sup>27</sup> These phones are also used to cheat on tests and to destabilize school environments as a student can spread word or gossip about another student instantaneously through a tweet or text. In an ideal world, it can be imagined that schools would enforce faculty to leave their cell phones in the school office during the entirety of the school day. This mandate would help reverse the trend that the simple presence of a cell phone, even when it does not belong to anybody who is in the room at the time, can negatively affect face-to-face interactions and can decrease the quality of conversation, both affecting the teacher and the student in this case.<sup>28</sup> With this in mind, it is important to rely upon educational institutions to begin and continue this movement against cell phone use for adolescents, especially in a learning environment.

Parents are a large part of the addiction problem, as parenting often spans a large spectrum of various techniques and some parents do not see fit to monitor their children's usage of mobile devices. Oftentimes, parents will freely hand their child an iPad or iPhone to keep them busy and distract them so as to give themselves a break. In addition, parents might be oblivious to cell phone addiction, and might not be even monitoring their child's activity. For example, if a cell phone is being used for 'sexting', or 'cyberbullying', this is an opportunity for parents to step in and prevent the problem from continuing. Parents have a unique opportunity to advise their children on all of the bad things that can happen from too much cell phone use, and particularly improper cell phone use. This is also an educational opportunity for parents to prevent future misuses of a cell phone and teach their child the right ways to operate these devices, and perhaps take the phone away as punishment if the phone is used in a less than satisfactory way. Therefore, parental intervention is a key step in helping young adults 'recover' from this addiction. If parents can advocate for moderation and disrupt social media usage, then young adults have a better chance of avoiding the addiction all together; moderation is key.

The last step to recovery will also call upon educational institutions, like schools, for expertise and authority. There needs to be a formal space in which all of this data on

cell phone addiction is uncovered and presented to young adults. Most schools have an "anti-drug" curriculum, therefore schools should begin implementing a new series to this existing education, presenting the warning signs for excessive cell phone use. This preventative method will, at the very least, spread the word about this phenomenon and provide ways to productively address excessive cell phone use. Current children's media policy is designed to increase children's access to beneficial content, and to decrease their exposure to harmful content. These guidelines easily translate to cell phone use and educators can partner with children's media policy pioneers to begin the process of implementing this new awareness education campaign. Additionally, the scientific research that currently exists in this field should help boost the formation of an anti-cell phone addiction curriculum to span schools across the country. In addition, scientists should help advocate for changes to the system, in accordance with their data; it is critical that research be used in the evaluation of current media policy and media literacy education. Young adults are malleable; introducing media literacy education can help students approach media, in general, in a more intentional way.

Rapid technological developments have truly led to enormous gaps in society's thorough understanding of cell phone and media addiction.<sup>29</sup> As of 2017, 46% of Americans say they could not live without their smartphones.<sup>30</sup> This glaring statistic is proof enough to begin taking steps towards regulating cell phones, in the hopes of reclaiming a society that would be no longer defined by its status on social media or by its attachment to a physical piece of technology. Cell phones were just a means of connecting people when they were invented and now they have turned into a means of insulating people. Is this an ultimate form of privatization? What are cell phones a manifestation of? This paradox is a crucial piece of the puzzle in understanding how cell phones are harming individuals around the world. If policy makers, industries, schools, parents, and researchers could combine forces to address cell phone addiction, the world could rapidly diffuse information that could save the minds of the next generation. Now "look up!" There is a bright, real-life, high-definition viewing experience waiting, beyond the bandwidth of a cellular phone.

## **Notes**

- <sup>1</sup> Naftulin, Julia. "Here's How Many Times We Touch Our Phones Every Day." Business Insider. 2016.
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- <sup>3</sup> Wen, Patricia. "Tiny screens can be a big strain on eyes." The Boston Globe. 2013.
- <sup>4</sup> Abrams, Abigail. "<u>Your Cell Phone Is 10 Times Dirtier Than A Toilet Seat. Here's What To Do About It.</u>" *Time. 2017.*
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- <sup>6</sup> Miller, Geoffrey. "The Smartphone Psychology Manifesto." Perspectives on Psychological Science. 2012.
- <sup>7</sup> Lamberg, E., Muratori, L. "Cell phones change the way we walk." *Gait & Posture*. 2012.
- 8 Ibid.
- <sup>9</sup> Roberts, James A., et al. "I Need My Smartphone: A Hierarchical Model of Personality and Cell Phone Addiction." *Personality and Individual Differences.* 2015.
- 10 Ibid.
- 11 Ibid.
- <sup>12</sup> Sapacz, M., et al. "Are We Addicted to Our Cell Phones?" Computers in Human Behavior. 2016.
- 13 Ibid.
- 14 Ibid.
- <sup>15</sup> Wen, Patricia. "Tiny screens can be a big strain on eyes." The Boston Globe. 2013.
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- <sup>17</sup> PR Newswire. "Smartphone Addiction Creates Imbalance in Brain." November 30, 2017.
- 18 Ibid.
- 19 Ibid.
- <sup>20</sup> Ibid.
- <sup>21</sup> Hatton, Celia. "China 'social credit': Beijing sets up huge system." BBC News Beijing. 2015.
- <sup>22</sup> Rapier, Graham. "An 'Uber for buses' startup is launching an ICO to end tipping as you know it and it's already raised \$6 million." Business Insider UK. 2017.
- <sup>23</sup> Fraser, Nancy. "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy." 1990.
- <sup>24</sup> Jordan, Amy B. "The Impact of Media Policy on Children's Media Exposure." 2012.
- <sup>25</sup> Roberts, James A., et al. "I Need My Smartphone: A Hierarchical Model of Personality and Cell Phone Addiction." *Personality and Individual Differences.* 2015.
- <sup>26</sup> Ibid.
- <sup>27</sup> Ibid.
- <sup>28</sup> Sapacz, M., et al. "Are We Addicted to Our Cell Phones?" *Computers in Human Behavior.* 2016.
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