

# **The Ethics of Mitigating Social Media Addiction with Governmental Regulation**

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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## **Introduction**

The Internet has created an economy where attention is a key resource. There are almost an infinite number of things to do on the Internet, ranging from reading the news, to watching sports, to playing video games. To succeed in the modern age, companies must create applications, platforms, or websites that capture people's attention. Social media websites are one such type of online platform that enables users to share and exchange information, ideas, opinions, and content. Users can find other people with the same hobbies and interests, forming diverse communities constituting a wide berth of niches.

Social media websites are excellent at capturing people's attention. There are roughly 4.8 billion social media users, which constitutes around 60% of the world's population, and the average user spends roughly two and a half hours per day on social media ("Global Social Media Statistics," 2023). Recently, researchers have been investigating whether social media may be too effective at retaining attention. These researchers postulate that social media is effective at triggering the brain's reward center very quickly, leading to a "high similar to the one people feel when gambling or using drugs" (Miller, 2022). This prompts some people to seek more of the stimulating behavior. Through prolonged and repeated usage, the repeated firing of these reward neural pathways rewires the brain, leading to addiction. People with addiction tend to partake in the addictive behavior for excessive amounts of time despite adverse effects on mental and physical health and may have withdrawal symptoms or relapse when attempting to quit.

Several studies have found that prolonged usage of social media may lead to a greater risk of mental health problems. One such study found that adolescents who use social media for more than 3 hours per day may face an increased risk of internalizing problems, which include depression and anxiety (Riehm et. al., 2019). Additionally, some surveys have reported that

about 9% of online users in the United States are purportedly addicted to social media. (U.S. Social Media Addiction By Age Group 2019,” 2019). These data show that social media addiction is a problem that must be taken seriously. However, despite this growing concern, the companies who host these platforms have done very little to address this issue. Given the severity of the problem, it may be necessary for the government to use its power and jurisdiction to regulate social media companies to address the addictiveness of their platforms. This paper will examine the current role of the United States government in regulating social media companies to lessen the addictiveness of their platforms. It will also examine whether the government should be responsible for addressing social media addiction and its consequences.

### **Addictive Features of Social Media**

There are three primary ways social media platforms trigger the reward pathways in people’s brains. The first are intermittent variable rewards, which is also called the slot machine effect. Research in behavioral psychology has shown that the best way to get a person to repeat a behavior is not to consistently give a positive reward, but to randomize the timing of the reward, which stimulates novelty and a hope for seeing something unusual or important. A prominent example of this is gambling in a casino. Social media companies similarly maximize user retention by randomizing the frequency and magnitude of rewards. Likes, comments, and notifications, which are prominent features of many social media applications, are essentially unpredictable and random. A user may receive many likes, comments, and notifications from one post, but not on another, and this variability prompts the user to keep returning to the apps. Many social media applications also provide a feed including a motley of videos, photos, and other media. Some of this feed is uninteresting to the user, but some of the media is engrossing, prompting users to keep searching for the next enticing post (Bhargava & Velasquez, 2020).

Social media companies also employ measures to take advantage of reciprocity, the desire for social validation, and social proof, which is people's tendency to do what the majority of others do. "Likes" act as a form of online currency, giving users a little validation while also nudging them to reciprocate the favor and scroll through the posts of their validators. Millions of people use social media apps, and as a result it is common for users to feel pressured to use these apps to keep up with what their friends are doing. Additionally, these apps are the primary medium of communication between many people, especially teenagers, so forgoing these apps often involves missing out on much needed social interaction (Bhargava & Velasquez, 2020).

Social media applications also remove stopping cues, which eliminates user decision making. This is seen in the infinite scroll, autoplay, and other auto refill features. Instead of the page or video ending, which prompts the user to choose a different link or exit the application, users instead only have to wait for the next video to play or repeat the rote motion of moving their thumb. These features, while convenient, remove natural stopping cues that prompt the user to reflect on their social media usage (Bhargava & Velasquez, 2020).

### **Consequences of Social Media Addiction**

Due to the addictive nature of certain social media features, social media addiction has been thoroughly studied for its consequences. These addictive features increase the time users spend on social media applications, preventing them from dedicating time to other areas of their life, such as school, work, sleeping, or socializing with other people. As a result, people addicted to social media may neglect taking care of themselves, leading to symptoms of depression and anxiety (Bhargava & Velasquez, 2020).

Young people between the ages of 12 and 17 seem to be especially prone to the detrimental effects of social media addiction. They are the demographic with the greatest online

presence and the greatest engagement with social media (Al-Samarraie et. al., 2022). These teenagers are also very likely to experience a fear of missing out (FOMO). Since many of their peers likely use social media applications, teenagers can feel as if they are missing out on their friends' lives if they neglect to use social media.

One could argue that social media addiction is the symptom or consequence of depression and anxiety, and that people with symptoms of mental illness resort to social media, not the other way around. A number of experimental studies have shown that although depression and anxiety can cause social media addiction, addiction to social media can also lead to depression and anxiety. A study conducted by Hunt et. al. (2018) followed 143 undergraduates from the University of Pennsylvania. They found that students who were asked to limit their usage of Facebook, Snapchat, and Instagram to ten minutes per platform per day showed a significant reduction in symptoms of depression and loneliness compared to a control group over a three-week period. Interestingly, both groups showed decreases in anxiety and a fear of missing out over the course of the study, likely due to an increased awareness of their social usage. Both groups were asked to monitor the number of minutes they spend on social media applications, and as a result became more conscientious of their social media usage. One subject in the control group stated that "I was in the control group and I was definitely more conscious that someone was monitoring my us-age. I ended up using less and felt happier and like I could focus on school and not (be as) interested in what everyone is up to." (Hunt et. al., 2018)

Social media applications, despite their addictive nature, can have a number of positive benefits for users who are able to use them in a controlled manner. They can be used to connect with friends, arrange meetups, find people with similar hobbies, and learn new information. Social media can also help individuals and businesses find niches and connect with customers.

Some may argue that the benefits of social media outweigh the costs, but solutions to social media addiction can address the addictive nature of the platforms without decreasing their positive value. Thus, extreme solutions to tackling social media addiction in the United States, such as blocking all social media, are both infeasible and detrimental, and a more nuanced approach should be used. The literature above shows that increasing users' awareness of their social media usage may be a key first step towards addressing social media addiction.

## **Methods**

To develop my argument regarding why the government should play a role in regulating social media addiction, I first selected sources that gave me a greater insight regarding the problem. This led me to the article "Ethics of the Attention Economy: The Problem of Social Media Addiction." (Bhargava & Velasquez, 2020) The authors Bhargava and Velasquez provided a rigorous analysis of the addictive nature of social media which helped elucidate the significance and consequences of social media addiction. The article also briefly discussed the role policymakers should play in regulating social media and cited legislation that aimed to put restrictions on certain social media features.

After deciding to incorporate a commentary of governmental nudging into my argument, I used the legislation cited in Bhargava and Velasquez's article to introduce the current role of the government in regulating social media addiction. I then selected and analyzed sources that would help me argue in favor of the use of governmental nudging in regulating social media platforms. This included the article "The Positive Power of Nudges" and "Nudges and Libertarian Paternalism." These articles discuss the ethicality of nudging and how governments can execute nudging programs ethically and properly.

## **Governmental Nudging and Social Media**

Governmental nudging involves the use of behavioral science principles to change people's behavior towards making certain decisions without forbidding other choices. This involves structuring decision environments to trigger unconscious cognitive processes in people that are more likely to lead to favorable outcomes. The term "nudge" was popularized by behavioral economist Richard Thaler and law scholar Cass Sunstein in 2008. They characterized the mind as consisting of two systems, coined System 1 and System 2. System 1 is automatic, heuristic-based, unconscious, uncontrolled, fast, and cognitively frugal, while System 2 is analytical, controlled, conscious, slow, and cognitively demanding. By structuring decision environments that target System 1, governments can influence people to make certain decisions without them consciously deliberating over them (Saghai, 2013).

Several governments around the world have formed "nudge units," which are specialized teams that design and implement nudges in order to achieve policy objectives. The first such nudge unit was the UK's Behavioral Insight Team (BIT). Created in 2010, this team has employed various techniques to help individuals make more favorable decisions, thus saving millions of dollars. For example, tax prompts that include the line "most people pay their tax on time" led to a conservative estimate of \$300 million being brought forward from a sample of 10.4 million. The BIT has also used specialized prompts to reduce welfare costs. By prompting job-seekers to identify what, when, and how they will find work, the BIT reduced state welfare costs by \$75 million to \$150 million per year. Many other countries, such as the US, have also created similar nudge units and have saved a comparable amount of money (Halpern & Sanders, 2016).

US government officials are thoroughly considering the application of the principles of nudging to mitigate the risks of social media addiction. The US Congress has introduced

legislation that designs nudges that would lower the chance of users being addicted to social media. Some of this legislation also creates processes for evaluating these nudges and further evaluating the addictive nature of social media platforms. Senator Josh Hawley introduced a bill titled the Social Media Addiction Reduction Technology Act, or SMART act, which required social media companies to design their applications in a way to make them less addictive (SMART Act, 2019). Although the bill did not pass, it outlined several features that would nudge users to use social media less. It would outlaw infinite scroll, autoplay, and other auto refill features that load content without an explicit request from the user. It also required the addition of features that would allow users to restrict the amount of time they could use social media applications as well as notify them about the time they have spent using social media. One such requirement was displaying a pop up for every 30 minutes a user is engaged with a social media platform. These requirements would reintroduce stopping cues that are no longer present in many social media applications and make users more cognizant of their social media usage. The bill also mandates a triennial report on the “processes through which social media companies and other internet companies, by exploiting human psychology and brain physiology, interfere with free choices of individuals on the internet” (SMART Act, 2019).

Senator Amy Klobuchar introduced a similar bill titled the Social Media NUDGE Act a few years later (Social Media NUDGE Act, 2022). The bill outlines a more research dependent approach to addressing social media addiction. It required the National Science Foundation and National Academies of Science, Engineering, and Medicine to conduct a review to identify “content-agnostic interventions” to reduce the harm of social media addiction. This review would include the findings of academic studies, reports, and other appropriate information, and take into account the userbase size, means of revenue, and methods of content creation and



sharing on different social media platforms. These interventions would not alter the core functionality of social media platforms or rely on the particular substance of the user-generated content on the platforms. After these institutions submit a report detailing their findings, the Federal Trade Commission would identify which interventions should be applied to which social media platforms. These provisions would then be enforced by the Federal Trade Commission, and social media companies would be required to submit a plan to the Commission detailing how they plan to implement the intervention, as well as publicly post the details of their compliance on their websites.

Although both of these bills did not progress past their introduction and eventually died in the Senate, they indicate that US government officials are cognizant of both the addictive nature of social media, and the importance of combatting addiction using research from the field of behavioral science. However, this raises the question of whether the government should have the responsibility and power to regulate social media companies to mitigate the addictiveness of their platforms in the first place. Individualism, freedom of choice, and libertarianism are prominent ideologies within the United States, and the government must respect people's autonomy. How should personal and governmental responsibility be appropriately balanced? Additionally, just as social media companies exploit the findings of behavioral science research, governments can do the same. How can the government employ behavioral science research in a way that is beneficial and not demeaning to its citizens?

### **Argument for Government Nudging to Mitigate Social Media Addiction**

To understand the importance of government oversight, it is important to look at the base incentives and motives of both the US government and social media companies. Fundamentally, the US government was created for the purpose of serving its citizens. The US Constitution

clearly affirms this, as the first three words of this famous document are “We The People.” Social media businesses on the other hand have a business model that does not prioritize the user. The business model of social media platforms depends on the continuous retention of users for a prolonged period of time. The longer a person uses a social media application, the more advertisements they are exposed to, and the more likely they are to engage with these advertisements. This engagement allows social media companies to charge advertisers money. Thus, social media companies are directly incentivized to find ways to keep users engaged as long as possible, since this will generate the greatest profit (Bhargava & Velasquez, 2020).

Social media platforms will very likely continue applying the findings from research in behavioral science to maximize user retention, since this most directly supports their business model. The US government should have the responsibility to regulate social media companies, because absent of any incentive to do otherwise, social media companies will not reduce the addictive harm of their platforms. The US government has the capacity and thus the responsibility to address social media addiction with nudging, which influences the decision making of social media users without directly controlling their actions (Jachimowicz & McNeerney, 2015).

Nudging also serves as a compromise between libertarianism, the complete freedom of choice of an agent, and paternalism, which involves a government making decisions on behalf of its citizens. Both of these ideologies have weaknesses at their extremes. In the case of libertarianism, individuals may not act in their own best interest, or may act in a way that harms others. Conversely, in the case of paternalism, the government may make decisions that are not in its citizens best interest, either through malice or poor judgment. Nudging acts as a middle ground between paternalism and libertarianism by preserving the individual’s right to choose

while encouraging certain favorable behaviors (Zajma, 2021). The removal of features such as infinite scroll and the addition of features such as pop ups do not prohibit the user from using social media applications or directly control their social media usage behavior. Users will retain their freedom to use social media as much as they desire, given the appropriate application of nudging.

## **Conclusion**

With the SMART Act and the Social Media NUDGE Act, the US government is showing its intent to nudge its citizens towards healthy social media usage and mitigate the risks of social media addiction. These interventions aim to increase users' awareness of their social media usage, subverting the control of social media features that target unconscious mental processes. As detailed in this paper, the government has a responsibility to mitigate social media addiction through regulation, and is able to do so in a way that respects the autonomy of its citizens. Given the potential harm caused by social media addiction, nudging and other similar methods to mitigate this risk should be further explored. These methods should both be reasonable and properly balance the ideologies of libertarianism and paternalism (Zajma, 2021). The US government must proceed with caution regarding its use of nudging in the regulation of social media, as it can set a precedent for the regulation of other disparate entities or companies that also utilize behavioral science principles.

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