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The Consequences of Technology on U.S. Student Health

Introduction

Technology has become an enormous part of modern life. Over the past hundred years, it has completely transformed the way humans learn, travel and communicate. Due to the COVID-19 pandemic, modern technology has begun to play a larger role in the United States' education system than ever before. Online-learning technology has helped the U.S. overcome many obstacles associated with the pandemic, such as continuing the classroom virtually to comply with the prohibition of large gatherings. However, it has also become a major distraction to this new classroom. As *New York Times* student-contributor Stephan T. expresses, "From what I have been through for the past two weeks is that online schooling is really a double edge knife" (*New York Times*, 2020). Stephan is one of the millions of U.S. students, who struggle to keep up with the challenges of online learning. A study conducted at Texas A&M University revealed that a vast majority of students had difficulty concentrating on academic work due to distracting technology such as social media and video games (Son, Hegde, Smith, Wang, Sasangohar, 2020). In addition to being a distraction, a team of social studies and medical professors at Clemson University report that technology has many adverse effects on student health and causes extensive amounts of stress and anxiety (Scott, Valley, Simecka, 2016). Consequences from excess technology use include lowered social skills, less self-motivation, a decrease in emotional intelligence, and depression. The drastic shift in student-life caused by the COVID-19 pandemic has resulted in a nationwide need for technology. The excess use of technology has taken a great toll on U.S students' overall wellbeing by affecting their mental and physical health.

The Health Risks Associated with Excess Technology Use

Although technology and online learning has helped schools in the United States stay connected during the pandemic, many health problems arise from its frequent use. David A. Scott, an associate professor with a PhD in Counselor Education and Brooke Simecka, the Assistant Director of Career Development, from Clemson University, along with Bart Valley, a therapist at Comprehensive Counseling Services wrote about the consequences of technology overuse on one's health in the *International Journal of Mental Health and Addiction*.Their research showed that excess "technological use [can] impact a person on multiple levels and in multiple areas including: affective, cognitive, and behavioral concerns" (Scott, Valley, Simecka, 2016). These concerns include lowered social skills, less self-motivation, a decrease in emotional intelligence, and depression. New technologies such as social media and video games, have caused the youth's technology use to become more prevalent along with these severe issues. During the COVID-19 pandemic, schools have switched to online learning classes. This means that students are subjected to hours of screen time a day, increasing their exposure to the risks of technology overuse. Dr. Colleen Peters Halpua, an associate professor specializing in online learning at East Texas Baptist University, described the risks associated with online learning and technology in regards to students' physical, mental, emotional, and social health. She states that, "excessive [technology] use can negatively impact the physical, mental, emotional and social development of youth" (Halupa, 2016). While excess technology use greatly affects one's physical social and emotional wellbeing, it principally contributes negatively to one's mental health and causes stress.

Increasing Stress Levels

Social media causes students an extensive amount of mental health issues such as stress and depression. A study done by *The Wall Street Journal* displayed a spike in depression and stress among U.S. college students due to their technology and social media use (*The Wall Street Journal*, 2019). The students' mental distress stemmed from the "comparative culture" of social media. Students constantly compete with and compare themselves to one another through social media, causing them to develop depression and stress. Due to the restrictions of the COVID-19 pandemic, students have turned to social media as a source of communication and entertainment. This change has

caused many students to fall victim to the comparative culture of social media and become unsatisfied with their lives. Alexander Brent, a current student at the University of Tennessee writes that, "Social media provides a filtered view of our friends and peers—the good shines through while the bad stays hidden. This can make us feel as if everyone is happier than we are, as if we're the only ones with problems, and as if our problems can't be solved". He concludes that social media is a "recipe for stress, anxiety and depression" (*The Wall Street Journal*, 2020). The mental distress caused by social media can lead to physical health concerns. A study conducted by Dr. Michael Peterson, a professor at the University of Delaware with graduate degrees in Health Promotion and Behavioral Medicine, and Micheal Massimini, a B.S and M.S Research Associate for the Public Health Management Corporation in Philadelphia, shows the impact of technology on college students' mental health by monitoring their perceived stress levels. Their investigation revealed that the use of technology has a major effect on sleep, time management, and stress. Throughout their investigation, multiple students were asked questions pertaining to their technology use. 62% of the surveyed students reported to have lost sleep at least once in the past week due to social media and internet use causing them time management issues, such as class tardiness (Peterson, Massimini, 2009). Social media technology has resulted in extensive amounts of stress, causing the student "PSS" (perceived stress score) to rise substantially.

Distraction

The lack of structure in online school has allowed technology to become a major distraction to students, impeding their academic achievement. Due to the mandated quarantine, college students are being forced to work online causing stress and distraction. A study conducted at Texas A&M University done by multiple graduate degree scientists, revealed that a vast majority of students had difficulty concentrating on academic work due to distracting technology such as social media and video games. Students stated that "online classes were subject to distraction due to lack of interactions and prolonged attention to a computer screen" (Son, Hegde, Smith, Wang, Sasangohar, 2020). Since switching to online classes, many schools have reported a significant drop in academic achievement. A study done titled "The COVID-19 slide: What summer learning loss can tell us about the potential impact of school closures on student academic achievement" by Dr. Megan Kuhfeld (MA), a Research Scientist, and Dr. Beth Tarasawa (PhD, MA), the vice president of research at NWEA, displays that students are experiencing a "learning loss" similar to the summer learning loss during vacation (Kuhfeld, Tarasawa, 2020). This is due to the many distractions and unstructured environment of online learning. According to *The New York Times*, students feel that online learning is extremely overwhelming, and struggle to learn new information due to their distracting devices. Riley S., a student from Brooklyn, who is enrolled in online learning, states that, "There's no structure, which is making it hard to get up and be productive. Overall, online school makes time management extremely difficult and I feel like I'm not even learning in some of my classes". Another student, Aaliyah Rogers from Martin Luther School-Maspeth found that: "some of the very same distractions I deal with in school, such as receiving texts from friends or my phone serving as a distraction in and of itself — seem much harder to resist at home" (*The New York Times*, 2020). The many distractions at home have caused students difficulty in concentrating and retaining new information, displaying the cons of online learning.

Conclusion

In conclusion, the social and educational changes due to the COVID-19 pandemic have caused many issues regarding students' mental and physical health. By switching to online classes, schools have subjected their students to hours of screen time a day, increasing their exposure to the risks of technology overuse. Furthermore, due to the social restrictions of the COVID-19 pandemic, students have begun comparing themselves to one another on social media more frequently, resulting in depression and stress. This stress manifests itself in consequences such as poor time management and a decreased sleep schedule. Moreover, the lack of structure in online school has allowed technology to become a major distraction to students, impeding their academic achievement. A vast majority of students have difficulty concentrating on work due to distracting technology such as social media and video games, causing them to have a "learning loss". In summary, excessive technology use appears to have a negative impact on one's health.