The Effect of Social Media on the Mental Health of Teenagers

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## Introduction

Thirty students sit in a classroom. The teacher stands up at the front, lecturing the students on how to analyze a famous Shakespeare play. A group of these students has their phones sitting on top of their desks. Their phones occasionally buzz with energy, and students pick them up to check for new alerts that may have come upon their phone. The students stare at their phones, scrolling through their feeds for the rest of the class, the teacher's lecture serving as background noise. The phones are the center of attention, and it is the only thing the students can think about. Kids would even check their phones when no vibration actually occurred, which is known as the phantom vibration syndrome (Locke 2016).

In 2011, 35% of people owned smartphones. Smartphones are now owned by 81% of the population in the United States of America as of 2019 ("Mobile Fact Sheet" 2019). It has only been eight years and phones have not only become more prevalent in society, but they are practically a necessity.

Students need to use smartphones and computers to submit online assessments, watch videos for school, research papers and are used to help teachers communicate with students with emails. At a certain point during high school, it is a liability to not have a phone. Phones are, undoubtedly, useful in the everyday life of a student.

Modern phones have many different useful capabilities, but like all things, there is a limit to how much good they can do. Social media can be positive, as it allows for communication across long distances. However, social media can cause dangerous habits every day, ranging from walking into a street unknowingly (Reilly 2016) to incidents of texting while driving. In fact, 3,166 people died from distracted driving in 2017 (National Highway Traffic Safety Administration, 2019). Many of these deaths are caused by texting and driving. These technologies affect the lives of many people in a way that can be seen. Wrecks are actively happening because of it, and other fatal accidents such as one person who walked in front of a car while playing Pokemon go (Reilly, 2016). What can not be seen is what effects that it has on the human mind. Something that has always been of interest to me is the mental health. On smartphones, people are constantly being judged for one thing or another, more specifically on social media. From peer pressure to bullying, could social media be negatively impacting the mental health of humans, specifically developing high school students like myself?

Social media has a negative impact on the mental health of teens due to the like system, design, and over-usage of it; lower total usage of social media could positively impact mental health. My goal in this research is to find out if this actually applies to students during high school.

### Background

In the late 1960s and early 1970s, computers were machines that relatively few people knew how to operate (" Computers: Timeline of Computer History" n.d.). They often sat in a tech supply closets covered in dust, and couldn't be used on a daily basis. The only people one might see one of these computers were those that wanted to pursue the career path of technology.

Now, in 2019, high school students actively try to sneak a peek at their phones during class lectures. These phones, or miniature computers, can do much more than the computers from the 60s and 70s. Most teachers even make their students do homework on laptops that are provided by the school, and as of 2015 80% of 8th graders used a laptop for schoolwork during the week. These students have a world of knowledge, good and bad, available at their fingertips.

Smartphones, specifically, do not just have a single usage. They do not just make phone calls and send texts. Smartphones can do a variety of things: games, social media, organize information, watch movies, etc. They allow the users to do everything with ease, and the usage of phones by teens has steadily increased over the years ("Mobile fact sheet," 2019)

One of the most popular types of applications on smartphones are social media, with Facebook having close to 2.5 billion users (Clement, 2019). It is something that did not exist in the 1960s, and it is just one of the reasons as to why these close time periods are so drastically different.

According to Merriam-Webster, the definition of social media is as follows: "forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos)". Essentially, social media is a location for user-generated content that almost everyone has access to. This means that teens could very easily gain access to this vast build-up of user-generated content and already have.

Social media is just another chore for people to worry about in their daily life. It is a place where people are actively uploading posts about themselves and things of their interest. They always have to think about what they might post, and what other people are posting, like one NASA intern who was fired due to careless vulgar tweeting and bragging about her new position("NASA Intern fired over lewd tweets," 2018). What is interesting is that this brings up is the implications it has on the user: if the user worries about the feed on the social media they use, they are dedicating a significant portion of their thoughts to it.

There is nothing that social media can compare to, in terms of research. There was no such thing as social media before the 2000s, so there are no data that shows the implications of any given social media in a specific year. Simply put, there are two extremes: before social media was created, and after it was created. This is due to the rate of advancement technology has had in the late 1900s and early 2000s, and even then in 2011 the ownership of smartphones was still very low ("Mobile fact sheet" 2019).

Smartphone ownership is currently above 80% and the phone has an important role within modern society. People have to curate their social media posts to make sure there is no backlash or that might change the way that others perceive them. Social media is a place for expression, but it is also composed of humans. People are only interested in certain subject matters when on social media, which is why communities are created.

What is human behavior like naturally, in an environment that separates them from society, where no communities are formed? In an attempt to find out what human behavior was like in a situation like this, an experiment was performed, known as the "Stanford Prison Experiment" (BBC prison experiment). The experiment gathered volunteers through careful testing and sought to put them inside of a fake prison. Some were selected to be guards while others were prisoners, and the guards were told to regulate the prison. They would all then be left alone for a period of time, and their behavior within the experiment would be studied. It was found that humans are social animals who thrive in social groups and tend to start conflict due to general differences among them (BBC prison experiment). The prisoners simply flocked together into multiple different social groups depending on personality, likes, and dislikes. They

picked fights with each other and the guards as if little gangs had been formed in the short time they were there. It shows what people will do in communities, and the things they tend to do in these little communities of prisoners.

Communities on social media are very similar to this, with forums that are created for the sake of these differences. Reddit, for example, has thousands of user-created communities that attract people who are interested in the matter, varying from communities centered around jokes to political wings. This sets up a dangerous environment for many who use social media, especially teens, as everyone is judged for their beliefs and everyone knows it. One wrong move and a famous internet celebrity can get "canceled", as in they are suddenly disliked by even their best fans. Similar scenarios can happen to people who are not celebrities. It is an environment that can very easily lead to a negative impact on a teen's mental health.

On the other hand, there are ongoing studies that suggest social media is a good thing, and could even be used for psychological therapy for some people (Farpour, Habibi, & Owji, 2017). They suggest that social media is a very valid source of encouragement for these people who are mentally unstable and need help. It allows these people to talk about their problems, specifically depressed cancer patients. Patients who used social media were diagnosed with depression less often than those who did not (Farpour, Habibi, & Owji, 2017). It is said to help nurture these people back into a stable mindset that lets them think.

The goal of this research is not to talk about its possible positive effects. If that were the case, there would be more to discuss. This research seeks to analyze and correlate the information to figure out what negative effects that social media has on teens, and then decide if the negatives outweigh the benefits. In proposition, social media has a negative impact on the

mental health of teens due to the like system, design, and over-usage of it, and lower total usage of social media could positively impact mental health.

#### Argument

Facebook has a user count of 2.45 billion (Clement, 2019) while other sites have drastically lower users in comparison. Instagram has a base of approximately 1 billion users monthly (Moshin 2019). Even fewer than that are websites Twitter and Snapchat, which have 68 million (Clement 2019) and 203 million (Moshin 2019) respectively.

In 2017, approximately 6,200 people ages 15 - 24 committed suicide ("Teen suicide," 2019). This is a drastic increase from the year 2000, approximately 30% (Miron, Yu, Wilf-Miron, & Kohane, 2019). The suicide rate increase correlates with the advancement of technology over time, as there has been a drastic improvement of technology over the course of 30 years. In the year 1992, the IBM Simon was the closest thing to a smartphone that existed (Erickson, 2012), but it was essentially nothing more than a PDA which was a minicomputer used for organizing information and sending faxes. It was not until 2007 that the Apple iPhone was released to the public and caused vast technological advances (Silver, 2018). The time span here encapsulates the increase in suicide rates, but it is not specific enough.

The increase in suicide rates goes increases from 2000 to 2016 (Miron et al., 2019); The time period needs to be more specific, and thus led to a possible correlation with social media. In 2005 just 7% of the U.S. population used social media (Perrin, 2015). This escalated at a fast rate, just enough to correlate with the above data, in that by 2015, 65% of American adults used at least one social media (Perrin, 2015). Even if the above data is solely adults, it is worth taking note that an increase in teen usage of social media also exists. In just four years, the percentage

of teens who claim to use social media "almost constantly" has almost doubled. This period was from 2014 - 2018, and the increase was from 24% to 45% (Anderson & Jiang, 2018).

I did an analysis of a social media platform to find information that could support the correlation between social media and those suicide rates previously mentioned. This would tell me more about social media itself, and help me to understand what exactly makes it so attractive to teenagers. I could then analyze the effects it has on teens, negative and positive.

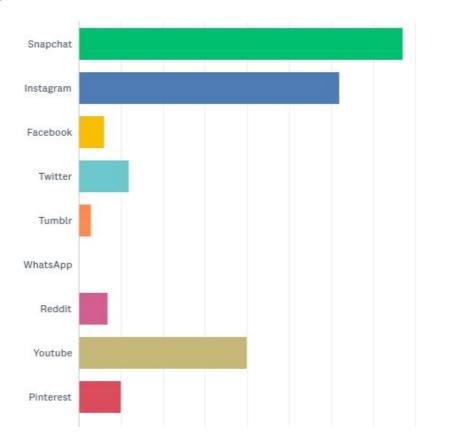
To do this, a survey of ten questions was created that will be referred back to throughout this essay (Appendix). The survey in question received one hundred responses from teens and was shared through social media in order to obtain results. The question referred to here asks: What social media do you use the most?

## Social media usage Rankings

- 1. Snapchat (77%)
- 2. Instagram (62%)
- 3. Youtube (40%)
- 4. Twitter (12%)
- 5. Pinterest (10%)
- 6. Reddit (7%)
- 7. Facebook (6%)
- 8. Tumblr (3%)
- 9. Whatsapp (0%)

# What social media do you use the most?

Answered: 100 Skipped: 0



Note that the questionnaire advised the volunteers to respond with what they used on a daily basis, this means they could have answered multiple choices. Out of the assorted answers that were available, Snapchat was used by most respondents. Instagram was the second most used social media according to the results.

Snapchat, which was created in 2011, is a popular platform (Malloy, 2017). It grew in popularity very fast and, according to the survey I created and research conducted by Pew research center, it is one of the most popular social media among teens (Anderson & Jiang, 2018). Some of the more notable features of the app are its capabilities to either be used for simple messaging or social media where things are posted on a consistent basis. It shares in most basic features of social media in that it gives the user the ability to like a post or a video, but it also has a very important and unique feature: a "snap score."

To begin with, it is a good idea to start with the basics---the like button, for instance. This feature will be found on any popular social media and can take many different forms. It is found in all of the top three results on my survey: Snapchat, Instagram, and Youtube. The like button is very important because it comes with a number. According to research, teens are more likely to 'like' a post that already has lots of likes (Sherman, Payton, Hernandez, Greenfield, Dapretto, 2016). Teens can very easily fall under the effects of peer pressure, and this is just an extension of that concept. The results of the study concluded that when a post has more likes a teen is more likely to like the post than a post with fewer likes. The teens are pressured into liking these posts because everyone else likes them.

Peer pressure is one major issue with social media, as far as the aforementioned research concludes (Sherman, Payton, Hernandez, Greenfield, & Dapretto, 2016). One of the most unique features of Snapchat is its snap score. It is essentially a score that users get based on the snaps they send and receive. Some teens have snap scores in the thousands. This is a clear indication of time and dedication to the app, which is large according to this score. So, theoretically, Snapchat is a competition for its users--whether or not the user bothers with it is up to them. For further support, humans are known to be a competitive species (Linden, 2015). The snapscore is a number much similar to a like button, as it is a quantity that users can compare.

There is some proof that teens are affected by social media in the form of the like button. When social media originally started, it was often referred to as a "popularity contest" (Coleir, 2014). Even today, many media sites refer to social media as a popularity contest, or some refer to this concept being a stigma of social media. The competition is for a simple statistic: the number above the like button, whether it be a heart, a thumbs up or an up arrow.

Since social media is seen as a popularity contest by many teens, it has had a negative impact on mental health. This happens because, like all competitions, they are afraid to lose. Humans, as a species, do not like to lose (Shaw, 2017). So, when a teen feels that they are not successful on social media, due to low likes or in comparison to someone popular, it is likely to affect their pride in a negative way. The goal of social media, and what causes people to continually use it, is that of immediate gratification (Dwivedi et al., 2018).

Immediate gratification is the tendency to forgo a future benefit for less impactful but more prompt benefit (Ackerman, 2019). With social media, the like button offers exactly that. The like button is always active and shows the number of approvals from other users of the platform, each user giving one like. The user's goal is to gain as many likes as possible on not just one post, but all of their posts. All of this might negatively impact their mental health because of the effects on their self-esteem.

That is just one of the many possible reasons for the decline in mental health in teens, so what other possibilities are there? Well, there was an interesting finding in the conducted survey. Within the survey, there was an optional question that asked for a personal story. If a teen found themselves able, they could answer the written response question. In this portion, the teen answered with the following: "I've been bullied on social media which has worsened my anxiety and depression but also I've met some amazing people and resources because of social media". This was not the only response that claimed that social media had negative and positive effects on them. This shows that social media can be used for bullying. This is not just the case for this

person, either. According to a survey produced in 2018, 59% of teens are cyberbullied online (Anderson, 2018). Essentially, cyberbullying is any form of bullying that takes place on a digital platform.

## **Counter-Argument**

It is also proven that social media can improve the mental health of teens. Returning to the quote from the last paragraph, the anonymous surveyee said, "I've also met some amazing people and resources because of social media." This teen states that they have witnessed first-hand positive effects because of social media. There is evidence to support this, at least partially. In 2017 there was a study that was conducted to see if social media could improve the mental health of cancer patients who were diagnosed with depression (Farpour et al., 2017). The study correlated social media use with that of patients who did not have depression, which showed that, statistically, the data supported the use of social media for patients diagnosed with depression. The matter of the fact is, it can help people engage with others much more easily. This social media offers an outlet for teens who might not normally engage with others, so they rely on it.

The issue, however, is that it does not outway the negative effects of social media on the mental health of teens. Even if teens do gain positivity and better communication, it is likely they are losing sleep. Studies have shown that there is a correlation between the amount of sleep a user has if they use social media before bed (Kaimal, Sajja, & Sasangohar, 2017). When this information is correlated with the fact that teens don't get enough sleep normally it shows a significant issue with the lack of sleep teens receive. ("Teens and Sleep"). The study further shows that a lack of sleep correlates with depression. So even if social media itself is not directly

causing a decline in mental health, it likely worsens it indirectly by causing teens to lose hours of sleep.

It is worth noting that social media can improve the mental health of someone under certain conditions. The issue is that the chances of this are very slim due to all the possible negative effects. If social media is being used as an outlet, it is fine because of the benefits, but that scenario is unlikely due to the risk that comes with using it.

### Conclusion

In conclusion, many correlations show that social media has a negative effect on the mental health of teens. It cannot directly cause mental health issues, but it can worsen them.

The like button seems to have one of the more powerful negative effects on the mental health of teens, as it can negatively affect their self-esteem and cause anxieties. It's a number, and higher numbers are generally seen as better by humans, so when a teen has a low number of likes on a post, it can hit hard. It can possibly result in cyberbullying, even.

Additionally, it is shown that teens frequently get bullied on social media. This harassment can affect their mental health much like any other bullying. The chance that a teen could get bullied on social media is, statistically, very high (Anderson 2018).

Of course, social media can help with depression because it helps the user to communicate when they can't talk about their issues, especially since people with depression are likely to not communicate with anyone, adolescents of the highest risk. (O'Connor, Reiss, McGuire, Hetherington, Plomin, 1998). The problem is that teens are likely to over use social media.. According to my survey, 56 out of 100 participants said they use social media for more than four hours a day (Appendix). Overall, it can be presumed that social media has a negative effect on the mental health of teens, but can also improve their mental health if used under certain precautions, but under normal circumstances, it causes more negatives than positives, such as losing sleep.

## **Action Plan**

I propose that, in order to spread awareness, I arrange two assemblies on the school campus that hone in on a single topic relating to the negative impact that social media has on its users. I would likely focus on the effects that social media has in their daily life rather than something that is only subconscious. I could give real-world examples and maybe more.

Ultimately, the goal would not be to downplay social media. I would prefer, instead, to spread awareness of the effects that over-usage of it can cause. I want to encourage people to not spend as much time on it, and show them the beneficial effects it could have. If I can correctly spread awareness for the issue, then I will have succeeded in my venture.

## Final words

Social media has a negative impact on the mental health of teens after excessive use (3 or more hours), and according to my survey, more than half of the teens use social media excessively.

This can cause things like a lack of sleep (Scott, Biello, & Woods, 2019), and can be a source of bullying for many teens (Moreno, 2018), and proves to be a major focus for teens who want to feel confident about themselves.

Social media, as a whole, is both good and bad. It is one of the biggest things humans have ever had immediate access to for communication with practically anyone in the world. It allows people to express themselves, and it is an outlet for those who need it. The problem is that teens are not developed enough for this level of information. There is simply too much on social media for a teen to comprehend, and even more, social media can also lead to problems such as bullying.

Overall, if teens could limit their use of social media and control how they use it, it would be much less harmful to their mental health. I simply want to spread awareness and show that these effects are very real.

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## Appendix

Survey - https://www.surveymonkey.com/stories/SM-DP6KW9H7/

Survey questions:

- 1. What is your gender?
- 2. What social media do you use the most?
- 3. How long do you use social media, on average, in a day?
- 4. Are you active on social media?
- 5. Do you enjoy social media?
- 6. What do you use social media for?
- 7. On a scale of one to ten, rate your experience on social media.
- 8. Please check all that apply to you (Mental symptoms and professional diagnosis claim)
- 9. Please share a personal story if you want to.