Research on the Effects of Twitter on Adolescents' Physical and Mental Health

Tong Cao^{1,a,*}

¹YUCAI Experience International High School, Shenyang, Liaoning, 110000, China a. Caotong0620@163.com *corresponding author

Abstract: In this era of rapid development of information, science and technology have become tools to assist human development. But the convenience these tools provide is a double-edged sword. Nowadays, more and more teenagers are addicted to social media and rely on the Internet. At the same time, the Internet has a huge potential impact on teenagers' physical and mental health. Through the search and reference of relevant literature, this paper analyzes the negative effects of teenagers' use of the Internet. Taking Twitter, an Internet platform, as an example, this paper proposes reforms from the social media itself to control audience groups at different levels, identify user groups, and strengthen the approval system so as to reduce the negative impact on teenagers' physical and mental health.

Keywords: social media, Twitter, adolescents, negative impact

1. Introduction

With the rapid development of the Internet today, more and more people are willing to rely on the help of the Internet, and this also includes teenagers [1]. However, for teenagers, their self-control and values have not yet been formed, and the Internet is an open environment without too much control. In other words, because people are too dependent on the Internet, the Internet has become a medium that is extremely easy to affect the body and mind of teenagers. All kinds of information on the Internet can lead unformed teenagers astray, and even affect their lives. This article selects Twitter as the research object, because Twitter is a well -known software and representative in today's Internet industry, with extensive audience and comprehensive content. This paper examines the physical and mental effects of malicious comments, cyberbullying and sexual violence on Twitter. Malicious comments and Internet violence distort young people's values and harm young people's hearts and self-esteem, which can lead to psychological disorders, improper values, and even thoughts and behaviors that hurt themselves or commit suicide. Pornography and violence not only affect the network environment, but more importantly, the dissemination of pornographic information videos or horrific distorted behaviors such as murder and abuse will affect the immature body and psychology of young people, causing them to have irregular cognition of normal physiological phenomena, sex, and life.

^{© 2023} The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

2. Twitter's Introduction

Twitter has become one of the most iconic companies in Silicon Valley over the last 20 years [2]. Twitter is a key place for people to debate, joke, and voice opinions in their own political, sports, tech, and financial circles. It also serves as a platform to give voice to the voiceless, helping protesters organize and express themselves in repressive regimes around the world. In March 2006, Jack Dorsey, Noah Glass, Biz Stone, and Evan Williams founded Twitter, which was originally a side project from the podcasting tool called Odeo. In July 2007, Twitter received \$100,000 in Series A funding led by Union Square Ventures. The app's popularity began to surge after the tech community heavily promoted it during the annual South by Southwest conference.

Dorsey stepped down as CEO in October 2008 and was replaced by Williams. Twitter's board fired Dorsey over concerns about the executive's management style and public boasting. Twitter expanded its reach to 200 million active users in 2012. The problem for Twitter now, in 2023, After months of uncertainty, Elon Musk appears to be moving forward with a \$44 billion deal to buy Twitter. The next big question is: How will he change the company? Musk's experience has mostly been building new businesses, not transforming existing ones [3]. Twitter is characterized by its unique ability to track potential users, regardless of whether they use it or not, which means that Twitter's influence is actually very large, and so are Twitter users, such as Obama [4]. Then this influence can indirectly affect the economy of an enterprise [5]. Twitter participation refers to the content that someone is involved in your release. Users can interact with other people through some different ways, including: collection tweets, re-posting tweet replies to push, and mentioning other users in a separate tweet [6]. Visit other people's accounts on Twitter.com during the day or night to read people's Twitter feeds, which constantly change as people post. Check out trending topics to see what's happening in the world.

By summarizing a large number of reports and news items on the public network, this paper analyzes and introduces its working principles. Twitter is smart enough to have a schedule that works for the majority of Twitter users [7]. Weekdays, 8 a.m. to 10 a.m., 6 p.m. to 9 p.m. Or between 5 and 6 p.m. on a weekday. For B2C companies, the most promotional time is the weekend. With the development of technology, artificial intelligence can combine the number of times you log in to your account with the time, and then, according to the type of videos you watch and the type of videos you watch, the videos you are interested in are accurately pushed on weekdays (Monday-Friday) through back end big data calculations. This principle is like creating a Twitter marketing campaign, following the same steps as any other type of social media marketing campaign. For example, research the competition, determine how to attract the target audience, choose the type of content that users want to create, share and promote the content, and analyze the results.

At the same time, this paper finds that Twitter isn't just driven by big data, because that requires too much work. Big data requires a certain number of parameters, so how do you get those parameters? First of all, at the beginning of Twitter user registration, the App will let users choose their favorite type of promotion, such as: sports, music, hypnosis [8]. On this basis, when the application is promoted within the scope of existing parameters, big data will also introduce new topics based on the content of the promotion, while further promoting the type of promotion based on the content of the search engine. For example, search for news and you will get news promotion. However, Twitter is an application that lets the public upload short videos and let the public decide whether to watch them or not. In other words, the company is not morally culpable because, for Twitter, all posts come from individual users, while a small number of commercial partners are paid for popularity (e.g., celebrities, or media organizations, reporting news outlets), and almost all viewing rights come from individual users. In other words, when people are indirectly affected on Twitter, whether mentally, psychologically, or physically, the problems are personal to the user. Intuitively speaking, Twitter

has the right and ability to evade any responsibility for psychological and physical harm caused to minors.

3. Negative Effects of the Internet

This negative influence is more likely to be interpreted as distorted guidance or misdirection, directly or indirectly, by supervisors, leading to negative changes in the way children live or work. These influences have brought them a lot of unnecessary troubles and negative effects. The physical health of human beings, the genetic quality of offspring, whether it will cause cardiovascular disease, whether it will mimic smoking, drinking and fighting, whether it will cause psychological distortions. As a group of people affected by negative information factors, they not only have to endure the negative effects of sex addiction, obesity, anxiety, depression, stunting, psychological distortion, lack of self-confidence and so on. Moreover, the consequences are irreversible, and it will cost users dearly, even with their life as a bargaining chip. Some ideas, once conceived, carry with them the possibility of crisis.

3.1. Social Media Trolls, Rumors and Defamation

In our understanding, the Internet is a region where information is gathered and transmitted wirelessly. It is the site of the most topical events in many of society's most high-profile areas, as well as the most inhumane tragedies in dark corners. Social media gives people the fastest and most efficient way to expose news and spread it to other users. Users can publish their works, which can be about hot news topics, political issues, celebrity gossip public opinion, secrets of certain circles. However, in the era of rapid cross-communication of information, it is impossible to guarantee that all hot spots are true and reliable. We should not easily believe that all people have the same views, the same values, and the same morals [9]. In fact, with the gradual development of the time, the spread of false information is no longer simply due to the failure to discover the truth.

Relevant research shows that today's users are more willing to use some ideas that run counter to the facts, or false information, or fabricated lies, rumors to hype, to attract traffic for themselves, so that they become the object of attention. More and more people are finding that their false statements can get people's attention online and even twist the minds of some others to bring in their own opinions. At this time, these figures will gradually attract a large number of people, just like Hitler's speeches. To be their own accomplice, to expand their own power. Maybe we don't know what kind of speech or online information is called defamation or false accusation. People were hot in the comments section, but those black netizens Hitler used the way of speech to influence more brainless netizens so that they followed the way of reversing right and wrong to hype themselves and win eyeballs. Indeed, because commenting on the Internet is everyone's right, as long as it does not involve breaking the law, freedom of speech.

To return to the topic, teenagers are in a period of cognitive development, known as value formation. This reversal of right and wrong, both psychologically and physically, is an immeasurable distortion. These distorted values can make them wonder if the society they live in is reasonable. Here the human heart is vividly reflected in the cold, sinister extreme. The fairy-tale dream is shattered, and children begin to wonder if their values are in line with society's needs. What's more, in order to attract people's attention and thus obtain traffic, some teenagers seem not to mind learning to reverse black and white and continue to spread inappropriate remarks. Once this bad habit is formed, they are not far from prison. Finally, the social phenomenon will appear: minors will increasingly lose trust in the Internet and feel that there are more and more evil people in the world.

3.2. Videos That Spread Violence, Obesity, and Pornography

It's no secret that online video entertainment sites like Twitter target a wide range of video content types. Twitter is an entertainment company with little control over the site. Despite their own outward claims to be the cleanest of the many social platforms, foreign companies like Twitter are openminded, their user system is democratic, users have their own right to control, and users can post any content as long as it's all legal. Very little information is harmonized. For media companies, good push timing is also essential. For example, push for a period of time before eating, and promote the merchants shown in the video to arouse people's desire to eat, especially for those who do not know what to eat. Those who don't yet know what to eat will find the food they want through the delivery app based on the food found in the feed. The short video company is very smart, and we talked about how Twitter would work and it would be applied to the mainframe computers in the background. These computers provide information based on the preferences and perspectives of each user. This is called a "big data push".

However, these data are also affected by mistakes. When it was quiet that night, people's vigilance had fallen to the lowest point. At this point, big data began to work again. For example, Twitter can push food and products to customers. These products may look ordinary in the morning, but at night, it can attract brainwashing consumers through advertising processing at night. Even let consumers do not resist and critical thinking, which is easy to indulge in the fantasy of happiness. In the state of hunger, emptiness, and hallucinations at night, the concepts of usually losing weight and the concept of rational consumption were completely drowned. The depression of office hours, the constraints of rational, burst out on a silent night.

It is difficult for adolescents to resist something that or even adults cannot resist, so they will overeating and gradually indulge their body shape and damage their health. The impact of retaliatory consumption will continue until adulthood. They can't save money, they will not be able to save money to maintain their salary, and they will not be able to resist emergency situations. There are also bloody videos, such as the provocative Twitter video of Ukraine shooting Russian prisoners of war, that not only spread blood and violence, but also induce people to help the Ukrainian army against Russia. The mass publication of such videos, photos and comments by the media may weaken people's brain responses to such information stimuli. Indirectly, it leads to a decline in empathy. This digital form of media is, in a way, imperceptible and difficult for people to discover. Of course, this classification restriction is not controlled by the media, because Twitter will only alert searchers that the content is violent, gory, pornographic videos, but will never sanction the creators of their work. Perhaps later, it may be forced to be deleted by the relevant departments. However, in cases where no one reports, videos are generally taken down much less quickly than they spread. These videos are affecting us in subtle ways. For example, on March 23, 2010, netizens posted a series of videos about the massacre at a kindergarten in Fujian Province, China. Showing the bloody results of the massacre. Their purpose was to warn people to take care of their children, but it ended up providing a great outlet for vicious perverts. Five violent incidents occurred in quick succession that month, alarming police and ordinary residents alike. It also causes unknown damage to the minds of young people, who may love violence, who may love blood. In short, it's hard not to be affected. The Internet is probably the indirect reason why they are wanted or imprisoned. Sex is an information element that is easily associated with pornography, but the control of pornography is basically unlimited on Twitter. I often hear that porn is normal on Twitter. As it turned out, Tumblr, which started as an artistic micro blogging service in 2007, lost its appeal when it was inundated with porn five years later. Founded in 2009, Chatroulette was a whimsical way to meet strangers, almost immediately traded for lighthearted photos of male genitals and lewd thugs. OnlyFans began in 2016 as a platform for performers to post videos, and now consists mostly of pornography created by sex workers. But most companies aim to

marginalize pornography. While Only Fans have capitulated, Chatroulette and Tumblr seem more determined than ever to oppose it. Facebook and YouTube enlisted armies of algorithms and humans to banish porn, in deference to advertisers who didn't want brands devalued by unhealthy adjacency. Among the big social media services, Twitter allows users to post what it calls "intimate media." But the platform also permanently suspended users who posted miniskirts, crawling photos, revenge porn, non-consensual erotica, images taken with hidden cameras, or images accompanied by media inciting violence. Pornographic images account for about 13% of all tweets, but are not yet available for direct sale [10]. Twitter can be called the porn hub of social media. The fact that the hashtag, which started in 2017, involves several influencers and is used regularly, is a testament to Twitter's reluctance to address issues like pornography and the consequences of illegal filming.

In other words, the porn in its place may be bankable, but there's too much of it in a PG-style venue that can scare off bigger revenue streams. Against this backdrop, pornography on Twitter arguably has the ability to become more and more widespread. So what do the messages and values that pornography spreads bring us?

In the clothing of this "service," users' personal data is being mined for criminal activities ranging from "sextortion" to rape to the sexual exploitation of minors, leading to serious consequences including suicide. It increases the chances of teenage pregnancy. Teens who are regularly exposed to sexual content on TV are far more likely to become pregnant, and are twice as likely to become pregnant when watching episodes with high levels of sexual content. It impedes sexual development. Teen porn viewing disorients them at a developmental stage, when they must learn how to deal with their sexuality, when they are most vulnerable to uncertainty about sexual beliefs and moral values. Blocking Internet-connected devices from accessing adult material is a good start to keeping pornography out of reach for teens. But this approach is not humane. Improper sexual values increase the risk of depression. There was also a significant relationship between frequent pornography use and feelings of loneliness among adolescents, including major depression. It creates distorted expectations and hinders healthy sexual development. Teens who are exposed to a lot of pornography have lower levels of sexual self-esteem. Continuing to talk about pornography is vital to addressing issues such as depression and low self-esteem.

4. Discussion

For official purposes, the company has the right to ban users from posting any comments that are offensive, abusive, or expletive-filled. Violent or bloody conversations are prohibited in the comments section. In open countries, citizens can retain the right to post sexual, pornographic and violent content. But give a warning, and continue this pattern of warning minors about video content. Social media companies can set up a system for minors, which must be the official system for minors, to refuse to promote the video files of the program to minors. Teenagers should implement the real name system, or adopt advanced calculation rules to calculate the age of users. If the real name system is not possible in a democratic country, a small number of pornographic videos can be pushed to minimize the results of searches for dangerous words. This not only retains the rights and interests of citizens, but also protects the physical and mental health of teenagers. Some sex education knowledge and videos with pornographic elements can be appropriately placed around teenagers so that they can understand and avoid forming bad habits. Teach them the right values, the right understanding of sex, acceptance of sex, and at the same time learn about the dark side of the world online. Advertising can be carried out to reduce the economic loss of the APP company as much as possible. We can change the time of promotion to promote these ads, so that people can rationally consume and rationally manage their bodies.

Therefore, such measures can be implemented in theory and have certain positive effects. Although this approach will touch the interests of a small part of the capital, but this article is for the broad audience of young people, in contrast, the health of young people's body and mind, should be more important than the personal interests of some capital. Instead of leaving the choice in the hands of teenagers with no self-control, as it is now. Or blame the teen's parents, and guardians. The solution measures given in this paper are based on the existing solution measures. We now have the verification of fake news, but this is not necessarily effective, it is better to give the official publisher name, so that users are clear, which group of people published the news is well-informed and authoritative. It's not just an ordinary citizen's nonsense that has to be treated as truth without verification. And to increase the intensity of censorship, in my opinion, it is not only the nature of videos such as torture that deserves to be taken down. Some videos that spread irregular values should be censored. Combined with the initial concept of the APP, it can be published to give people ideas and denounce the injustice or dissatisfaction they get because of different national policies, social backgrounds and religions. Instead of inciting others to be the same as themselves, provoking social relations and distorting the status quo of social implementation in revenge.

5. Conclusion

Because of the spread of Internet violence, bad speech, pornography and violent information, some teenagers have been negatively affected physically and mentally. Some young people do not develop integrity values so as to take sides in the network violence that forces them to become accomplices, distorting their psychology and affecting their moral values. Bad remarks can easily make an adult with good ability to commit suicide, let alone a minor who has not entered the society and has not experienced the dangers of society. Wrong understanding of sex will lead to a larger base of underage pregnancy, more abortions will lead to serious harm to the body, and the psychological shadow caused by wrong understanding of sex or rape by people with wrong understanding of sex will make it difficult for minors to face the future life, and most of those who survive will spend their lives to heal. Violence will make people worship violence more, and the unspeakable anger repressed in real life is likely to spread from person to person with the spread of violent elements. If everyone follows the example of freedom of violence, the whole country will fall into chaos and economic development will be affected. This is why it is important to avoid and reduce the inculcation of inappropriate speech and behavior among minors, to reduce the misinterpretation of sexuality among young people, and to reduce the spread of violence in society, so as to solve the root causes of violence as much as possible and to stop the spread of violence among the population.

Finally, the limitation of this paper is the lack of more data to demonstrate. Next, in the field of the development of minors in the Internet, we will discuss how to implement this scheme to protect minors, and how to minimize the interests of capital while protecting minors, so as to achieve the best of both worlds.

References

- [1] Panpan Luo, (2022), The influence of Internet technology on human cognition, https://kns.cnki.net/kcms2/article/abstract?v=3uoqIhG8C475KOm_zrgu4sq25HxUBNNTmIbFx6y0bOQ0cH_CuE tpsMHGrTN63LTy0ua8bWW0x44cOwuBjDntojE-tfaIi8mR&uniplatform=NZKPT.
- [2] Geia, L., Pearson, L., & Sweet, M. (2017). Narratives of Twitter as a platform for professional development, innovation, and advocacy. Australian Psychologist, 52(4), 280-287.
- [3] Andy Wu, Goran Calic, (2022), The Challenges of Transforming Twitter, https://hbr.org/2022/10/the-challengesof-transforming-twitter.
- [4] SIMMONE SHAH, (2022), The 7 Biggest Challenges Twitter's New CEO Faces, https://time.com/6285685/twitterlinda-yaccarino-challenges/.
- [5] Oliver Barsby, (2022), NEW TWITTER FEATURES: UPCOMING TWITTER UPDATES AND FEATURES, https://www.interhacktives.com/2022/03/24/new-twitter-features/.
- [6] Kim Woo Hyuk, Park Eunhye & Kim Sung Bum. (2023). Understanding the role of firm-generated content by hotel

segment: the case of Twitter. Current Issues in Tourism (1).

- [7] Mosleh Mohsen, and Rand David G. (2022), "Author Correction: Measuring exposure to misinformation from political elites on Twitter.." Nature communications 13.1
- [8] Nguyen, C. T. (2021). How Twitter gamifies communication. Applied epistemology, 5(6), 410-436.
- [9] Prins, J. E. J., & Schellekens, M. H. M. (2005). Fighting untrustworthy Internet content: In search of regulatory scenarios. Information Polity, 10(1-2), 129-139.
- [10] Jhaver, S., Boylston, C., Yang, D., & Bruckman, A. (2021). Evaluating the effectiveness of deplatforming as a moderation strategy on Twitter. Proceedings of the ACM on Human-Computer Interaction, 5(CSCW2), 1-30.