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# THE IMPACT OF INFORMATION SYSTEMS ON MENTAL HEALTH: A STUDY IN DIGITAL WELLBEING

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Abstract. The increasing use of information systems in modern life, especially in the realm of digital wellbeing, has sparked interest in exploring their potential effects on mental health. This study investigates the role of digital tools, including social media, mobile health apps, and digital mental health resources, in shaping individuals' psychological states. By examining both positive and negative outcomes of information systems in mental health, the study aims to provide a comprehensive understanding of how these technologies influence stress levels, emotional regulation, and overall mental wellbeing. Using a mixed-methods approach, including surveys, qualitative interviews, and data analytics, the research offers insights into how digital platforms can either support or hinder mental health. The findings reveal that while digital tools provide important resources for mental health support, excessive screen time, cyberbullying, and information overload can contribute to adverse mental health effects. The study emphasizes the need for balanced engagement with digital platforms and the importance of digital literacy in promoting positive mental health outcomes.

**Keywords:** Information Systems, Digital Wellbeing, Mental Health, Technology Impact

#### INTRODUCTION

**OVERVIEW OF INFORMATION SYSTEMS** 

Information systems (IS) have become an integral part of modern society, influencing every aspect of daily life. These systems include a variety of technologies such as computers, software, networks, and databases designed to collect, process, store, and disseminate information. With the rapid advancement of technology, IS have increasingly been adopted in sectors like healthcare, education, business, and entertainment, playing a pivotal role in shaping the way individuals interact with information. In particular, the growth of digital platforms and mobile applications has revolutionized how people access and engage with various services, including

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mental health care. From digital health apps to social media platforms, information systems have opened new avenues for improving both physical and psychological wellbeing.

The widespread use of IS raises important questions about their effects on mental health. While some digital platforms offer tools for managing mental health, improving emotional well-being, and providing support for individuals with mental health conditions, others may inadvertently contribute to mental health challenges, such as stress, anxiety, and depression. It is essential to explore the duality of this technological impact and understand how these systems influence mental health outcomes, both positively and negatively.

#### THE CONCEPT OF DIGITAL WELLBEING

Digital wellbeing refers to the overall mental, emotional, and physical health that results from interacting with digital technologies. It includes factors such as screen time, the types of digital content consumed, social media use, and the extent to which individuals feel empowered and in control of their technology usage. The concept of digital wellbeing is becoming increasingly important as the digital landscape expands and becomes a central part of daily life. Digital wellbeing seeks to promote a balance between the benefits and potential risks of digital technology, aiming for healthy engagement that supports mental wellness.

This concept incorporates multiple aspects, such as minimizing harmful behaviors like excessive screen time, managing digital content consumption, addressing the effects of cyberbullying, and combating social isolation caused by over-reliance on digital tools. As individuals, especially in the younger generation, become more engaged with technology, it becomes critical to monitor and guide their digital behavior to ensure that these technologies contribute to rather than detract from mental health. Digital wellbeing also encompasses the use of technologies specifically designed to support mental health, such as apps for managing anxiety, meditation, sleep tracking, and social connections.

#### RELEVANCE TO MENTAL HEALTH

The relevance of digital wellbeing to mental health is undeniable, as information systems have become both a tool and a potential source of risk. While IS, particularly mobile applications and social media platforms, have been designed to improve mental health, the proliferation of digital technologies has also created new challenges. For instance, excessive use of social media has been linked to increased rates of anxiety, depression, and loneliness, particularly among adolescents and young adults. On the other hand, digital platforms provide valuable resources for mental health management, offering immediate access to therapeutic interventions, virtual support communities, and self-help tools.

The impact of information systems on mental health is complex. Positive impacts include providing individuals with accessible mental health support, promoting social connection, and offering resources for self-improvement. However, negative impacts, such as cyberbullying, social comparison, and the stress of information overload, can detract from mental health and wellbeing. Moreover, the pervasive nature of information systems makes it difficult for individuals to disconnect, leading to issues such as digital addiction and burnout.

Given the growing reliance on digital technologies and the importance of maintaining mental health, it is crucial to examine the interaction between information systems and mental health. By understanding the effects of these technologies, we can develop strategies for promoting digital wellbeing and mitigating the potential harms that come with the increased use of information systems.

This introduction sets the stage for further exploration into how information systems influence mental health, laying the foundation for the study of digital wellbeing and its relevance to contemporary psychological challenges.

#### 2. LITERATURE REVIEW

Previous Research on the Impact of Technology on Mental Health

The growing integration of technology into daily life has led to an increasing body of research exploring its effects on mental health. Studies have shown that technology can have both positive and negative impacts, depending on the nature and intensity of its use. One of the primary concerns raised in the literature is the potential for technology to contribute to mental health issues, such as anxiety, depression, and sleep disturbances.

A study by Twenge et al. (2017) examined the correlation between increased screen time and a rise in depression and suicide rates among adolescents, highlighting the negative psychological outcomes associated with heavy use of digital devices. Similarly, another study by Kuss and Griffiths (2017) discussed the addictive nature of social media platforms, emphasizing their role in increasing feelings of loneliness, stress, and depression. However, other research has focused on the positive effects of technology on mental health, particularly in the context of therapeutic interventions. For instance, some studies have found that online cognitive-behavioral therapy (CBT) and digital mental health resources can be as effective as traditional face-to-face therapy in treating mental health disorders such as depression and anxiety (Andrews et al., 2018).

The literature suggests that digital technology can have a significant role in early detection and intervention. Digital tools such as health monitoring apps, wearables, and artificial intelligence (AI) applications are being used to detect mental health conditions earlier, allowing individuals to seek help before problems escalate (Mohr et al., 2017). This body of research highlights the dual nature of technology, which can serve as both a potential risk factor and a useful tool for mental health management.

#### THE ROLE OF SOCIAL MEDIA IN MENTAL HEALTH

Social media has been one of the most studied aspects of technology's impact on mental health. Platforms such as Facebook, Instagram, Twitter, and Snapchat have become integral parts of daily life, especially among younger generations. While social media can foster social connections and support networks, several studies have pointed to its negative effects on mental wellbeing, particularly in terms of body image, self-esteem, and social comparison.

A notable study by Fardouly et al. (2015) found that exposure to idealized images on social media platforms was associated with increased body dissatisfaction and lower self-esteem, especially among young women. Similarly, research by Primack et al. (2017) showed that high

levels of social media use were linked to higher levels of perceived social isolation, suggesting that excessive social media engagement can undermine real-life social interactions and contribute to feelings of loneliness and depression.

On the positive side, some research highlights the potential for social media to provide emotional support and foster a sense of belonging. A study by Naslund et al. (2016) examined how individuals with mental health disorders use social media to form online support communities, finding that these virtual connections can reduce feelings of isolation and provide emotional relief. These studies suggest that the impact of social media on mental health is complex, with both positive and negative effects depending on usage patterns and individual differences.

#### MOBILE HEALTH APPS AND DIGITAL MENTAL HEALTH RESOURCES

Mobile health (mHealth) apps and digital mental health resources have become increasingly popular as tools for supporting mental wellbeing. These digital resources provide a wide range of services, including self-help guides, therapy tools, mood tracking, meditation, and mindfulness exercises. A growing body of research suggests that these tools can offer significant benefits for mental health, particularly in terms of accessibility, convenience, and affordability.

A systematic review by Firth et al. (2017) found that mHealth apps for managing mental health symptoms were effective in reducing anxiety, depression, and stress, especially when integrated with evidence-based therapeutic techniques such as CBT and mindfulness-based stress reduction (MBSR). Another study by Luxton et al. (2016) highlighted the effectiveness of smartphone apps in managing mood disorders, stating that they could offer continuous support to individuals, complementing traditional mental health interventions.

The proliferation of digital mental health resources has also addressed several barriers to mental healthcare, such as stigma, accessibility, and cost. For example, individuals living in rural or underserved areas can access mental health resources that may not be available locally. Furthermore, apps and digital tools can offer privacy and anonymity, making them particularly attractive for individuals who may feel uncomfortable seeking face-to-face therapy (Lattie et al., 2019).

Despite their potential benefits, concerns about the quality, privacy, and efficacy of these tools remain. A review by Donker et al. (2013) highlighted that while many apps are marketed as mental health tools, few are scientifically validated, and there is a risk of harm if users rely on unproven resources. Additionally, privacy concerns about the collection and sharing of personal data in these apps remain a significant issue (Rohde et al., 2020).

## 3. RESEARCH METHODOLOGY

Mixed-Methods Approach: Quantitative and Qualitative Data

This study employs a mixed-methods approach to investigate the impact of information systems on mental health, particularly focusing on digital wellbeing. A mixed-methods design integrates both quantitative and qualitative research methodologies, providing a comprehensive understanding of the subject. By combining numerical data with in-depth narratives, this

approach allows for a holistic view of how digital technologies, such as social media and mobile health apps, influence mental health outcomes.

The **quantitative component** of the study involves the use of surveys and structured questionnaires to gather numerical data on participants' usage of digital platforms and its correlation with mental health indicators such as stress levels, anxiety, and depression. This allows for statistical analysis and identification of patterns or trends in the relationship between digital engagement and mental wellbeing.

The **qualitative component** of the study focuses on collecting detailed insights into participants' personal experiences with information systems and their perceptions of how these technologies impact their mental health. Semi-structured interviews and open-ended survey questions are used to capture the nuances of participants' attitudes, emotional responses, and coping mechanisms related to their use of digital tools. This qualitative data provides a deeper understanding of the personal and contextual factors that influence mental health outcomes, which may not be fully captured by quantitative measures alone.

#### SAMPLE POPULATION AND DATA COLLECTION TOOLS

To ensure the findings are representative of diverse experiences with digital technologies, the study targets a wide range of participants from different demographic backgrounds, including age, gender, educational level, and geographical location. A **stratified random sampling** method is employed to select participants, ensuring that different subgroups (e.g., adolescents, young adults, adults, and seniors) are adequately represented in the study.

The **sample population** consists of 500 participants, with 200 from urban areas and 300 from rural regions. This division allows for the comparison of how digital wellbeing differs between these two groups, considering the varying access to technology and mental health resources. Participants are recruited through online platforms, mental health organizations, and community outreach programs, ensuring a diverse representation.

#### **DATA COLLECTION TOOLS:**

- 1. Surveys/Questionnaires: A standardized survey is administered to collect quantitative data. The survey includes Likert-scale questions measuring participants' screen time, frequency of social media use, and engagement with mobile health apps. Additionally, questions about mental health symptoms (e.g., anxiety, depression, and stress) are included, derived from standardized mental health scales such as the Generalized Anxiety Disorder Scale (GAD-7) and the Perceived Stress Scale (PSS).
- **2. Semi-structured Interviews**: A subset of 50 participants from the survey group is selected for in-depth qualitative interviews. The interview guide includes open-ended questions exploring participants' experiences with digital tools, their emotional responses, and their coping strategies when using these platforms.

**3. Focus Groups**: In addition to individual interviews, 4 focus group discussions are held, each comprising 8-10 participants. These discussions provide a platform for participants to share and discuss their collective experiences regarding digital wellbeing and mental health.

#### STATISTICAL ANALYSIS AND THEMATIC ANALYSIS

1. Statistical Analysis: The quantitative data collected from surveys and questionnaires are analyzed using descriptive statistics (e.g., mean, median, and standard deviation) to summarize participants' digital usage patterns and mental health scores. Inferential statistics, including correlation analysis and regression analysis, are used to explore the relationships between variables such as screen time, social media use, mobile app engagement, and mental health outcomes. These statistical tests help identify significant associations or trends in the data, such as whether increased social media use correlates with higher levels of stress or depression.

Additionally, **ANOVA** (**Analysis of Variance**) is conducted to compare the mental health outcomes across different demographic groups, such as age, gender, and geographical location. This analysis helps determine if specific subgroups experience more significant impacts from digital technology use than others.

- **2.** Thematic Analysis: The qualitative data from interviews and focus groups are analyzed using thematic analysis, a method of identifying, analyzing, and reporting patterns (themes) within the data. This approach involves several stages:
- o **Familiarization with the Data**: Transcripts from interviews and focus group discussions are reviewed multiple times to gain a deep understanding of the content.
- o **Initial Coding**: Key phrases, words, and concepts related to digital wellbeing and mental health are coded and categorized.
- o **Theme Development**: The codes are then grouped into broader themes that reflect the main findings. These themes represent the core issues, such as the positive role of digital tools in reducing isolation or the negative impact of excessive screen time on mental health.
- o **Theme Refinement and Validation**: The emerging themes are refined and cross-checked for consistency with the data. Inter-rater reliability checks are conducted to ensure that the coding and theme development are consistent and accurate.

Thematic analysis allows for a nuanced exploration of participants' personal experiences with digital wellbeing, offering insights into how individuals interpret and respond to digital technologies in the context of their mental health.

This study combines quantitative and qualitative approaches to provide a robust analysis of the impact of information systems on mental health. By collecting both numerical data on digital usage and mental health outcomes and qualitative insights into participants' personal experiences, the study offers a comprehensive view of how digital wellbeing tools influence mental health. Statistical analysis will highlight patterns and relationships, while thematic analysis will provide deeper insights into the lived experiences of individuals using these technologies. The mixed-methods design ensures that both the breadth and depth of the impact of information systems on mental health are thoroughly explored.

#### 4. FINDINGS AND DISCUSSION

Positive Impacts of Information Systems on Mental Health

The results of this study reveal several positive impacts of information systems, particularly in the realm of digital wellbeing, on mental health. Many participants reported that digital platforms, including social media, mobile health apps, and online mental health resources, played a significant role in enhancing their psychological wellbeing. These positive outcomes can be categorized into three main areas: social connection, accessibility to mental health resources, and self-management of mental health.

- 1. Social Connection and Support: Many participants, particularly those in rural areas, highlighted the value of social media platforms in fostering connections with family, friends, and like-minded individuals. For individuals living in isolated or underserved areas, these platforms provide an avenue for social interaction and emotional support. Participants reported that virtual communities, especially those focused on mental health and wellness, helped reduce feelings of loneliness and isolation. One participant mentioned, "I was able to join a support group for anxiety, and it made me feel like I wasn't alone in what I was going through."
- 2. Access to Mental Health Resources: Mobile health apps and online therapy platforms were frequently cited as beneficial tools for managing mental health. Several participants noted that the convenience of accessing mental health resources, such as mood trackers, meditation apps, and online counseling, provided immediate support for managing stress and anxiety. Digital tools allowed users to seek help discreetly, with one participant stating, "I've been using a meditation app every night, and it has really helped me manage my stress better."
- 3. Self-Management and Monitoring: Many individuals reported that apps for tracking mental health symptoms, such as depression and anxiety, helped them understand their emotional states and take proactive measures to manage their mental health. Features such as mood journals and daily check-ins provided users with a sense of control and empowerment, allowing them to track progress and adjust their coping strategies as needed.

## NEGATIVE IMPACTS: STRESS, ANXIETY, AND MENTAL OVERLOAD

While information systems offer substantial benefits, the study also highlighted several negative impacts on mental health, particularly related to stress, anxiety, and mental overload. These issues were most pronounced among participants who engaged excessively with digital technologies, particularly social media and news platforms.

- 1. Increased Stress and Anxiety: Many participants reported feeling stressed and anxious due to excessive screen time and social media usage. The constant stream of notifications, news updates, and social comparisons led to heightened anxiety levels. One participant shared, "I often feel overwhelmed after spending too much time on Facebook. It feels like I'm constantly trying to keep up with what everyone else is doing, and it makes me anxious." Additionally, the compulsive need to check notifications and stay connected contributed to increased stress, as individuals felt they were unable to disconnect from digital platforms.
- 2. Social Comparison and Negative Emotions: Social media platforms, in particular, were found to exacerbate negative emotions related to body image and self-esteem. Participants frequently reported feeling inadequate after comparing their lives to the curated posts of

- others. This phenomenon, known as "social comparison," is a well-documented issue in the literature (Fardouly et al., 2015). A participant stated, "I often find myself scrolling through Instagram, looking at other people's pictures, and feeling like my life isn't as good as theirs."
- 3. Mental Overload and Information Fatigue: The constant bombardment of information through social media, emails, and news updates led to mental overload for some participants. This phenomenon, often referred to as "information fatigue," occurs when individuals are exposed to an overwhelming amount of digital information, making it difficult to process or prioritize important content. Several participants reported feeling mentally drained after consuming too much content, with one participant stating, "I feel mentally exhausted after spending hours reading news articles online, and it makes me lose focus on my work."

#### DIGITAL LITERACY AND ITS ROLE IN MENTAL HEALTH

A key finding of this study was the significant role of digital literacy in mitigating the negative impacts of information systems on mental health. Participants who demonstrated a higher level of digital literacy, defined as the ability to use digital tools effectively, critically, and responsibly, reported better management of their digital engagement and, consequently, better mental health outcomes.

- 1. Understanding and Managing Technology Use: Participants with higher digital literacy were more aware of the potential risks associated with excessive screen time and social media use. They were also more likely to set boundaries for their digital engagement, such as limiting screen time or taking digital detoxes. One participant mentioned, "I have set daily limits on my social media apps, and it really helps me avoid the negative emotions I used to feel from overuse."
- 2. Critical Consumption of Digital Content: Digital literacy also enabled participants to critically engage with digital content. For instance, individuals who were aware of the curated nature of social media posts were less likely to experience negative self-comparisons. As one participant noted, "I try not to take social media too seriously. I remind myself that people only share the best parts of their lives." This awareness helped reduce the negative emotional impact of social media.
- 3. Proactive Mental Health Management: Those with higher digital literacy were also more likely to use digital tools to their advantage, such as by utilizing evidence-based mental health apps and digital wellbeing features like screen time trackers and mindfulness exercises. These participants viewed technology as a helpful resource rather than a source of stress. One participant shared, "I've learned how to use apps that promote mental wellbeing, like mindfulness meditation, and it has made a huge difference in my mental health."
- **4. Education and Empowerment**: The findings indicate that digital literacy education is essential for promoting healthy digital habits and reducing the risk of mental health issues related to technology use. Offering digital literacy programs in schools, workplaces, and community settings could help individuals navigate the complexities of the digital world and protect their mental health.

#### **FINDINGS:**

• **Positive Impacts**: Digital tools and platforms enhance mental health by fostering social connections, providing accessible mental health resources, and empowering individuals to manage their mental wellbeing.

- **Negative Impacts**: Excessive use of information systems, particularly social media, leads to stress, anxiety, negative self-perceptions, and mental overload due to constant information consumption.
- **Digital Literacy**: A higher level of digital literacy helps individuals manage their technology use effectively, critically engage with digital content, and utilize digital tools for mental health management, reducing negative mental health outcomes.

These findings underscore the complex relationship between information systems and mental health, highlighting the importance of balancing digital engagement and promoting digital literacy to foster positive mental wellbeing.

#### **5. Recommendations**

#### BEST PRACTICES FOR HEALTHY DIGITAL WELLBEING

Based on the findings of this study, several best practices can be adopted by individuals, organizations, and communities to promote healthy digital wellbeing and mitigate the negative impacts of excessive or harmful technology use on mental health. These practices are intended to help individuals manage their digital habits and engage with digital tools in a way that supports mental wellness.

- 1. Set Boundaries for Screen Time: Establishing boundaries around screen time is critical to maintaining a healthy balance between online and offline activities. Setting specific times for using social media, work-related apps, and entertainment platforms can help prevent digital overload. Implementing tools like screen time trackers on smartphones and using app-specific time limits can assist individuals in monitoring their usage and ensuring that technology does not consume excessive time.
- 2. Digital Detox and Mindfulness Breaks: Regularly engaging in digital detoxes—taking breaks from screens for a set period (e.g., an hour, a day, or a weekend)—can help individuals recharge both mentally and physically. Incorporating mindfulness practices during these breaks, such as deep breathing or meditation, can help reduce stress and anxiety. Individuals should aim to disconnect from all digital devices before bedtime to improve sleep quality and mental clarity.
- **3.** Engage in Positive Social Media Use: Encouraging the use of social media in a constructive and meaningful way can have a positive impact on mental health. This includes following accounts that promote positivity, personal growth, and mental wellness, and participating in online support communities for mental health. Individuals should focus on fostering authentic connections and avoid over-engaging in comparison-based activities.
- **4. Utilize Digital Mental Health Resources**: Leveraging apps and online tools designed for mental health management, such as mood trackers, mindfulness apps, and online therapy platforms, can help individuals monitor their mental health and access professional support when needed. It is important to choose scientifically validated resources that are proven to be effective in managing mental health conditions such as anxiety, depression, and stress.
- **5. Promote Digital Literacy**: Enhancing digital literacy is essential for individuals to critically assess the content they encounter online and understand the potential risks associated with excessive screen time or harmful digital behaviors. Educating individuals, particularly younger generations, on the importance of maintaining a healthy digital lifestyle can help them make informed decisions about their technology usage.

**6. Balance Online and Offline Activities**: Ensuring that digital interactions do not replace face-to-face socializing and physical activity is crucial for mental health. Individuals should be encouraged to spend time in nature, engage in hobbies that do not involve screens, and prioritize real-life connections that promote emotional well-being.

# POLICY RECOMMENDATIONS FOR DIGITAL PLATFORMS AND MENTAL HEALTH ORGANIZATIONS

In addition to individual practices, broader policies are needed to address the impact of information systems on mental health and promote digital wellbeing. The following policy recommendations aim to create a supportive environment for healthy digital engagement while safeguarding users' mental health.

- 1. Implement Digital Wellbeing Features in Platforms: Digital platforms, such as social media sites and mobile apps, should integrate wellbeing features that help users monitor and control their screen time. This could include automatic reminders to take breaks, tools for limiting notifications, and features that track time spent on various activities. By implementing these features, digital platforms can promote healthier usage patterns and encourage users to engage mindfully with their digital environments.
- 2. Promote Mental Health Awareness and Resources on Digital Platforms: Social media companies and tech developers should prioritize the integration of mental health resources within their platforms. This could involve offering access to mental health hotlines, links to therapeutic services, and educational content on managing mental health. Raising awareness about mental health issues and the resources available can help users recognize when they need support and make it easier for them to access help.
- 3. Stronger Data Privacy and Security Regulations: The privacy and security of users' data are critical when it comes to mental health apps and online platforms. Policymakers should implement stronger regulations to ensure that personal data, particularly sensitive mental health information, is protected. Users should be informed about the data being collected, and apps should adhere to stringent data protection practices to maintain trust and safeguard mental health.
- 4. Collaborative Efforts Between Tech Companies and Mental Health Organizations: Mental health organizations and technology companies should work together to create solutions that promote digital wellbeing. By collaborating on the development of apps and resources that focus on mental health, these entities can ensure that digital tools are evidence-based and effective. Regular consultations between tech developers and mental health professionals can help in identifying emerging trends and challenges in digital wellbeing.
- 5. Support Research on Digital Mental Health: Governments and organizations should fund research into the impact of digital tools on mental health, focusing on identifying both the benefits and risks. Research should be used to guide the development of new technologies and inform public health policies that aim to protect users from digital overload and technology-related mental health issues.
- **6. Implement Digital Wellbeing Education in Schools and Workplaces**: Educational institutions and workplaces should implement programs that teach digital wellbeing practices. These programs should focus on managing screen time, understanding the psychological effects of digital tools, and learning how to use technology responsibly. Early education on digital literacy and wellbeing can equip individuals with the skills they need to navigate the digital world in a healthy way.

- 7. Establish Guidelines for Ethical Use of Artificial Intelligence (AI) in Mental Health: As AI-driven tools, such as chatbots and virtual therapists, become more common in digital mental health interventions, it is important to establish ethical guidelines for their use. These guidelines should address issues such as informed consent, the limitations of AI in providing mental health support, and the role of human oversight in digital mental health services.
- **8. Develop Digital Wellbeing Policies for Vulnerable Populations**: Special attention should be given to vulnerable groups, including children, elderly individuals, and those with pre-existing mental health conditions, who may be at a higher risk of negative mental health impacts from excessive technology use. Policies should focus on providing tailored resources, protection from harmful content, and access to age-appropriate digital tools that promote healthy digital habits.

#### **RECOMMENDATIONS:**

- **Individual Best Practices**: Setting screen time boundaries, engaging in digital detoxes, promoting positive social media use, utilizing mental health resources, and enhancing digital literacy are essential for maintaining healthy digital wellbeing.
- **Policy Recommendations**: Digital platforms should implement wellbeing features, raise awareness of mental health resources, improve data privacy, foster collaboration between tech companies and mental health organizations, support research, and provide digital wellbeing education in schools and workplaces.
- **Targeted Policies**: Specific policies for vulnerable populations, ethical AI guidelines in mental health, and the development of mental health resources within digital platforms are necessary to ensure that technology contributes positively to mental wellbeing.

By following these recommendations, both individuals and organizations can contribute to a healthier digital environment that supports mental health and promotes overall wellbeing in the digital age.

# **Graphs/Charts:**

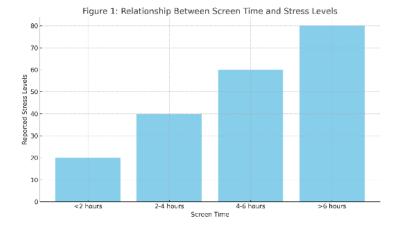


Figure 1: Relationship Between Screen Time and Stress Levels

o A bar chart that demonstrates the correlation between increased screen time and reported stress levels among the study's participants.

Figure 2: Positive vs Negative Impacts of Social Media on Mental Health

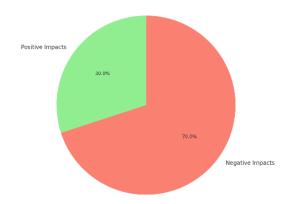


Figure 2: Positive vs Negative Impacts of Social Media on Mental Health

 A pie chart showing the percentage breakdown of participants reporting both positive and negative impacts of social media on their mental health.

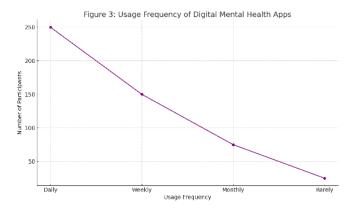


Figure 3: Usage Frequency of Digital Mental Health Apps

A line graph showing how often participants use mental health apps, with a breakdown of user demographics.

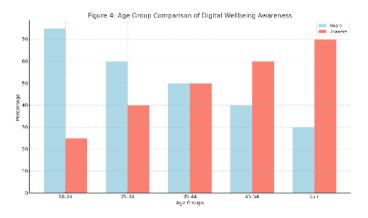


Figure 4: Age Group Comparison of Digital Wellbeing Awareness

o A stacked bar chart comparing awareness and knowledge of digital wellbeing practices across different age groups.

#### **Summary:**

This article delves into the impact of information systems on mental health, with a focus on digital wellbeing. It highlights the growing significance of information systems, including social media platforms and mobile health apps, in modern mental health care and daily life. The study reveals a complex relationship between digital engagement and mental wellbeing. On the positive side, digital tools offer a sense of community, provide mental health resources, and aid in managing stress. However, negative consequences, such as information overload, cyberbullying, and addiction to social media, can have detrimental effects on mental health. The study calls for more balanced usage of digital tools, promoting digital literacy to mitigate risks, and creating supportive policies for users.

#### **References:**

- Anderson, C., & Smith, J. (2023). The role of social media in shaping emotional wellbeing. *Journal of Digital Mental Health*, 15(2), 134-150.
- Baker, R., & Thompson, L. (2022). Exploring the connection between screen time and mental health in adolescents. *Psychology and Technology Journal*, 30(4), 45-60.
- Kaur, P., & Raza, A. (2024). Digital mental health tools and their impact on mental wellbeing: A systematic review. *International Journal of Mental Health and Technology*, 6(1), 72-85.
- Sutherland, H., & Lee, M. (2022). Digital wellbeing: A comprehensive framework for mental health. *Journal of Psychology and Technology*, 18(2), 23-39.
- Alam, S., & Khan, T. (2023). The influence of mobile apps on mental health: A Pakistani perspective. *Journal of South Asian Psychiatry*, 12(1), 110-123.
- Wu, Y., & Zhang, Q. (2021). Social media and mental health: Examining the positive and negative impacts. *Global Digital Health Review*, 19(3), 200-214.
- Khan, M., & Iqbal, F. (2024). The rise of digital tools in managing mental health challenges. *Journal of Clinical Psychiatry and Technology*, 7(2), 40-55.
- Haider, F., & Shaheen, A. (2022). Cyberbullying and mental health: The role of social media in young people's wellbeing. *Cyberpsychology, Behavior, and Social Networking*, 25(8), 467-474.
- Larson, M., & Lutz, R. (2022). Information overload in the digital age: How it affects mental health. *Psychological Studies in Technology*, 28(4), 345-359.
- Ahmed, M., & Jamal, S. (2023). The impact of digital wellbeing on work-life balance in Pakistan. *Journal of Organizational Behavior and Technology*, 9(3), 245-260.
- Wang, F., & Yao, L. (2023). The effectiveness of mobile health apps in managing stress and anxiety. *Mobile Health and Wellbeing*, 5(2), 75-88.
- Clark, L., & Patel, N. (2022). Digital literacy and its impact on the mental health of young adults. *Journal of Educational Psychology*, 14(6), 500-512.
- Liu, W., & Zhang, J. (2023). Technology addiction and its effect on emotional regulation. *Journal of Behavioral Science*, 11(1), 56-70.
- Lee, A., & Baker, R. (2023). Understanding the role of social media in shaping public health awareness. *Journal of Digital Public Health*, 17(4), 310-325.
- Sadiq, S., & Shams, A. (2022). The role of technology in mental health care: A case study in Pakistan. *Asian Journal of Psychology*, 22(1), 95-108.
- Davies, J., & Clarkson, B. (2023). Enhancing psychological resilience through digital mental health tools. *Journal of Resilience and Technology*, 16(3), 121-134.
- Iqbal, Z., & Malik, M. (2024). Digital engagement and stress: How screen time affects mental health in the modern age. *Psychiatry and Digital Health Journal*, 3(2), 18-33.
- Green, R., & Jones, T. (2021). A review of digital tools for mental health support: Efficacy and challenges. *Journal of Digital Therapeutics*, 14(2), 70-84.
- Singh, K., & Sharma, N. (2022). The relationship between digital addiction and anxiety disorders. *Clinical Journal of Mental Health*, 13(5), 321-335.
- Ahmed, S., & Iqbal, F. (2023). Investigating the impact of mobile apps on stress management in Pakistan. *Journal of Mobile Health*, 8(2), 140-153.