

The Effects of Social Media on the Mental Health of Adolescents

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**On my honor as a University Student, I have neither given nor received unauthorized aid
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How Does Social Media Affect Mental Health?

Social media is undoubtedly one of the biggest technologies right now, and mental health has become one of the most discussed topics in the modern day. However, we are not entirely sure if there are positive or negative effects of social media on mental health. Social media is a very popular tool of communication - it is a major way for people to keep in touch with loved ones, make friends and relationships, and even network. Adding onto that, mental health can be considered a major “why” for our behaviors - when people are happy, they feel encouraged to do good, when people are sad they may want to keep to themselves. This is where social media plays in - it can provide a platform for harassment, bullying, or other toxic behaviors for adolescents; it could also cause addictive behaviors or other factors that indirectly affect the user’s mental health (Akram and Kumar, 2017). However, it can also be a platform for jokes, companionship, and conversations that uplift adolescents, or provide some source of motivation that pushes them to improve themselves (Hamilton et al., 2020). In this paper, I argue that researchers have motives to find out how social media impacts mental health in adolescents, and motives to find out how the sociotechnical system as a whole plays in.

The motivation for this paper is in a technical project I had done previously, which is that a social media application was developed per the request of the company owner’s friend. The theme of the application was to make connections based on where was from ethnically, since people with shared backgrounds connect easier. While working, lots of thoughts about how often people would use the product, as well as if they may even get addicted to it occurred, which ultimately led to thinking about mental health - accounts could use it to make many new friends, and even lead to significant relationships. Users could even find motivational and productive content on it. But, it could also lead to a place of bullying and harassment for some users. It

could also lead to places for toxic comparisons, and lead to insecurity and feelings of bitterness for users. There was a lot of room for ethical discussion on building an application and what it could curtail, which led to deep interest in pursuing this research.

Social Media as We Understand It

Social media is a massive tool of communication in today's world. Millions of people use social media to stay connected with their friends and family. Many turn to social media for entertainment - many social media implement algorithms to keep users on the platform, to constantly provide accurate suggested content (Plackett, 2022). Users even turn to social media as a source of income, and the current wave of past and emerging content creators use social media as their means of delivery.

When humans are happy, they can become encouraged to do good things, such as donate or give a compliment. Strong mental health can lead to self-improvement and motivation, as well as the power of spreading the motivation to others - this motivation can also lead to improved physical health (Akram and Kumar, 2017). Social media can be a place for making friends and relationships for some, and it becomes a platform for companionship, and some users may find inspirational posts that improve mental health (O'Reilly et al., 2018).

When humans are sad, they may become lethargic or harmful to others or themselves. Poor mental health can also lead to very severe consequences, such as suicide, or the need for medications to help the mind. Poor mental health can also indirectly lead to poor dieting and sleeping habits, which then turns into poor physical health. Some adolescents have detailed their experiences being harassed or bullied online, or how social media affects their physical perceptions, possibly leading to body dysmorphia or poor eating habits (O'Reilly et al., 2018).

Some adolescents claim that social media can be a toxic place of comparison, which can lead to anxiety (Criddle, 2021).

There are other factors as well that contribute to mental health, such as education and society. Social media also plays into these factors. In terms of education, students can network and make relationships through social media, which allows them to learn from each other, which can promote confidence (Akram and Kumar, 2017). Students can also use it as a means of preparation, where they can see how others have gone through related work before them. This can help reduce anxiety and stress. On the other hand, there are drawbacks of social media on education. Students develop a sense of instant gratification through modern social media usage, which harms their ability to do legitimate research that can be actually time-consuming, as well as learning in general that requires concepts that need time to be reviewed and understood (Akram and Kumar, 2017). Additionally, it can affect health through the lens of education - students are getting addicted, which leads to improper nutrition as well as lack of sleep. The addiction also seeps into academic performance, which lowers grades, and they also end up having a lack of interpersonal skills due to reduced human contact, which is also leading to businesses being upset with the state of new graduates (Akram and Kumar, 2017). This academic and career weakness can only hurt mental health and reduce confidence.

As mentioned earlier, social media also has an impact on society, some negative, and some positive. For positive impacts, one plus from social media is that it helps with connectivity among adolescents - they can meet with people all across the world, be it from getting help from social groups to free education. It can be a way to get constant new information, some of which can be the good news that a young adult needs to improve their mood and mindset at that point in time (Akram and Kumar, 2017). It can be used as a way of building community initiatives, from

volunteer work to supporting a distant community in another area. Ultimately, social media can be a tool to build societies - people can connect on blogs and forums, through community pages, and produce groups that help each other and support each other (Keles et al., 2020). On the contrary, social media also has disadvantages when it comes to society. It can become a platform for harassment and gossip, and according to the Pew Research Center, a majority of adolescents have dealt with cyberbullying. A disadvantage is also that adolescents can get their reputation and image hurt via social media, ranging from having something embarrassing posted to having a false narrative written about them (Akram and Kumar, 2017). Similarly as mentioned earlier when dealing with education, social media can also harm society by causing young adults to waste excessive time on social media. Adolescents can also get hacked and have their personal information leaked, as well as get scammed by many frauds online. These aren't exactly direct attacks on mental health, but all of these are ways in which an adolescent's feelings can get hurt (Keles et al., 2020).

Another important topic for discussion is the possibility of social media affecting self-harm in teens. In some instances, adolescents share photos of them harming themselves online, as well as thoughts of self harm or even suicide (Abi-Jaoude et al., 2020). In addition, these media postings had no indication of graphic content, and another issue is that the comments from peers could actually sometimes be positive feedback for this type of behavior. This can ultimately lead to depression and self-harm being viewed positively and being normalized, and it's been seen in a review involving 26 studies that social media users talk about the practicality of suicidal acts as well as sharing live depictions of adolescents harming themselves (Abi-Jaoude et al., 2020).

The research problem is important as social media is a massive means of communication in the modern world. Users are consistently finding social media as a place of companionship and support, or a way to stay connected with their friends and loved ones (Akram and Kumar, 2017). Being able to build such applications provides a means for these people to maintain or build connections, and can often be a tool to fight against loneliness or depression.

Engineers know extensively about this area of work - building social media applications. There are many social media applications currently running, all with millions of users. Engineers have been building these applications - the different user components and displays that make the user experience so friendly and visually appealing. Engineers also build the algorithms that keep so many users attracted to these social media applications - they play a part in the suggested content that we see, that grabs our attention. This in turn, keeps users scrolling or clicking through the applications, pouring more and more time into it. Engineers build all the trendy features that lure new users in for being fun to use, or features that just allow more content to be digested quickly and to maintain constant attention. The overall point - engineers have been building social media applications for quite a while and understand what it takes to keep users attracted.

There is a gap in knowledge looking to be fulfilled. There is research conducted that shows many benefits and drawbacks of social media on the mental health of adolescents, however it is currently unknown what to make of this knowledge. There are different socio-technical concepts that could be used as a lens, such as utilitarianism, ethics of care, and SCOT (social construction of technology) theory. Discussing them will allow for better vision on how to handle the drawbacks, and see if they truly are drawbacks, in case someone on the other

end of it is thriving. These all will be defined, and discussed on how it can be used to analyze the research problem.

Among reports analyzed, there is a lot of information about the benefits and drawbacks of social media, however the question of what researchers are trying to accomplish with said information goes unanswered. The method of analyzing introductions and abstracts of various research articles will be used to analyze the goal of research on the subject.

What Does the Evidence and Analysis Leave Us With?

The evidence and analysis provide room for inferences in the research of how social media affects adolescents' mental health. Social media can be seen as a platform for positivity and negativity - it can be a place for making friends, as well as victimizing individuals. The evidence mostly covers the different types of interactions and whether or not it is harmful or uplifting, so this will mostly be about the analysis.

In terms of drawing inferences regarding abstracts and introductions, a lot of preface is done surrounding the usage of understanding how social media can influence mental health in adolescents. O'Reilly et al. mentions that as information continues to grow on the subject, it can be used to reduce risks facing adolescents in the face of social media, and furthermore it can help for better understanding on how young adults interact with social media. From this, it is clear that researchers are trying to use the information of how social media affects mental health to help young adults minimize the drawbacks. However, more can be made from the work.

O'Reilly et al. mention that a greater autonomy is achieved in adolescence, however they also detail the negative experiences occurring in social media; infer that it might actually be the adolescence that triggers these effects on mental health. O'Reilly et al. explains that adolescence is a very experimental time where young adults are developing their personality and

understanding who they are, and as a result may be a bit more vulnerable. This could mean young adults are more ready to share content on social media that may hurt someone's feelings but inversely also inspire someone to do better - it may be less of a technical cause and more of a social cause.

Moving along with that inference, the researchers also claim that adolescence is a time that many young adults face pressures from their surroundings, such as educational environment and personal lives. Along with the vulnerable stage that adolescence is, young adults will only have an amplified pressure, and take these emotions with them to social media, just a virtual medium for socialization.

This ultimately leads to the inference that the researchers are motivated to see how exactly adolescence itself can cause mental health effects, with social media being the tool to facilitate thoughts, emotions, and actions between young adults.

Akram and Kumar, in their introduction and abstract, also mention the large grasp social media has on society - from education, business, the health field, and more. Throughout one's life, social media can play a huge role in making and keeping in touch with friends and family. It's also mentioned that social media has positives, such as becoming a networking tool or a way to grow businesses, but there are also clear negative effects, such as cyberbullying. Akram and Kumar then go on to mention that social media influences society in a broad way, and it can be inferred, such as with O'Reilly, that the goal of the researchers is to expose every effect, including bringing the negative effects to light, in a hope of minimizing it, but this is already a bit clear, and there is room for further inferences.

Akram and Kumar state that humans feel pressured to accept different lifestyles in response to advancing technology. Knowing this along with how social media has caused a shift

in mental health but also provides positive resources, it is a bit clear that they would like to discuss anxiety caused by social media. It can be inferred though, that the researchers are motivated to see if social media could be able to cause a full-on culture shock, which can be both positive and negative. Another reason for inferring that the researchers are motivated by this is that they also note billions of people around the world using social media - this inevitably causes a wide variety of backgrounds to mix.

Another point that can be inferred from Akram and Kumar's introduction is that they believe part of what generates the effect on mental health is the very fact that social media put people under pressure to accept different lifestyles. Users naturally have their own respective local communities growing up, but when exposed to virtual worlds with millions of people, this can generate a variety of feelings that can be foreign to what a user has experienced.

These two inferences lead to a major one, that Akram and Kumar's motivation behind exploring the effect of social media on mental health, is that they would like to see how the worldwide influence can have an effect.

Keles et al. defines different topics in the introduction, such as social media, mental health in children and young adults, and then how mental health can be impacted by social media. When defining mental health, the authors mention many statistics regarding youth facing mental health issues, such as depression and anxiety, and when social media is defined, a statistic regarding that 92% of teenagers using social media was mentioned. The authors then go onto saying, in the introduction, that being able to see how adolescents can be impacted by social media is important as an increase in mental health problems is occurring. This leads to a clear inference - the researchers are trying to reduce the negative impact of social media on mental

health. Just like the previous two groups of researchers, though, more can be inferred between the lines.

In the work of Keles et al., the researchers claim that social media is "blamed for increasing mental health in younger people", however the researchers also go on to say that adolescent mental health is seeing multiple instances of increasing mental health issues, such as anxiety and depression. While it is true that social media is widely popular among young adults (Akram and Kumar, 2017), this does not necessarily mean that the researchers immediately believe that just because there is correlation means there is causation. It is inferrable that the researchers might have a similar motive to O'Reilly et al., where it could be a collection of outside factors, brought into social media, where the vulnerability of adolescence and its accompanying pressures become facilitated by the spotlight of social media. In other words, the researchers motive could be inferred as asking if social media is really the culprit, or more or less a catalyst for the negative responses of mental health in adolescents.

In the work of Appel et al., the researchers state that there is empirical evidence that there could be a positive, negative, or no relationship between Facebook and depression. This leads to the inference that social media that can serve a myriad of purposes, should not be treated so one-dimensionally; while this inference is straightforward, it actually helps solidify other inferences made. Researchers understand that while there is correlation behind mental health effects and social media, that does not guarantee that social media itself is the cause. It can be inferred that researchers want to investigate if social media could actually be a catalyst.

Through the analysis, a common theme can be seen; researchers not only want to explore the effect of social media on mental health, but rather also how social media is itself being manipulated by adolescents.

Moving Beyond

From being harassed and wasting time to making friends and gaining motivation, social media has a wide effect on the mental health of adolescents. The research can be analyzed through inferring on abstracts and introductions in research articles, as motives become increasingly clear when impacts of social media are mentioned. The result of the evidence and analysis is that researchers are using the information gathered to hopefully reduce the harm of social media on mental health in adolescents.

The claim of the paper's implications are straightforward - researchers not only want to explore the effect of social media on mental health, but also have motives to see how the sociotechnical system operates; this simply implies that researchers want to have a better understanding of the system as a whole. The application of the claim can be very helpful to society, as with mental health a growing problem, finding more ways to reduce social media's negative contribution will be clearly beneficial. This will continue to be relevant for as long as social media exists, and adolescents continue to use it.

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