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MODERNITY AND MENTAL HEALTH: DOES TECHNOLOGY MATTER?

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ABSTRACT

This comprehensive review explores the complex relationship between modernity, particularly technology, and mental health. It examines mental health disorders' prevalence and impact, aetiology, and current treatment approaches. The article then delves into the specific effects of technology on mental well-being, discussing the potential benefits and risks associated with our increasingly digital world. The review concludes by emphasising the need for a balanced approach that leverages the benefits of technology while mitigating its potential harms. It also highlights areas for further research, including longitudinal studies on the long-term impacts of technology use on mental health and the development of evidence-based digital mental health solutions. This article provides a comprehensive overview of the current state of mental health in the context of modern technology, offering insights for researchers, healthcare professionals, and individuals seeking to understand and navigate this complex landscape.

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INTRODUCTION

A person's emotional, psychological, and social health contribute to their mental health, an essential part of their total wellness. It impacts our capacity to manage stress, form relationships, and make decisions by affecting our thoughts, feelings, and actions (World Health Organisation, 2018). Inadequate support and treatment for those coping with mental health concerns have traditionally resulted from mental health being stigmatised and ignored despite its importance. The frequency and severity of mental health issues have come into the public's light in recent years. Nearly 20% of American individuals might suffer from a mental disease this year, suggests the National Institute of Mental Health (NIMH, 2021). Mental health issues such as schizophrenia, bipolar illness, anxiety disorders, and depression are prevalent. A person's relationships, quality of life, and capacity to carry out everyday tasks can all take a hit when these conditions are present.

Genetic, environmental, and lifestyle variables all have a role in the development of mental health issues. American Psychiatric Association (2020) research indicates that trauma, persistent stress, substance misuse, and specific medical problems can all have a role in the onset of mental health difficulties. Poverty, prejudice, and a lack of healthcare access are socioeconomic issues that can worsen mental health issues and make therapy more difficult to achieve. Prevention, early intervention, and readily available treatment alternatives are all part of the solution to mental health challenges. Treatment options may include talk therapy, medication, behavioural modifications, and social support. There needs to be a reduction in the stigma associated with mental health and an increase in resources provided by healthcare institutions and governments. According to Patel et al.(2018), published in The Lancet Commission on Global Mental Health and Sustainable Development, countries may enhance public health and well-being by placing a premium on mental health education, research, and treatment.

The prevalence of mental health disorders is a significant global concern. In the United States alone, the National Institute of Mental Health (NIMH) reports that approximately 52.9 million adults, or about 21% of the adult population, experienced a mental illness in 2020 (NIMH, 2021). This statistic underscores the widespread nature of mental health challenges. Common mental health conditions include major depressive disorder, affecting about 8.4% of adults; anxiety disorders, impacting roughly 19.1% of adults; bipolar disorder, affecting 2.8% of adults; and schizophrenia, which affects about 1.5 million adults in the U.S. annually (NIMH, 2021). These disorders can profoundly impact an individual's daily functioning, relationships, work performance, and overall quality of life.

The aetiology of mental health disorders is complex and multifaceted, involving the interplay between genetic predisposition, environmental factors, and individual experiences. Research in neurobiology and genetics has revealed that many mental health conditions have a heritable component, with certain genetic variations increasing susceptibility to specific disorders (Smoller, 2016). Environmental factors also play a crucial role. Adverse childhood experiences, chronic stress, trauma, and substance abuse can significantly increase the risk of developing mental health issues. Socioeconomic factors, including poverty, unemployment, and social isolation, have been linked to higher rates of mental health problems (World Health Organization, 2014). Additionally, certain medical conditions, such as thyroid disorders, cardiovascular diseases, and chronic pain, can contribute to or exacerbate mental health symptoms, highlighting the intricate connection between physical and mental health.

Mental Health and Technology

An all-encompassing, multi-pronged strategy, including prevention, early intervention, and easily accessible treatment choices, is necessary to address mental health challenges. According to Cuijpers et al. (2019) in the Annual Review of Psychology, evidence-based psychotherapies, including interpersonal and cognitive-behavioural therapy (CBT), have effectively treated various mental health issues. To alleviate symptoms, many people find that pharmaceutical treatments, such as antidepressants, anxiolytics, and antipsychotics, are essential. The necessity for tailored methods is further highlighted by the fact that the effectiveness of different therapies might differ widely. Mental health has also benefited from lifestyle changes, such as getting enough sleep,

exercising regularly, and practising stress management strategies like meditation and mindfulness (Firth et al., 2020). Recuperation and mental health maintenance are greatly aided by social support networks, which encompass loved ones, acquaintances, and community organisations. Efforts to increase mental health awareness, decrease stigma, and expand access to care should be prioritised by public health organisations on a more significant level. The Comprehensive Mental Health Action Plan 2013–2030, put up by the World Health Organisation, details worldwide plans to improve mental health, forestall mental diseases, and guarantee everyone has access to adequate treatment (WHO, 2021). As a society, we may strive for better mental health care by addressing the socioeconomic determinants of mental health, including mental health services in primary healthcare and using technology for teletherapy and digital treatments.

The intersection of mental health and technology has become increasingly prominent in recent years, offering new challenges and innovative solutions. As digital devices and online platforms become more integrated into daily life, their impact on mental well-being has drawn significant attention from researchers and healthcare professionals alike (Torous et al., 2019). This essay explores the complex relationship between technology and mental health, examining our increasingly digital world's potential benefits and risks.

One of the most promising aspects of technology in mental health is its potential to improve access to care. Teletherapy platforms and mental health apps have enabled individuals to connect with mental health professionals and access resources from the comfort of their homes (Torous et al., 2019). This is particularly beneficial for those in rural areas or with mobility issues who might otherwise struggle to access traditional in-person therapy. Moreover, digital interventions such as cognitive behavioural therapy (CBT) apps have shown efficacy in treating conditions like depression and anxiety, offering a scalable solution to address the growing demand for mental health services (Firth et al., 2017).

Nevertheless, worries over the possible detrimental effects of technology on mental health have been voiced due to its widespread usage, especially on social media. Particularly among young people and teenagers, research has connected heavy social media usage to elevated levels of loneliness, despair, and anxiety (Keles et al., 2020). Social comparison and inadequacy might set in when we are constantly exposed to staged depictions of other people's lives. In addition, many digital platforms are addictive and meant to keep users engaged at all costs, which can lead to problems sleeping and less in-person social interactions—two things that are important for mental health (Twenge & Campbell, 2019).

On the other hand, technology has also created new opportunities for mental health research and treatment. Big data analytics and artificial intelligence are being employed to identify patterns in mental health data, potentially leading to earlier detection and more personalised treatment approaches (Shatte et al., 2019). Virtual reality (VR) technologies are showing promise in the treatment of phobias and post-traumatic stress disorder (PTSD), allowing patients to confront and overcome their fears in controlled, simulated environments (Maples-Keller et al., 2017).

As we navigate this digital age, it is crucial to approach the relationship between technology and mental health with nuance and critical thinking. While technology offers unprecedented mental health care and research tools, it also presents new challenges that must be addressed. Moving forward, a balanced approach that leverages the benefits of technology while mitigating its potential harms will be essential in promoting mental well-being in our increasingly connected world (Torous et al., 2019).

The effect of technology on mental health

Technology has become integral to modern life, profoundly influencing human mental health in various ways. The ubiquity of digital devices and online platforms has created a complex landscape of opportunities and challenges for psychological well-being. Researchers have identified several key areas where technology significantly impacts mental health, including social media use, access to mental health resources, sleep patterns, and cognitive functioning (Twenge & Campbell, 2019).

The usage of social media has one of the most noticeable impacts on people's mental health as a result of technology. While it is true that social media may help people feel more connected to one another, research has shown that using them too much can have harmful effects on mental health. In a meta-analysis conducted by Keles et al. (2020), it was discovered that greater social media use was linked to higher levels of psychological distress, anxiety, and depression, especially among young adults and adolescents. Social comparison and feelings of inadequacy might result from being constantly exposed to well-crafted portrayals of other people's lives. On top of that, social media addiction and FOMO can lead to more stress and fewer in-person social connections, which are bad for mental health (Przybylski et al., 2013).

On a more positive note, technology has significantly improved access to mental health resources and treatment options. Teletherapy platforms and mental health apps have made it possible for individuals to connect with mental health professionals and access support from the comfort of their homes. They are particularly beneficial for those in rural areas or with mobility issues who might otherwise struggle to access traditional in-person therapy. Torous et al. (2019) highlighted the potential of digital interventions, such as cognitive behavioural therapy (CBT) apps, in treating conditions like depression and anxiety, offering a scalable solution to address the growing demand for mental health services.

However, the pervasive use of technology has also been associated with negative impacts on sleep patterns and cognitive functioning, which are closely tied to mental health. The blue light emitted by digital screens can disrupt circadian rhythms and melatonin production, leading to sleep disturbances (Hale et al., 2019). Poor sleep quality is a known risk factor for various mental health issues, including depression and anxiety. Additionally, the constant stream of information and notifications from digital devices can lead to cognitive overload and decreased attention spans. Carr (2020) argues that this "shallow" mode of thinking induced by constant digital stimulation may hinder deep, reflective thought processes essential for emotional regulation and mental well-being.

Coping mental health in the modern world

Maintaining good mental health has become increasingly challenging in today's fast-paced, hyper-connected world. The pressures of work, social media, and constant connectivity can take a toll on our psychological well-being. However, there are effective strategies to cope with these challenges and promote mental health in the modern era. Developing a solid support network is one of the most crucial steps in maintaining mental health. Social connections are vital to emotional well-being, providing a buffer against stress and promoting resilience (Ozbay et al., 2007). In our digital age, it is essential to cultivate meaningful face-to-face relationships alongside online connections. Regular interactions with friends, family, or support groups can provide emotional sustenance and practical help during difficult times.

Mindfulness and meditation practices have gained significant attention as practical tools for managing stress and improving mental health. Research has shown that mindfulness-based interventions can reduce symptoms of anxiety and depression while enhancing overall well-being (Khoury et al., 2013). Incorporating mindfulness techniques, such as deep breathing exercises or guided meditations, into daily routines can help individuals stay grounded and manage the constant influx of information and stimuli characteristic of modern life.

Physical activity is another crucial component of mental health maintenance. Regular exercise has been consistently linked to improved mood, reduced anxiety, and better cognitive function (Mikkelsen et al., 2017). In increasingly sedentary lifestyles, consciously incorporating movement – whether through structured workouts, walks in nature, or active hobbies – can significantly boost mental well-being. Managing digital consumption is essential in the modern world. While technology offers numerous benefits, excessive screen time and social media use have been associated with increased rates of depression and anxiety (Twenge & Campbell, 2019). Implementing digital detoxes, setting boundaries on device use, and cultivating offline hobbies can help create a healthier relationship with technology and protect mental health. Seeking professional help when needed is a critical aspect of mental health care that has become more accessible in recent years. Teletherapy and online counselling services have made it easier for individuals to connect with mental health professionals (Torous et

al., 2019). Overcoming the stigma associated with seeking help and recognising when professional support is necessary are essential steps in maintaining mental health in the modern world.

CONCLUSION AND RECOMMENDATION

The relationship between technology and mental health in the modern world is complex and multifaceted. While technology has undoubtedly brought significant benefits in terms of access to mental health resources and innovative treatment options, it has also introduced new challenges that can negatively impact psychological well-being. The ubiquity of digital devices and social media platforms has created a landscape where individuals must navigate the potential pitfalls of excessive screen time, social comparison, and reduced face-to-face interactions.

Despite these challenges, technology offers promising mental health support and treatment avenues. Teletherapy, mental health apps, and digital interventions have made mental health care more accessible to a broader population, particularly those in remote areas or with limited mobility. Integrating artificial intelligence and big data analytics in mental health research holds potential for earlier detection and more personalised treatment approaches.

However, the negative impacts of technology on mental health cannot be overlooked. Excessive social media use has been linked to increased rates of depression, anxiety, and loneliness, particularly among younger populations. The constant connectivity facilitated by digital devices can lead to sleep disturbances and cognitive overload, both of which can exacerbate mental health issues. A balanced approach is necessary to address mental health in the modern era. The approach involves leveraging the benefits of technology while implementing strategies to mitigate its potential harms. Encouraging digital literacy, promoting healthy technology use habits, and fostering solid in-person social connections are crucial to maintaining mental well-being in our increasingly digital world.

Further research is needed to fully understand the long-term impacts of technology on mental health, particularly as new technologies emerge and evolve. Longitudinal studies examining the effects of various types of technology use on mental health outcomes over time would provide valuable insights. Additionally, research into the efficacy of digital mental health interventions and their long-term outcomes is crucial for developing evidence-based digital mental health solutions.

Finally, interdisciplinary research combining insights from psychology, neuroscience, computer science, and public health could lead to more comprehensive strategies for promoting mental health in the digital age. Investigating the potential of emerging technologies such as virtual reality and artificial intelligence in mental health treatment while also addressing ethical concerns and potential risks will be crucial in shaping the future landscape of mental health care in our technologically advanced world.

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