## How does social media affect our mental health?



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## MSAprojektarbeit

# Table of Contents

1. Introduction (Barak)	1
2. Anonymity, cyberbullying and the hateful environment of social media. (Jan)	1
3. Fear of Missing Out (Barak)	4
4. Lowered Self Image/Esteem (Barak)	6
5. Sleep deprivation (Teddy)	8
6. Change in human communication (Teddy)	10
7. Group building, finding people of similar interests, and escaping reality. (Jan)	12
8.Conclusion (Jan)	14
9.Works Cited	16

#### 1. Introduction (Barak)

In the past two decades, social media networks have rapidly risen in popularity, as they became a dominant part in many people's lives. In fact, according to Statista, 3.6 billion people were using social media sites in 2020, and that number is expected to reach 4.41 billion by 2025(Tankovska, 2021). However, scientific research has come to a relatively clear consensus on the negative effects different aspects and side effects of social media sites can have on one's mental health. These may come in different forms, such as cyberbullying, change in human connection, our fear of missing out, etc. This essay will attempt to gather and combine scientific data in order to further analyse the ways by which social media usage can have an impact on a user's mental health.

# 2. Anonymity, cyberbullying and the hateful environment of social media. (Jan)

With social media becoming all the more popular one of the darker sides of it became more apparent, Cyberbullying. Bullying itself is nothing new. It has and will continue to happen in the real world. It's consequences on one's mental and overall well being are known, and can be devastating up to the point of being the main factor behind suicide (Kwan 2020). The same is the case for cyberbullying. In some key aspects, however, it is different making it especially dangerous and even harder to process for the victim:

"The victim can't see the affect on the offender, and can't see or feel the responses of people who may come to his/her aid, rendering that aid less resonant. Additionally, while there is a lack of authority to step in, the quick pace and lack of personal contact involved in cyber bullying allows for more people to join in the taunting in active ways they may not do in person. Negative statements made on-line are more pervasive than those made in person, with little escape." (Sobel in 'Cyber Bullying More Difficult', 2013)

Virtually every single social media website allows you to stay completely anonymous, all whilst interacting with other users. Using a fake

name, fake address, fake email and a VPN (Virtual Private Network) is easily done and there is nothing any normal user can find out about you.

The anonymity granted by social media may be helpful in certain situations, activists may use it to spread their message and protect themselves in real life from possible backlashes or attacks. Content creators too can use this to great effect as a stylistic choice, building a following as whatever character they choose to represent themselves as, rather than their actual person. It issimilar to how an artist in the real world might use a pseudonym.

Sadly, this anonymity can also be used to harm. It allows people to bully, insult and spread rumours about someone without fearing any repercussions in real life. With bullying in real life, there is a face to you, and if handled well by the authorities, for example, teachers, there will be consequences for the one bullying. This is not the case for cyberbullying, and unless the bully does something to reveal their identity, there will be no consequences, as you simply don't know whom to punish. It also removes the inhibition threshold. If you know that there are consequences to something there needs to be a bigger incentive for committing the act than if there were no consequences. This increases the number of potential bullies and creates a more hateful environment in general as mild insults are allowed to be said with no major repercussions. Owing to this cyberbullying is extremely common. A study from 2010 shows 25% of all teenagers, not only the ones using a lot of social media, have experienced it in the year before. Additionally, we have to keep in mind that this number only includes the cases reported and it is safe to say that the actual number is higher since a lot of victims of all types of abuse often do not talk about their experiences (Gordon 2020).

Another study suggests that a lack of eye contact may be more important than anonymity when it comes to online disinhibition and consequently cyberbullying. This makes sense when considering how much of a role visual factors play in our communication. It is way easier to insult a person you don't know or see, rather than an actual human face, a face that also sees you.

A common excuse "it was all just a joke" also plays into this. Some people consider their statements to just be a joke. This is fine if both parties agree to it. The problem is when it reaches a point when people are not ok with it. In real life it is easy to see people being uncomfortable with the situation, you see their face and expression and see how much it potentially hurt them. When not seeing someone's face this is near impossible to do (Lapidot-Lefler 2011).

The factors above do not only encourage cyberbullying but increase the vulgarity of language being used in the online environment too (Wolchover 2012). A hateful environment alone has negative effects on everyone. Ridicule and insult don't have to reach the intensity of cyberbullying to be insulting to a person and negatively affect their mental health. Additionally, it makes cyberbullying stand out less, thus decreasing the chances of any bystander getting involved. If a vulgar and rough colloquial tone is the standard, cyberbullying stands out less. Many people do not take cyberbullying seriously, and even further mock victims complaining about or reporting such cases (Joe 2016).

All of these factors combine to create an environment where bullying is prevalent, further stirred up, and not taken seriously if reported. It is to say with 100% certainty that if an individual is experiencing cyberbullying it is detrimental to their mental health. No potential benefits to social media will be able to outweigh the negative effects caused by cyberbullying (Kwan 2020). If we want to create an online environment where people's mental health is not negatively affected, decreasing the amount of cyberbullying, and increasing the amount of help available for those that suffer is to be a priority.

#### 3. Fear of Missing Out (Barak)

The fear of missing out, or FoMO, is a primitive measure of distress directly correlated with missing out on social experiences. As social animals, humans require social interaction for both physical and mental wellbeing. This likely stems from the fact that, from an evolutionary perspective, exclusion from the group would quite literally be life threatening, as strength in numbers was quite essential to our survival. In response, the brain developed an anxiety-triggering mechanism to alert us and make us dislike being alone(Roberts and David, 2019).

By a process called Individual Relative Deprivation, in which one compares one's life to another's when seeing that they are experiencing something they think they should be having, social media makes it very easy for us to experience FoMO. Our friends constantly post highlights of their 'exciting' lives on various social media feeds, making it incredibly accessible for one to compare his seemingly unexciting life to their seemingly enjoyable ones. Note that the friends' social media feeds often aren't a direct reflection of their lives, but are rather a highlight reel of exciting experiences which exclude the more boring parts(Deutsch, 2018). The common consensus is that FoMO-inducing social media behaviour is derived from the Belongingness Hypothesis(Baumeister and Leary 1995), a theory describing that humans have a basic and primitive need to form pleasant, long lasting relationships with others, and Information Foraging theory, which theorises that our information seeking behaviours are pre-program into our brain, and are derived from the food gathering behaviours of our hunter-gatherer ancestors. These cause users with FoMO to constantly check their social media feeds in order to stay updated regarding their friends and influencers, which in turn makes them experience more FoMO via comparisons to those people's lives, and so the cycle goes on(Roberts and David, 2019).

Many studies have been conducted to show the relationship between FoMO, mental health and use of social media. For example, one research conducted on 143 undergraduates at the University of Pennsylvania has shown significant increases in mental-wellbeing and drops in symptoms of FoMO for a group whose daily social media usage has been reduced to 10 minutes per platform, per day in contrast to the group permitted to use it regularly(Hunt et. al, 2018). Another study conducted on 296 israeli students showed that FoMO leads to an increase of social media usage in the classroom(Alt 2015). Thus, a malicious cycle is created, by which social media breeds FoMO, which in turn breeds negative mental health symptoms, while simultaneously promoting more social media use.

A 2015 article about a survey conducted on 1200 canadians of all age groups showed the undeniable connection between FoMO and social media usage. The report claimed that constant life updates on social media are the

main driver of FOMO, with 45% of those who said they had experienced it saying they also can't go more than 12 hours without checking social media, and 20% saying they can't go more than an hour. As shown in this data, FoMO causes people to check their social media feeds excessively, since they want to know whether they are missing out on anything, once those users see they really are missing out, more FoMO is induced. The survey also mentions that 56% of the respondents experiencing FoMO were of the age group 18-30(Kolm, 2015), which would conform with the hypothesis on social media's connection to FoMO, as these people would've grown up using screen electronics and various social media feeds.

FoMO doesn't only apply to friends or family, but rather, it applies to any social groups one consists of. In addition to the traditional social groups one would have, social media provides opportunities to consist in others. Whether it's a Facebook group, Whatsapp chat or video game guild, all are social constructs one feels they are a part of. Hence, on social media, there are even more opportunities for one to feel like he is missing out.

However, it could also be argued that having more outlets for social engagement and opportunities for self inclusion in social groups actually helps one's mental health, as they have more opportunities for social interaction and hence fulfillment of belongingness. Additionally, some sources claim that FoMO leads some people to self-authentication on social media, that being an authentic and realistic representation of oneself through their social media posts. This, however, does not happen to everyone, as most people fall into the common anxious and lonely feeling FoMO brings(SciShow Psych, 2019)

#### 4. Lowered Self Image/Esteem and Body image(Barak)

The common social media feed often consists of famous people and friends, whose posts should appear to represent their lives and feelings. However, through social comparison, that is, comparison of one's life to another's, viewing said posts and profiles may negatively impact the user's self esteem and image.

As we have mentioned in the section discussing FoMO, profiles of social media users are often unrepresentative of their actual lives. People prefer

posting highlight reels of short experiences over showcasing the full picture, which makes sense(Deutsch, 2018). A social media consumer would prefer viewing more exciting and entertaining posts in their feed, since they likely already have duller moments and experiences in their own lives(perhaps partially due to excessive social media use). An influencer may post a picture of themselves doing something exciting and unique, but won't post themselves going home by train, or eating frozen pizza, since neither party(influencer, consumer) is content nor interested in those parts of their lives. And while both parties may not consciously acknowledge that this is the case, this is often the relationship between the consumer and influencer.

Social comparison is a natural process by which one compares one's life to another's. In Festinger's original psychology paper, social comparison theory suggests that self comparisons are a natural drive derived from the need for evaluation of one's abilities and opinions, of which the easiest way of achieving is reflection upon oneself in contrast to members of the group(Festinger, 1954). There are two types of social comparison, downward, which occurs when comparing to a party one deems as inferior, and upward, which occurs when comparing to a party one deems as superior, of which I will mostly discuss the latter, since it is the most common in social media usage(Vogel et al., 2014).

Since the influencer's profile is full of exciting 'highlights', which in theory are supposed to represent their lives, this holds the consumer up to an impossible standard when going through the process of upward social comparison. This, in theory, would leave the consumer with a lowered self esteem or image, as they deem their own opinions and abilities to be inferior or worse than those of the influencers they follow.

Research shows that upward social comparison on social media leads to a worse self image(Feinstein et al.). A 2014 study showed a direct connection between lower self esteem and higher frequency of Facebook use, the main predictor of which was upward social comparison(Vogel et al., 2014). Another study showed the same(Feinstein et al.). While downward social comparisons are often correlated with an increase in self esteem, they aren't seen nearly as frequently on social media feeds(Vogel et al., 2014). Additionally, the same

study found that users did not tend to increase in self esteem when conducting downward social comparisons, which only conforms further to the hypothesis that social media usage causes decrease in self esteem and image.

This relationship between social comparisons and social media goes the other way too. A 2015 study found that people with a chronically higher tendency to undergo social comparisons are likely to use social media sites more than those with a lower tendency(Vogel et al., 2015).

Another aspect of self image is body image. And, with the abundance of models on social media, one can often compare their body to influencers' when scrolling through their feed. While research on this isn't as concrete, study shows that 50% of women and 37% of men compare their bodies unfavorably to influencers on their social media feeds(King University, 2019).

Thus, judging from the evidence shown, it should be concluded that social media will, in the large majority of cases, have a negative impact on one's self esteem and self image. However, it should also be noted that the term 'social media' is rather general for this context, and that many social media sites are much larger offenders of this effect than others. When talking about self esteem and image issues, sites such as Facebook and Instagram, on which users tend to post said 'highlights' of their lives, and thereby create a lot more opportunities for social comparison, seem to be much larger affectors than others(Vogel et al., 2014).

### 5. Sleep deprivation (Teddy)

As technology developed, many teenagers, adolescents, and adults started using it. Oftentimes this is in the form of social media, whose use has become widespread. However, one of many bad aspects of social media usage is the consequent sleep deprivation. This is has shown with every social media. This lack of sleep is directly related to mental health (Cramer and Inkster 2017). Poor mental health in turn leads to sleep deprivation and sleeplessness, and this creates a vicious circle. Without sleep, we are not able to function properly and there are plenty of negative effects related to it. After several nights of not sleeping, one's mental health worsens. The brain fogs, causing difficulties concentrating and making decisions (Why Lack of Sleep Is Bad for

Your Health. 2018). A lack of sleep can cause Tiredness and makes it more difficult to cope with daily life. Low self-esteem, depression, and general stress are all products of said symptoms.

Social media is used by many people, mainly teenagers. A study conducted by the Pew research center claimed, "76% of teens use social media (81% of older teens, 68% of teens ages 13 and 14)." 50% of teens say they feel addicted to their mobile devices (Monroe 2019). Oftentimes social media is overused by teenagers (Byerman 2020). This leads to a lack of sleep via excessive use at later hours. The recommended sleeping time for teenagers is 8 to 10 hours. However, according to a national survey conducted in the US, 69% of teenagers get 7 or fewer hours of sleep, and this is getting worse. Social media is not the only factor that concludes a lack of sleep, but it affects it. (Sleep for teenagers 2020).

The reason that a lot of social media platforms cause their users to deprive themselves of their sleep is how addictive they are. Phrases like "just one more post", "just 15 more minutes", or "one more video" frequently cross the minds of users whilst using social media platforms. In a surprisingly high amount of cases, this use of social media is on the level of addiction (Cramer and Inkster, 2017). Based on the information given by the Addiction Center, 5% to 10% of US citizens meet the criteria for social media addiction. When you get an alarm from social media signaling that you've received a like or mention, your brain releases dopamine, a hormone used as a reward by the brain, making you feel satisfied. Which is the main factor of why social media is addictive (Mandal 2019). The amount of dopamine that is released by social media is low compared to the dopamine released by the drug, however, long exposures can lead to addiction. As dopamine is released from our body, it uses up the dopamine that is produced

in the brain, more specifically in the substantial nigra, which is released by our brain, for the reward. Dopamine is released when you get a text message, like, etc. The problem is that this leads to addiction and a lack of dopamine in our brain can cause a disease like Parkin's disease or many other diseases. (Admin 2021)



(Figure 1. A statement made by a teenager to the addiction center)

Besides, social media activates the same neural circuitry that is caused by gambling or recreational drugs to keep users to use their product. All big social media websites have people employed and spent a lot of time and resources to make their product as addicting as possible (Hilliard and Theresa 2020). This is for the companies to make as much as profit as they can, since having people stay on the website, or application is their goal, to expose most advertisements to the users. The main problem is that the age of first experiencing social media is getting lower and lower, and the self-control of a person is not fully developed until the age of 21 (Ricci 2018). This is why social media plays a big role in individuals' sleep deprivation, especially adolescents and teenagers.

However, not every teenager ends up with sleep deprivation due to social media usage. Mediated social media use, when balanced with one's daily life, can avoid depriving the user of sleep. Even if you deprive yourself of sleep it is easy to fix and regain a proper sleeping schedule. Parents or corresponding guardians can provide input here to ensure a healthy amount of sleep for their child.

Overall, social media can cause sleep deprivation and there are severe cases. This limitation applies mostly to adolescents and teenagers. Fortunately, this problem is not impossible to fix with guides and rules of the parents or guardians. On the other hand, social media can be a good source of sleep deprivation assistance.

### 6. Change in human communication (Teddy)

How people communicate has changed over the years as mobile devices improved. This happened multiple times during humanity's existence such as with the advent of the telegram and later telephone has reached a new level with the internet and the consequent facetime apps, chat rooms, and instant direct messaging. Today almost every teenager, in relatively rich countries, owns a device that has access to the internet. In the U.S 95% of teenagers have access to a form of smart device, that is accessible to the internet (Anderson and Jiang 2018). As more teenagers own and utilize smartphones and computers, the way they interact with their friends' changes. What teenagers might be considering hanging out changed over the course of time. Teenagers nowadays might perceive the phrase "Do you wanna hang out today?" as if an online event or online meeting up. Meanwhile, teenagers back in the day, when technology was not as developed as it is right now, might have perceived the phrase as a physical meeting.

This is mainly done through social media and the mainstream popularity of these is a reflection of how communication and to a certain degree society changed. Human connection has been decreasing over the past few years (Ashworth 2019). Texting through social media changes our brain changes our brainwave, a brainwave that is very unique that scientists have not seen before (Dominguez 2016). This brainwave is not certainly harmful to our mental health. On the other hand, texting can contribute to misunderstandings between individuals because it is hard to express body language or expressions. Constant miscommunication and misinterpretation can worse the relationship. That gives rise to depression and loneliness. On the other hand, there is research insisting that texting from an earlier age helps to improve one's ability to use the fingers more actively.

Texting with social media can lead to exclusion as mentioned at the beginning of the essay. In most chat services, you can form a group, where you invite people and chat, the problem with this is that the person does not know what others are talking about in the chat that they are not in. So when you meet up in real life, the person will automatically be excluded from the conversation. In severe cases, it could end up in cyberbullying. It is simple to invite someone to your group chat and bully them.

The damages obsessive texting has on mental health are not necessarily direct. For example, Continuous stress buildup while waiting for a text message can adversely affect your mental health. According to the IESA,

"...after having to wait for a certain amount of time, anxiety and stress start to build up in an individual" (IESA). This applies the same to text messages.

The change social media has made to human communication is mostly negative, however, there are good sides to it. Improvement in social media made it possible for people to communicate with someone that is far away from them. Before social media was commercialized and everyone used them, letters, email or phone calls were the way to communicate with someone without actually meeting them. Sending letters and emails is too slow and ineffective compared to social network services, which allow you to send and receive immediately and rings an alarm on your mobile device, which you can have next to you for most of the time during the day. This is why nowadays people use social media to text to communicate, it sends what you type in a fraction of a second.

Using my own experience as an instance, as a person that is living far away from my hometown, without social media it is almost impossible to communicate with my grandparents. With the facetime function that most text-messaging applications have, it is really simple and easy to communicate with my grandparents that are living 8500km away from where I am currently living. The change in human connection social media consequently is not only negative but also has positive effects on it.

In addition to the positives, communicating via social media could enhance the relationship between people (Cramer and Inkster 2017). This is directly related to mental health. There are two main factors that I will be mentioning. First, social media made it simple to arrange appointments or meetings. Using social media to arrange parties or 'hanging out with friends' can happen via few clicks on any smart device. Secondly, you can communicate anytime with anyone. This can help individuals to form a stronger bond with others:

"...friendships can be enhanced by social media interaction, allowing young people to create stronger bonds with people they already know." (Cramer and Inkster 2017).

Communication through social media can improve relationships between friends which is directly connected to the mental health of individuals. Social media played a big role in changing human connection and communication. Communicating through social media can lead to misunderstandings which can affect our mental health. Also while you are waiting for a text message it can cause you to stress which can be harmful to mental health. Meanwhile, social media also changed human connection in a good way, such as facetime let us talk to someone that is far away from us. Also, social media let us talk anytime which can enhance the bond between the two. It affects mental health in both ways, positively and negatively.

# 7. Group building ,finding people of similar interest and escaping reality. (Jan)

Social media is available worldwide. It allows us to interact with those exact people that we want to interact with. Even for niche interests or thoughts, there exists a platform somewhere. This is great for making friends and finding like-minded people. Making new friends and having positive social interactions is good for you, and your mental health. One would think that social media helps with social interaction and decreasing loneliness. After all, a lot of people use social media during the current Covid-19 pandemic and lockdown to compensate for their lack of social interaction. You can indeed use social media to compensate for a lack of social interaction, but inappropriate social media use increases loneliness. Social media is not and can not be a replacement for real human contact, and should be seen as a substitute to make communication quicker and easier. The negative effects of isolation and loneliness can not be understated. They are wide-ranging and severe. (Novotney 2019)(Psycom.net 2019).

Downsides are also created by this fact. There exists a community for everything on the internet and you will have some people agreeing with you no matter how stupendous your idea is. It is prevalent on social media to have echo chambers of people agreeing with each other over outrageous ideas. Using social media these ideas can pull themselves out of social discourse and interaction and stay alive. As comments get deleted the groups split up into their respective sides with minimal interaction in between them, they keep

creating a worse and more radical image of the opposing group and instead of arguing with the other group, they start to argue with themselves about how much they hate the other group (This Video Will Make You Angry. 2015).

One of the main contributors in the said splitting up of the internet into sides is that we are more likely to share information and content that causes anger (Berger 2009). This gets further enhanced by the inherent design of social media websites, the more content is clicked, shared and interacted with, the more promoted it is by the website. News or statements that make people angry are inherently better at succeeding in the online environment, even if their truth is doubtful. Exposing yourself to this very toxic and hateful environment and the consequent negative emotions is not good for your mental health, and if one is to use social media responsibly avoiding such negative circles is important. (Ways a Toxic Environment Can Hurt to Your Mental Health. 2019).

On another note, social media may also be used to find help online when experiencing poor mental health and thus to a certain extent lowers the damage it helps create. There are a lot of options available online to help with your mental state a lot of which relate to social media in some way (Online Mental Health Tools. 2016). Especially when experiencing trouble or bullying in the real world, social media may be able to provide help and maybe beneficial overall.

This, however, comes with some downsides too. People experiencing poor mental health often escape to the online environment (Why Teens Compulsively Use Social Media: To Hide From Reality. 2021). This in of itself is already not that good. You can't just run away from your problems and hope they fix themselves. And you can't just leave reality behind. The problems will still exist and drag you down. Besides, escaping to the online world does not mean that you will have no new problems arising. There are a plethora of potential threats to your mental health online as already mentioned. If worse comes to worst you will experience strikes to your mental health both online and offline. Using social media to receive help, or make friends you can not make in the real world, can be good. Though as mentioned previously online interactions don't replace in-person ones. Part of using social media

responsibly is to not get sucked in fully and to still have the majority of your social interaction in person.

#### 8. Conclusion (Jan)

There are a lot of potential threats to your mental health in the world of social media. Cyberbullying, FoMO, and decreased self-esteem are only some examples of those threats. Consequences include sleep deprivation, depression and body dysmorphia. Additionally, you further distance yourself from reality and the people around you. Your connection to the world gets changed. Often this coincides with addiction. Addiction inturn further exposes you to the aforementioned dangers and effects. That is not to say that all social media is universally evil, or that there are no positive factors. It is however clear that for a lot of people it has made their mental health worse, and is detrimental if not used responsibly.

Sadly the way most social media apps are set up, and how consequent use looks like is encouraging especially the type of content and side effect so detrimental. Relying on likes/shares/hearts to decide what content gets put on the top pages pushes polarizing and hyperbolic content to the top. Content along these lines is especially prone to cause some of the aforementioned effects. No one wants to see the unedited life of the average person for example. Too often does discourse that could be used to exchange about different cultures and beliefs turn into a hate-filled frenzy. Too often are people ashamed of themselves or their appearance. Too often are hyperbolic images, lives and people shown giving users unrealistic expectations and consequent sadness over their comparatively boring situation or existence. Too often do people fall into addiction, due to the inherently addicting design of most platforms.

Social media is not going anywhere and only prone to get more popular as time goes on. Trying to instate a ban on all social media to protect the youth would be all but impossible. Some issues will always persist in one way or another. As technology advances, old ones may be fixed, and new ones created. There will never be a perfect social media, and we all have to be wary of the dangers during our use. What is important, is that we recognize the

dangers as a society to make it easier to help those in need of help now, and in the future.

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