

Game of Phones: The Competition over Devices and Children's Social Development

An STS Research Paper
presented to the faculty of the
School of Engineering and Applied Science
University of Virginia
by
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May 11, 2023

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

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Social media companies, parents, child psychologists, and advertisers compete to influence where children direct their attention. To boost their advertising revenue, the companies generally seek to maximize children's engagement with their platforms; many parents and psychologists, however, want to limit children's exposure to social media. Suicides among females aged 15-24 increased 87 percent from 2007 to 2020 (Garnett, 2022), as social media proliferated. To many parents and psychologists, the correlation is not accidental. They accuse social media companies of propagating anxieties that endanger children's mental health.

Social media companies do not deny the risks to children; instead, they publicize features they have introduced to protect them (Mosseri, 2021). Many parents have found it difficult to protect their children in the internet age (Auxier et al., 2020). Child psychologists have warned that children who use social media excessively are more likely to show signs of psychological disorders (APA, 2011). Advertisers are also under pressure; recently some have reduced their advertising to children (Hills, 2022). Companies, however, can earn more revenue by maximizing audience size and engagement.

Together, advertisers and social media companies constitute a monetization bloc, driven by the prospect of profiting from child viewership. Opposing them, the bloc composed of parents and child psychologists protect children's wellbeing by limiting their social media exposure. Social media companies contend that because their tools empower parents to control children's device use, parents are therefore responsible for any harmful social media use among children. Many parents, psychologists, and child welfare advocates disagree. They argue that the tools are not practically sufficient to protect even the children of conscientious parents, let alone all children. Some add that targeting children is also inherently exploitive.

These blocs compete over the development and attention of children, which has had mostly negative effects on their mental health.

Review of Research

Much of the modern literature is based on specific symptoms of outsized social media use rather than the general mental health of youths who engage in it. Some data show deteriorating mental health among the youngest generation (Hartman-Munick, 2022). Even more show that the pandemic dramatically increased social media use (Jennings, 2022). A commonly cited symptom was the deterioration in parent-child relationships among those who overuse social media (White-Gosselin, 2022). Some researchers found that getting young people off of social media improved weight esteem (Thai, 2023).

Recent research looks at how the COVID-19 pandemic affected both teen social media use and mental health during the pandemic. One study found that over the pandemic, social media use increased substantially, which had a detrimental effect on young adults (Price, 2022). Other researchers found that the increased social media usage induced psychological distress on body dissatisfaction (Penalba-Sanchez, 2022). This situation also bridged cultural divides. One other study revealed that although young Indians had increased social media use during the pandemic, it did not help their perception of social support (Rajan, 2022).

Researchers have developed metrics by which we can measure the severity of someone's social media addiction (Andreassen, 2012). Recent polling found that the hold social media has on young people has only strengthened (Pew, 2022). Researchers have found that decreases in psychological well-being among teens can be linked to the rise of social media and smartphones (Twenge, 2018). On the other hand, a meta-analysis found that social media use had little impact

on suicidal ideation (Ferguson, 2022). Other research in the Netherlands found adolescent social media use impacted friendship closeness, mostly on a person-specific basis (Pouwels, 2021).

The Body Image Problem

Many perceive that eating disorders and social media are inherently connected. Adolescent and young adult hospitalizations were increasing by about 1 percent per month before the pandemic, but increased to 7.2 percent per month with its emergence (Hartman-Munick, 2022). This hospitalization rate has since come down, but has not returned to pre-pandemic levels. This correlation with the beginning of the pandemic is non-trivial. It dramatically increased reliance on technology in order to accomplish daily tasks. Before the pandemic, many of these devices were primarily used for leisure. With this increased reliance on technology came the temptation to go back to that pre-pandemic behavior. This led to increased use of all social media platforms, but image-based social media has had a particularly negative effect.

Certain social media websites cause more harm through eating disorders and body dysmorphia because the types of content that each platform facilitates are different. For body dysmorphia, Instagram has been the target of the media over the past decade (RSPH, 2017). They vilify Instagram for allowing young girls to view edited photos of women, which has negative impacts on their mental health. Although this is justified anger, the individual users of these platforms are the ones posting these unrealistic and edited photos. One study found that among college women, “exposure to edited images increases the likelihood of editing one’s own photos, and also that photo editing has a negative effect on perceived physical appearance and mood” (Wolfe, 2022). These negative effects were amplified over the course of the pandemic.

One study determined that across the board, body dissatisfaction and social media use increased during the pandemic, but it impacted people differently across national lines (Penalba-Sanchez, 2022). This article studies the differences between British and Portuguese participants, saying, “stress and anxiety and the distance of increase between the results pre COVID—post COVID in the Portuguese was higher than in the British, suggesting that the onset of COVID although it affected both groups it affected considerably the Portuguese.” It is clear that many users have contributed to the negative emotional effects of these image-based platforms.

A silver lining is that reducing young people’s consumption of social media content may reduce their symptoms. There is brand new research, which should be taken skeptically as the larger scientific community examines and tests it, which suggests this possibility. A study was conducted over a four-week period in 2021 at a Canadian university in which researchers asked undergraduates enrolled in a psychology course who were regular social media users and have depression and anxiety symptoms to reduce social media use to under one hour per day (Thai, 2023). They defined regular as at least two hours a day. They found, “Results supported our hypothesis that reducing daily SMU led to discernible improvements in both appearance and weight esteem relative to self-monitoring controls who had unrestricted access to SMU.” In this context, SMU is social media use. This indicates that the effects of high social media use can be somewhat reversed.

There seems to be a general distaste for social media platforms in the traditional media. Traditional media does have an economic interest in competing with these platforms for attention, which may drive them to present a distasteful view. This is not only coming from the media, though, as many users report that they know they should be using it less. In the British Royal Society for Public Health’s annual report “Status of Mind” they conducted a survey of

almost 1,500 young people to find how they felt about using social media (RSPH, 2017). One anonymous young person said, “Instagram easily makes girls and women feel as if their bodies aren’t good enough as people add filters and edit their pictures in order for them to look ‘perfect’.” Another negative impact cited in this report was the impact on sleep from social media use. They found that “One in five young people say they wake up during the night to check messages on social media, leading them to be three times more likely to feel constantly tired at school than their classmates who don’t use social media during the night.” This finding is detrimental to children’s ability to engage in what matters most in their stage of life, to learn. If these impacts are well documented and users are aware, then why does this problem persist?

Social Media Addiction

Social media addiction describes the behavior of being unable to stop oneself from looking at social media even when having made the resolution to do so. The Bergen Social Media Addiction Scale (BSMAS) measures six metrics on a five-point scale (very rarely to very often) to determine social media addiction. The components include “salience, craving/tolerance, mood modification, relapse/loss of control, withdrawal, conflict/functional impairment” (Andreassen, 2016). The ability to quantify addiction is essential to researchers’ ability to understand social media. Knowing that someone can become behaviorally addicted to social media, what negative impacts does that have?

One study found that “social media addiction is also negatively linked to positive aspects (satisfaction, equality) of the relationship with parents” (White-Gosselin, 2022). A child’s relationship with their parent is the most important in their life because a parent is a teacher, a provider, and a protector. With the deterioration of relationships that formative, it logically

follows that this would impact society as a whole. For instance, one parent interviewed for a CNN article said of her 14-year-old daughter, “It became really addictive [for her] – the sense that you always have to be on, and always have to be responding to someone in order to be seen or to exist” (Kelly, 2021). This young girl’s addiction had revealed itself in displays of negative emotion, with her mother commenting, “I had no clue she was even feeling remotely down at all. When I asked her about it, she just kept saying she wanted to get away from it all ... but I didn’t know what that meant.” This is horrible for the child herself, but this also had an impact on the mother, who found herself struggling to support her child in a world she didn’t truly understand. Although anecdotal, this depicts a pattern shown in the data, that parents aren’t generally aware of their children’s online activity, and that this separation may be due to those online activities.

The COVID-19 pandemic strengthened the hold of social media addiction in young people. According to one survey, 83.7 percent of parents said that their children were using social media at an increased rate (Jennings, 2022). This survey also found, “Of the social media platforms available, parents most frequently allowed their tweens to create an account on TikTok (25%), followed by Facebook Messenger (23%) and Instagram (17%).” So far, discussion has been centered around social media addiction in general, but how does this bear out on a specific platform?

TikTok is a social media platform developed by ByteDance which uses an individualized algorithm to serve users with the exact content they might want to see. This is a great economic engine because configuring for individuals rather than groups or the general public could lead to better user retention. Digital Responsibility is an advocacy “started by a group of Silicon Valley tech employees who wished to share with young people the personal and public consequences of technology” (Digital Responsibility, 2023). In its description of TikTok, they say, “It creates a

constantly updated and personalized flow of short and entertaining clips that create an intense emotional impact, an immediate flood of dopamine” (Digital Responsibility, 2023). This platform has grown significantly over the pandemic as shown by the parents’ responses to the aforementioned survey. This new highly addictive model, which uses the brain’s own reward system to their economic benefit, can cause very negative results for children. The Attorney General of California, Rob Bonta, announced a nationwide investigation into the social media platform, saying, “We know this takes a devastating toll on children's mental health and well-being. But we don't know what social media companies knew about these harms and when” (Office of the Attorney General, 2022).

TikTok is massive among young people. According to Pew Research, 67 percent of teenagers ages 13-17 use TikTok, “with 16% of all teens saying they use it almost constantly” (Vogels, 2022). In their own press release, TikTok claims that “71% of users believe the biggest trends start on TikTok” (TikTok, 2021). Since its launch, TikTok has become one of the largest cultural centers in America, especially for young people. When something like this becomes so big, fear of missing out (FOMO) becomes a large social pressure motivating people to stay on the app, and feeding into their addictive cycle. One article in the Brown Undergraduate Journal of Public Health gives valuable commentary on one of the app’s features, the “endless scroll.” The author comments, “the content stream, the simple, ‘flow-inducing’ interface, and the capability for ‘endless scroll,’ capitalize on classical conditioning and reward-based learning processes to facilitate the formation of habit loops and encourage addictive use” (Petrillo, 2021). She argues that TikTok is functionally similar to slot machines, and that gambling addiction is already in the DSM-5. Although this is commentary and not academic research, the arguments

within are supported by the evidence of the massive numbers of youth who engage with the app on a daily basis.

With all of this attention on social media addiction and the public knowledge about TikTok and other addictive social media platforms, there is an increased focus on children becoming addicted, but not as much on what content they're being served. All content is designed to have some emotional effect, but that emotion can be used cynically. One narrative which has subsided recently, but is nonetheless a major factor in young people's lives is the promotion of political extremism on social media.

Political Extremism

Political extremism has existed for thousands of years, especially in systems where the government is required to listen to its citizens. For our purposes, the colloquial definition of political extremism is sufficient, namely those views and ideologies which lie outside of the current political framework and the media. In America, polarization has caused much of the population to feel alienated and pushed to extreme ends of the political spectrum. CSIS, a foreign policy think tank which claims to be bipartisan, has found that domestically over the past 20 years, terrorist incidents have increased at political demonstrations (Doxsee, 2022). They also say that extremist attacks and plots had increased to their highest levels historically in 2021. Governments are also taking note of the amount of extremism on the internet and attempting to craft an appropriate response. The Danish Government commissioned a report based on a conference from 2013 in which it says, "Not enough has been done to date to tackle the use of the Internet and social media by extremists and violent extremists" (Briggs, 2014). That report called for more counter-extremist messaging online, strengthening digital literacy among young

people, and building capacity of government messengers. Though it is easy to call for these in abstract, looking at how radicalism really spreads on the internet may be more beneficial.

One of the most common places for political discourse online is Twitter. Twitter has become the stage for many of the most intense, important, and impactful debates in our society, which means that it is susceptible to the kind of polarization which leads to political extremism. A common criticism is that it inherently fosters a siloed version of political discourse, commonly referred to as “echo chambers.” One study found that, based on American politicians’ readership, there was serious polarization among the userbase (Hong, 2016). This gives credence to the echo chamber criticism, especially since it came before much of the political development which led us to the current environment. The National Consortium for the Study of Terrorism and Responses to Terrorism (START), an organization led by the University of Maryland, released a report on “The Use of Social Media by United States Extremists” (Jensen, 2018). This report details the role of social media use of groups in an extremist database, saying, “Online social media platforms are playing an increasingly important role in the radicalization processes of U.S. extremists.” Given the effectiveness of this tool, considering its effects on a societal level may give valuable insights into how polarization works.

How is this affecting the way children are developing, if at all? Myrieme Churchill, a psychotherapist, said to Boston Public Radio that “in a way, we don’t think about extremism as a coping mechanism,” suggesting that political division and extremism can be categorized as a symptom of poor mental health rather than a cause (Farkus, 2022). This means that as more polarization pulls social media users in, the greater reach it will have to tap into the minds of the youth. This brings polarization into a different light, namely that as more young people enter political life and the polarization continues to worsen, the correlation is one worth noting. This

feedback cycle is not only hurting our society through polarization, but also hurting individuals in the process. As young people are the most online demographic, it would be reasonable to conclude that much of the political extremism on social media platforms is made by and for young people.

Conclusion

Social media has tapped into something uniquely human throughout its development, and this shows itself in the way American culture regards it now. The amount that social media has embedded itself in the culture is breathtaking especially given the fact that they're primarily used by young people. The connections made on these platforms have untold value to society, allowing old friends to stay in touch and new ones to meet. That being said, young women have a horribly difficult climate to be socially developing in. Where it used to be that only major media would edit photos to make people look unrealistic, now their friends from school can do it too. This has had serious effects on their self-perception and mental health. Children have the difficult task of navigating addiction at a young age, where social media platforms are attempting to keep people on the app for as long as possible. As long as the financial interest is there to keep eyes on the platform, this is unlikely to change, and the responsibility falls upon parents to regulate the amount their children are online. Finally, children have the treacherous path of avoiding the cycle of political extremism which pulls in more people as it grows. The effects social media has on children are vast and dangerous, and society must take responsibility for protecting these growing minds.

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