

Technology: The Mental Health Uncertainty

In March of 2020, the sudden feeling of uncertainty started to nourish everyone's mind. To promote a virtual classroom setting, schools had to revert to technological resources, such as Google Classroom and Zoom. Various jobs had to revert to cloud-based video conferencing platforms to enhance their company's production. These implementations seem promising to enhance society's productivity further, but all are at risk of being exposed to such dangerous activity. From the random lockdowns to the uptick in overall technological usage, technology has played a role in everyone's mental health.

From stones to phones to cell phones to smartphones, technology has been rapidly evolving. Technological platforms, such as internet applications, social platforms, and even video games, have been becoming a vital resource to enhance the productivity of an individual's life. Through such platforms, interactions are developing as further advancements are made. Along with the technological advancements come new mental health findings. For the past thirty years, everyone has interacted with technological platforms in many ways, but is that ultimately impacting overall mental health? Technology has a variety of implications on mental health, primarily due to the increased accessibility to social media that both provide a means of communication worldwide yet has consequences on overall wellbeing, the use of video games that have shown potential to improve mental health outcomes, and widespread growth of other online platforms that have advocated for the importance of mental health.

Increased time on social media platforms comes with positive well-being. In a research study conducted by China Billotte-Verhoff, Kathryn Green, and Kate Magsamen-Conrad, all three professors within the Communication department at different universities examined the rising

awareness of how social platforms improve individuals' mental health. This is vital since the three professors "begin by establishing a foundational knowledge of self-concealment, wellbeing, technology addiction, and online social capital" (Billotte-Verhoff/Green/Magsamen-Conrad 2). While there is a negative association between Self- Concealment, and well-being, social platforms have shown to be a preferable setting for self-concealed individuals. Because of that, this then leads to others reverting to that accommodating setting. Technology addiction is usually depicted as an issue, but the positive association between self-concealment and technology addiction can improve one's mental state. The high amount of social networks comes with high social capital, leading to a safe setting for individuals who prefer this interaction methodology. Ultimately, self-concealment, well-being, technology addiction, and online social capital lead to a better and healthier mental state (Billotte-Verhoff et al. 2). Addiction will provide more communication among others who use social platforms, calling attention to the accessibility of social platforms can be. Doing so will call for the attention of millions of social media users to network with other individuals, leaving a positive impact on their emotional state.

While each of the factors highlighted is examined, the type of interaction individuals may have with one another is something to carefully examine further as interactions through social platforms may be a concern. The rising danger of risky interactions comes down to the significant traffic through technological sources. While interaction through social platforms may be beneficial, negative social interaction can lead to a negative social capital, which can lead to issues for those "who view the Internet as a gateway to escape anxiety, depression, or helplessness ." (Billotte-Verhoff et al. 3). College students are especially prone to these social interactions due to the high interaction with technology. Since "92% of 18–24 year old non-college students and nearly 100% of undergraduate and graduate college students are

Internet users" (Billotte-Verhoff et al. 3). Menacing interactions may lead to unsafe social interactions that endanger their mental being.

Addiction through social platforms may increase social capital and lead to harmful habits. Jeff Cain, a professor at the University of Kentucky in the College of Pharmacy department, discusses the importance of how social platforms affect mental health. Cain examines factors that lead to addiction that eventually lead to poor mental health habits. This comes to how his research highlights the high number of college students feeling "hopeless" (Cain 738). The students that reported feeling hopeless also reported signs of being addicted to a device, which led to high feelings of stress and anxiety. Factors such as current, family, and economic issues were considered and played a part in how the students felt. Social media can be helpful, but certain groups use it to target those that are vulnerable, which can affect their emotional state. Personal issues that affect the individual can lead to unsafe interactions through social media, rendering poor interactions through daily activities.

While many factors were considered in Cain's research, not all age groups were carefully examined. For example, Cain references "students" and an age range throughout his research. One thing to consider is how social platforms may affect all age groups and what can be done to prevent this age group from evolving further stress and anxiety levels. Based on the research conducted, Cain's research highlights the increased screen time but does not report the average amount of screen time based on the research conducted. Safe social interactions were not mentioned, leading to controversy over how one may interact through social platforms.

Dangerous activity through social media, video games, TV shows, and movies severely affects those using such platforms as a coping mechanism. Taylor A. Burke, Emily R. Kutok, Shira Dunsiger, Nicole R. Nugent, a John V. Patena, Alison Riese, and Megan L. Ranney,

doctors at the General Hospital Psychiatry, conducted a study analyzing how life events affect individuals' use through the use of all technology, particularly adolescents. The study examined adolescents in the Fall of 2020 and discovered a concerning observation regarding adolescents' mental health: "Results indicated that among those who report infrequent use of social media for coping, greater increases in social media use were associated with higher depressive symptoms" (Burke/Kutok/ Dunsiger/Nugent/Patena/ Riese/ Ranney 147). The doctors that partook in this study explain that life-changing events, such as COVID 19, impact an individual's mental state, and use technologies such as social media, video games, TV shows, and movies, to cope with any issue one may experience. With the high levels of stress life-changing events can cause, the use of social media, video games, TV shows, and movies serve to alleviate those high levels of stress. While the accessibility of these technology platforms can provide more care, dangerous interactions can lead to a poor state alongside additional factors the life-changing event can bring.

While the authors conducted their experiment through an uncertain time everyone underwent, the study could have focused more on issues outside of school, such as life events. The authors mention the validity of their research; they acknowledge that research on the kind of social networks is one to keep an eye on. "Future research should explore in more granular detail what, if any, social media and technology use is protective during a pandemic, and for whom, to help tailor prevention efforts" (Burke et al. 147). The gap in their research calls for attention to how vital specific social networks can impact one's well-being. Doing so will fill in the gap that is missing and may drive other researchers to seek additional information on future social networks that can be implemented to combat the ongoing crisis social networks may have on an

individual's mental health. Knowing what sources of technology are reliable would drive many to gear towards these resources in a similar scenario as COVID.

With the advancements in place for smartphone and tablet apps comes new, innovative, and retainable ways to look for mental health resources. With the resources mobile applications are providing, professional doctors and clinicians are pushing for the use of mental health support systems. The accessibility these support systems provide emphasizes the use for applications to be commonly used by anyone who requires the assistance: "Treatment can take place anytime and anywhere (e.g., at home in the middle of the night or on a bus on the way to work) and may be ideal for those who have trouble with in-person appointments" ("Technology and the Future.."). Providing a more straightforward and accessible way of reaching out to a clinician or doctor pushes more individuals to seek this sort of care through innovative technological applications. There can be various resources in an application that can be very useful for an individual, such as meditation, illness management, and skill-training apps that can cut down costs and time to go and visit a doctor.

While an increasing number of online mental health support systems are becoming common, there are potential drawbacks that may cause other methods of seeking a better mental state. Anyone can set up a mobile application without guidance from a professional doctor: "The question of who will or should regulate mental health technology and the data it generates needs to be answered" ("Technology and the Future.."). Without the regulation of any medical government agencies, such as the Center for Disease and Control Prevention, calls for the attention of these agencies to inspect these online mental health support systems before a user decides to use those resources. Not only that but doing so will also provide extra support for doctors to recommend to their patients who need different methods of seeking better well-being.

While there may be innovative social platforms, additional technological sources used to combat common mental illnesses such as anxiety can positively affect overall well-being. The research article was written by Arean Patricia, a professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington, and Pim Cuijpers, a professor in the Department of Clinical, Neuro, and Development Psychology at Vrije Universiteit Amsterdam, focus on several technological platforms, such as video games, that are currently used to combat anxiety. Both authors address the undermining positive effect video games can have on mental health, stating, "not only is this video game as effective as standard psychotherapy, but adherence to the game was substantial" (Cuijpers/Patricia 479). Through the help of "therapeutic" video games, individuals seeking to improve their overall mental state would benefit from such technological resources. Doing so will call the attention of individuals to attempt and use sources such as video games.

Although new technological sources are being implemented, their accuracy remains unclear. Cuijpers and Patricia highlight the missing unknown technology currently undermines: "technology is not so sophisticated that it can accurately recommend the best app or treatment approach to a consumer with depression or anxiety or simulate a personal experience of therapeutic change" (Cuijpers/Patricia 480). Technological advancements are currently implemented but should be seriously monitored. Uncertainty of these resources demands more research on how games and apps can become more effective in combating mental health. One thing to consider is having individuals wanting to avoid implementing these resources to enhance their overall state.

Further research is necessary to fill in the gaps various researchers are leaving. While most researchers aim at a specific group and region, further research on groups that note the

psychological effects worldwide would benefit from making further points regarding the issue. Additional resources shall emphasize the importance and steps being taken regarding this issue. The ongoing social platform crisis technology is causing will continue to be a controversial issue, and the more research findings are found, the more vital the issue will be emphasized. More research on other technological resources such as games, mobile platforms, and video sources would benefit from presenting vital points for both sides of the controversial topic.

More technological advancements come with other gaps for researchers to fill in. Many researchers blame technology as the primary source of individuals' drained mental health when more research could have been placed to seek any treatments that may help combat the ongoing issue. On the other hand, many researchers focused on the positive outcomes of how clinicians are seeking to raise the issue when researchers could have focused on other sources of awareness improving mental health, such as games, mobile platforms, and video sources. Filling in those blanks will provide a clearer picture of the steps needed to be done from both sides. To avoid any bias from both sides, researching mental health while focusing on the psychological effects of an individual will give one a clear idea of what to consider while encountering additional research regarding the topic. While both sides provide reasonable points to their argument, neither side mentioned the possibility of the ongoing issue being something else. In other words, neither side argued that the issue may be beyond technology and may have to go beyond the research mentioned by the researchers.

With the rise of further advancements undergoing technology, there is still uncertainty about whether technology benefits an individual's mental health. Various organizations worldwide and clinics are taking steps to help combat technology issues. With that in mind, tech industries can ensure that steps are being implemented to raise awareness of this issue. Social

networks are taking further steps to enhance the environment of their networks, but further research shall be conducted to determine the outcome technology has on mental health.

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The research article was written by Arean Patricia, a professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington, and Pim Cuijpers, a professor in the Department of Clinical, Neuro, and Development Psychology at Vrije Universiteit Amsterdam, focus on the negative psychological effects technology has on an individual's mental health and focus on several technological platforms, such as video games, that are currently used to combat anxiety. The method implemented was to research the mental disorders individuals encountered due to technology. A possible limitation to this study would be the data being limited to a specific country, specifically the United States. While this article mentions the drawbacks technology has on mental health, various researchers have also conducted their research to prove the idea presented in Patricia and Cuijpers research. Patricia and Cuijpers research is vital for this paper as it highlights several platforms over which researchers failed to mention, the drawbacks technology has on individuals' mental health and the emphasis on combating this issue.

Burke, Taylor A., et al. "A National Snapshot of U.S. Adolescents' Mental Health and Changing Technology Use during COVID-19." *General Hospital Psychiatry*, vol. 71, 2021, pp. 147–148., <https://doi.org/10.1016/j.genhosppsy.2021.05.006>.

Various doctors at the General Hospital Psychiatry conducted a study, explained their results, drafted the manuscript, and "agree to be accountable for all aspects of the work." (148). The study focused on possible social interactions through technology that focused on

several media platforms, primarily social media. The study also primarily focused on changing behavior towards adolescents who visited the General Hospital Psychiatry. A possible limitation of this study would be the things that were commonly searched, how that plays a role in mental health, and how this can become a preventative issue. This limitation does not affect the validity of their research but more so draws for further investigation to be conducted. Another limitation would be the age group that was targeted for this research. While various studies examine the behavior towards adolescents, more research conducted on all age groups would significantly make the authors' data stronger and more appealing. This study is vital for this paper as it emphasizes the importance of more research and observes technological platforms that examine people's mental health.

Cain, Jeff. "It's Time to Confront Student Mental Health Issues Associated with Smartphones and Social Media." *American Journal of Pharmaceutical Education*, vol. 82, no. 7, 2018, p. 6862., <https://doi.org/10.5688/ajpe6862>.

Written by Jeff Cain, a professor at the University of Kentucky in the College of Pharmacy department, discusses the importance of technology affects mental health. The methodology implemented was to research how people become addicted to a screen and its impact on people's mental health. The data from the research suggests that the issue of technology and mental health is an ongoing issue. A possible omission would be that no data was ever included regarding people in the United States. While this data may be significant for this paper, it can be severe because other countries are currently combating the ongoing crisis between mental health and technology. As mentioned, this resource will serve to highlight how technology serves as a coping method for stress and how that coping method is affecting individuals.

Magsamen-Conrad, Kate, et al. "Technology Addiction's Contribution to Mental Wellbeing: The Positive Effect of Online Social Capital." *Computers in Human Behavior*, vol. 40, 2014, pp. 23–30., <https://doi.org/10.1016/j.chb.2014.07.014>.

Written by Kate Magsamen-Conrad, China Billotte-Verhoff, and Kathryn Green, all three are professors within the department of Communication at different universities. Their journal highlights the benefits of technological resources on everyone's mental health. The methodology implemented was to research any services that highlight any resources seeking to raise awareness of mental health. A possible limitation would be that the journal only focused on technological resources designed and implemented within the United States. This limitation affects the idea that technology and mental health may not be a significant issue in other countries. Additional resources confirm the idea of technology being vital to an individual's mental health. This resource will reinforce the importance of how accessible technology is becoming to raise awareness on issues such as mental health.

"Technology and the Future of Mental Health Treatment." National Institute of Mental Health, U.S. Department of Health and Human Services, <https://www.nimh.nih.gov/health/topics/technology-and-the-future-of-mental-health-treatment>.

The article written by the National Institute of Mental Health focuses on the importance of mental health platforms that promote mental health awareness. The article highlights that such platforms can "detect a change in behavior, it may provide a signal that help is needed before a crisis occurs (National Institute of Mental Health). The methodology implemented throughout the article was the credibility of how researchers and software engineers

collaborate to produce robust platforms users will use to reduce any negative psychological impacts on their mental health. A limitation on this would be the effectiveness of these apps, as there is not enough data to prove these technological platforms are effective.

While not enough data is prevalent to prove all platforms are effective, various researchers have emphasized that clinicians carefully examine these platforms before recommending them to their patients. The article is vital for this paper as it highlights the convenience of these platforms and the future they hold on helping individuals combat mental health concerns.