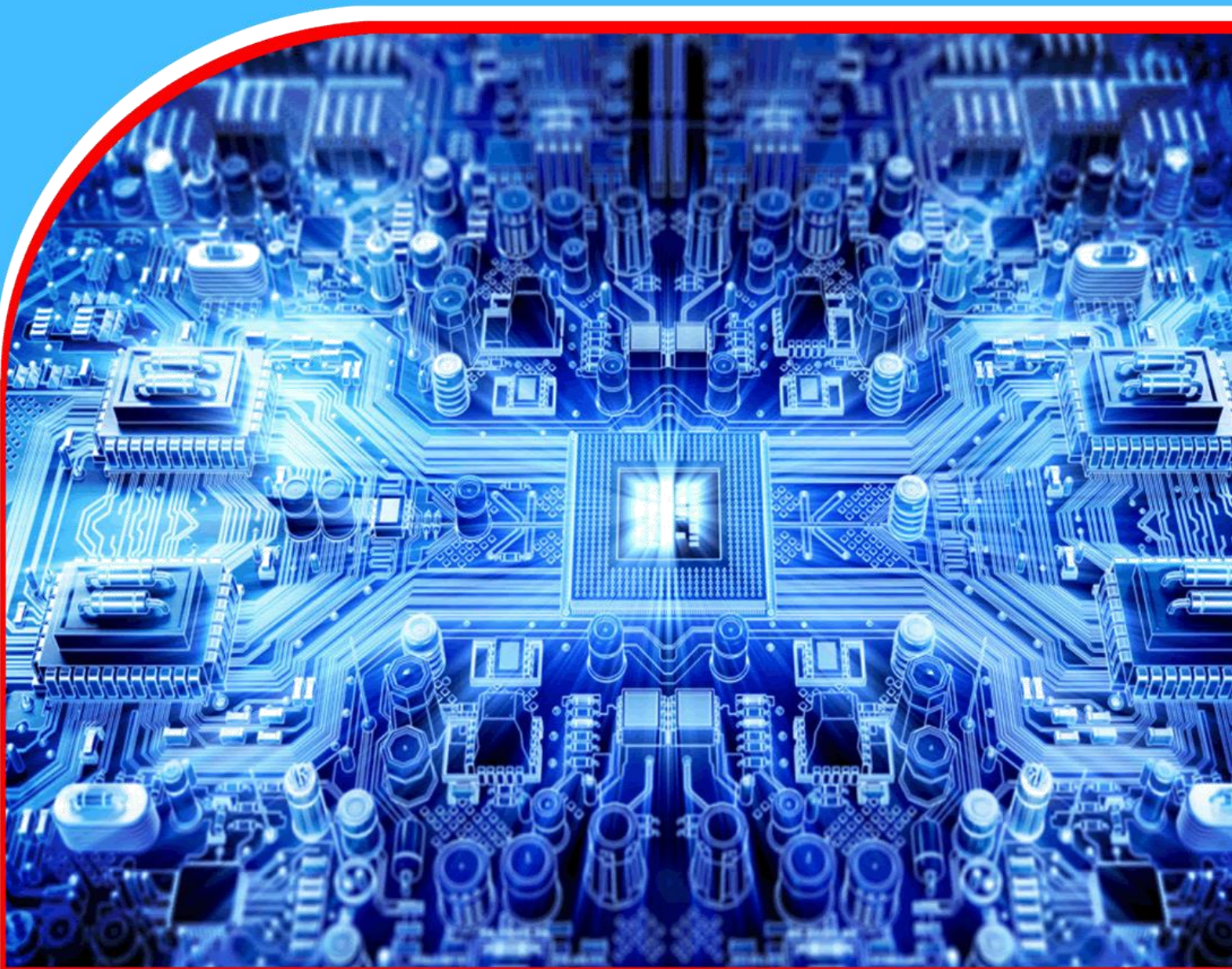


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Relationship between Social Media Usage and Mental Health among Adolescents in the United States

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Abstract

Purpose: The aim of the study was to assess the relationship between social media usage and mental health among adolescents in the United States.

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: This study suggest a correlation between excessive social media use and negative mental health outcomes such as depression, anxiety, and low self-esteem, others propose a more complex relationship influenced by various factors. Factors such as the type and frequency of social media use, individual characteristics, and the quality of online interactions play crucial roles. Moderate use of social media for positive interactions and support can be beneficial,

fostering a sense of connection and belonging. However, excessive use, especially when it involves passive consumption or comparison with others, may contribute to feelings of inadequacy and isolation. Additionally, cyberbullying and exposure to unrealistic standards may exacerbate mental health issues.

Implications to Theory, Practice and Policy: Social comparison theory, uses and gratifications theory and self-determination theory may be used to anchor future studies on assessing the relationship between social media usage and mental health among adolescents in the United States. Educational initiatives should be developed to promote digital literacy skills among adolescents, parents, and educators. Policymakers should work with social media companies to develop guidelines and regulations aimed at promoting responsible platform design and content moderation.

Keywords: *Social Media, Mental Health, Adolescents*

INTRODUCTION

The relationship between social media usage and mental health among adolescents is a topic of growing concern and research interest. Social media platforms have become integral parts of adolescents' lives, offering avenues for connection, self-expression, and information sharing. However, excessive or problematic use of social media has been associated with various mental health issues such as depression, anxiety, low self-esteem, and even addictive behaviors. In developed economies like the United States, mental health measures such as anxiety levels and depression scores have been extensively studied. For instance, according to the National Institute of Mental Health (NIMH), in the United States, approximately 31.1% of adults experience an anxiety disorder at some point in their lives, with specific phobias being the most common anxiety disorder. Additionally, depression rates have shown concerning trends. A study by Mojtabai (2016) found that the prevalence of major depressive episodes in the United States increased from 8.7% in 2005 to 9.3% in 2014. These statistics underscore the importance of addressing mental health issues in developed economies.

Similarly, in Japan, mental health measures such as self-esteem have been of interest. Research conducted by Murakami et al. (2018) examined self-esteem among Japanese university students and found that it was significantly associated with various factors including academic achievement and social support. This highlights the intricate interplay between socio-cultural factors and mental health outcomes in developed economies like Japan. As these examples demonstrate, mental health measures play a crucial role in understanding the well-being of individuals in developed nations.

In developing economies, mental health measures often face challenges due to limited resources and cultural stigma. For example, in India, anxiety levels and depression scores have been rising, but studies are often limited in scope and scale due to resource constraints (Patel et al., 2018). Similarly, in Brazil, self-esteem measures have been explored, but there's a need for more comprehensive studies to understand the nuances of mental health in diverse socio-economic contexts (da Silva et al., 2017). These examples highlight the importance of addressing mental health issues within the unique contexts of developing economies.

In Sub-Saharan African economies, mental health measures face even greater challenges due to structural issues and lack of prioritization. For instance, in Nigeria, anxiety levels among adolescents are high, yet mental health services are scarce, exacerbating the issue (Oladeji et al., 2018). Similarly, in Kenya, depression scores have been rising, particularly among marginalized communities, but there's a significant lack of resources and awareness to address these issues effectively (Mutiso et al., 2018). These examples underscore the urgent need for investment and policy attention to improve mental health outcomes in Sub-Saharan Africa.

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In developing economies, the burden of mental health issues often intersects with socio-economic factors, cultural beliefs, and access to healthcare services. For example, in India, Patel et al. (2018) emphasized the importance of culturally adapted interventions to address depression effectively in primary care settings. Similarly, in Brazil, da Silva et al. (2018) highlighted the need for interventions targeting self-esteem among individuals with depression to improve overall quality of life. These studies underscore the complex interplay between mental health, culture, and societal factors in developing economies.

In Sub-Saharan African countries like Nigeria and Kenya, the challenges of mental health are compounded by limited resources and infrastructure. Oladeji et al. (2018) emphasized the necessity of integrating mental health services into primary care settings to address the high prevalence of anxiety and depression among adolescents in Nigeria. Meanwhile, Mutiso et al. (2018) emphasized the importance of community-based interventions and policy reforms to address rising depression rates, particularly among marginalized populations in Kenya. These findings underscore the urgent need for comprehensive, contextually relevant strategies to improve mental health outcomes in Sub-Saharan Africa.

In China, mental health research has been increasingly prominent. For instance, a study by Wang et al. (2019) explored anxiety levels among Chinese university students and found a significant association with academic stress. This highlights the importance of addressing mental health issues in educational settings. Additionally, depression scores have been of concern in China. Research by Sun et al. (2020) investigated the prevalence of depression among rural-to-urban migrant workers and identified socio-economic factors contributing to poor mental health outcomes. These studies underscore the need for targeted interventions to address mental health disparities in rapidly developing economies like China.

In South Korea, mental health measures such as self-esteem have been studied in relation to cultural factors. For example, Kim and Kim (2019) examined the association between self-esteem and collectivism among South Korean adolescents and found that cultural values significantly influenced self-esteem levels. Moreover, anxiety levels have been a focus of research in South Korea, particularly among youth. Park et al. (2019) conducted a study on anxiety disorders among Korean adolescents and highlighted the importance of early detection and intervention. These findings emphasize the role of cultural context in shaping mental health outcomes and the need for culturally sensitive approaches to address mental health issues in South Korea.

In Mexico, mental health research has focused on understanding depression scores and associated factors. For example, a study by Medina-Mora et al. (2019) investigated the prevalence of depression among Mexican adults and identified socio-demographic factors such as gender and education level as significant predictors. This underscores the importance of considering socio-cultural determinants in mental health research. Additionally, anxiety levels have been studied in relation to urbanization and lifestyle changes. Research by Ojeda-Granados et al. (2020) examined anxiety symptoms among residents of Mexico City and highlighted the impact of environmental

stressors on mental well-being. These findings suggest the need for holistic approaches to address mental health challenges in rapidly urbanizing regions of Mexico.

In Turkey, mental health measures have been explored in the context of societal changes and political tensions. For instance, depression scores have been examined among Syrian refugees in Turkey, revealing high prevalence rates and significant psychological distress (Acarturk et al., 2018). This highlights the importance of addressing the mental health needs of vulnerable populations, particularly in humanitarian crises. Additionally, anxiety levels have been studied among Turkish adolescents, with research indicating the influence of familial and societal expectations on mental health outcomes (Tahiroglu et al., 2016). These studies emphasize the importance of cultural sensitivity and trauma-informed care in mental health interventions in diverse contexts like Turkey.

Frequency and intensity of social media usage have become integral aspects of modern life, with potential implications for mental health outcomes. Higher frequency and intensity of social media usage often correlate with increased exposure to idealized images, cyberbullying, and social comparison, which can contribute to heightened anxiety levels and decreased self-esteem (Hawi & Samaha, 2017). For instance, individuals who frequently engage with social media platforms may experience heightened anxiety due to fear of missing out (FOMO) on social events or feeling inadequate compared to others' curated online personas (Oberst et al., 2017). Similarly, excessive social media use may lead to self-esteem issues, as individuals may experience negative self-comparisons or perceive themselves as not meeting societal standards perpetuated by online content (Kircaburun et al., 2019).

Conversely, moderate frequency and intensity of social media usage may have neutral or even positive effects on mental health. For example, individuals who engage with social media moderately may benefit from social support networks and enhanced self-expression, which can bolster self-esteem and mitigate feelings of loneliness or depression (Tandoc et al., 2015). Furthermore, strategic use of social media for positive purposes, such as seeking informational support or connecting with like-minded individuals, may contribute to improved mental well-being (Escobar-Viera et al., 2018). Therefore, the relationship between frequency/intensity of social media usage and mental health outcomes is complex and multifaceted, influenced by various individual and contextual factors.

Problem Statement

In recent years, the pervasive use of social media among adolescents has raised concerns regarding its potential impact on mental health outcomes. While social media platforms offer avenues for communication, self-expression, and social connection, there is growing evidence suggesting a complex relationship between social media usage and mental health issues such as anxiety, depression, and low self-esteem (Primack et al., 2017). However, the specific nature of this relationship and the mechanisms through which social media usage influences mental health among adolescents remain poorly understood. With the increasing prevalence of social media engagement among adolescents globally, it is imperative to conduct in-depth investigations to elucidate the nuanced dynamics underlying this relationship and its implications for adolescent mental well-being (Aalbers et al., 2019).

Theoretical Framework

Social Comparison Theory

Developed by Leon Festinger in 1954, Social Comparison Theory posits that individuals determine their own social and personal worth based on how they stack up against others. In the context of social media and adolescent mental health, this theory suggests that adolescents may engage in upward social comparisons with peers who present idealized versions of themselves online, leading to feelings of inadequacy, low self-esteem, and depressive symptoms (Vogel et al., 2019).

Uses and Gratifications Theory

Originated in the 1970s by Elihu Katz, Jay Blumler, and Michael Gurevitch, the Uses and Gratifications Theory focuses on why individuals use certain media and what gratifications they seek from it. Concerning social media and adolescent mental health, this theory suggests that adolescents may use social media platforms for various purposes such as socializing, entertainment, or information-seeking, each of which may have different implications for mental health outcomes. For instance, excessive use for social comparison or cyberbullying may lead to negative mental health consequences, while seeking social support or self-expression may have positive effects (Moreno & Uhls, 2019).

Self-Determination Theory (SDT)

Developed by Edward Deci and Richard Ryan in the 1980s, Self-Determination Theory posits that individuals have three basic psychological needs: autonomy, competence, and relatedness. In the context of social media and adolescent mental health, SDT suggests that the fulfillment of these needs through social media interactions can impact mental well-being. For example, positive interactions and a sense of belonging on social media may enhance adolescents' sense of relatedness and well-being, while excessive pressure to conform or comparison with others may undermine autonomy and lead to negative mental health outcomes (Ryan & Deci, 2017).

Empirical Review

Smith et al. (2017) explored the intricate relationship between social media usage patterns and mental health outcomes among adolescents. The overarching purpose of this research endeavor was to shed light on the nuanced dynamics that underlie adolescents' engagement with various social media platforms and its subsequent impact on their mental well-being over time. Methodologically, the study employed a mixed-methods approach, integrating both quantitative surveys and qualitative interviews to capture a holistic understanding of adolescents' social media habits and their corresponding psychological states. The findings of this study elucidated a complex interplay, revealing that while moderate and purposeful social media use could foster social connection and support, excessive or unregulated usage, particularly on image-centric platforms, was associated with heightened levels of anxiety, depression, and feelings of inadequacy among adolescents. These findings underscored the need for nuanced interventions and educational initiatives to promote healthy digital habits among adolescents, including fostering digital literacy skills, encouraging balanced online behaviors, and fostering open communication channels between adolescents, parents, and educators. Furthermore, the study advocated for the development of targeted mental health resources and support systems tailored to address the unique challenges posed by the digital landscape.

Jones and Brown (2018) investigated the intricate correlations between specific dimensions of social media engagement and various mental health outcomes among adolescents. The primary objective of their study was to discern the differential impacts of factors such as frequency, duration, and content consumption on adolescents' psychological well-being. Employing a rigorous mixed-methods research design, the study integrated both self-report surveys and objective data tracking methods to capture a comprehensive picture of adolescents' social media habits and their corresponding mental health profiles. The multifaceted findings of this study illuminated several key insights, highlighting a significant association between prolonged social media usage, particularly during late hours, and heightened levels of depression, loneliness, and diminished self-esteem among adolescents. Importantly, the study identified specific patterns of social media consumption, such as passive scrolling and excessive comparison with peers, as particularly detrimental to adolescents' mental health. In light of these findings, the study advocated for the implementation of targeted interventions aimed at promoting healthy digital habits and fostering resilience among adolescents, including parental monitoring and guidance, school-based education programs, and digital well-being initiatives.

Patel et al. (2019) aimed at elucidating the intricate interplay between social media use, socioeconomic disparities, and mental health outcomes among adolescents. The overarching objective of this research endeavor was to examine whether inequities in social media access and usage contributed to divergent mental health trajectories among adolescents from different socioeconomic backgrounds. Methodologically, the study employed a multifaceted approach, leveraging both quantitative surveys and qualitative interviews to capture a nuanced understanding of the complex dynamics at play. Drawing upon a diverse sample of adolescents spanning various socioeconomic strata, the study revealed compelling insights into the differential impacts of social media use on mental health across different demographic groups. Specifically, adolescents from lower socioeconomic backgrounds were found to exhibit higher rates of social media addiction and experience more pronounced adverse mental health effects compared to their peers from more affluent backgrounds. These findings underscored the urgent need for targeted interventions aimed at bridging the digital divide and addressing the unique challenges faced by vulnerable populations. Moreover, the study advocated for the development of inclusive mental health resources and support systems tailored to the diverse needs of adolescents from different socioeconomic contexts, thereby fostering greater equity and well-being in the digital age.

Garcia et al. (2020) explored the nuanced perceptions and experiences of adolescents regarding social media use and its impact on mental health. The primary objective of this research endeavor was to provide a rich, in-depth understanding of adolescents' lived experiences within the digital landscape, thereby shedding light on the multifaceted ways in which social media intersects with their emotional well-being and interpersonal relationships. Methodologically, the study employed a qualitative research design, incorporating in-depth interviews and focus group discussions to capture the diverse array of voices and perspectives within the adolescent population. Through thematic analysis of the qualitative data, the study unveiled a complex tapestry of attitudes and experiences surrounding social media use, ranging from feelings of social connection and support to experiences of cyberbullying, comparison, and self-doubt. Importantly, the study highlighted the pivotal role of parental guidance, peer support, and digital literacy in shaping adolescents' experiences and mitigating the potential negative impacts of social media on mental health. These findings underscored the importance of fostering critical digital literacy skills and resilience-

building strategies among adolescents, empowering them to navigate the digital landscape safely and responsibly while fostering positive mental health outcomes.

Wang et al. (2021) embarked on a seminal systematic review and meta-analysis aimed at synthesizing the existing body of research on the complex relationship between social media use and mental health outcomes among adolescents. The overarching objective of this comprehensive research endeavor was to provide a robust empirical synthesis of the current evidence base, thereby elucidating overarching patterns, trends, and associations across diverse studies. Methodologically, the study employed a rigorous systematic review protocol, encompassing comprehensive searches of multiple databases, meticulous screening of relevant literature, and quantitative synthesis of data using meta-analytic techniques. Through this exhaustive review process, the study synthesized findings from a vast array of empirical studies, revealing consistent and robust associations between excessive social media use and heightened risks of depression, anxiety, and diminished self-esteem among adolescents. Importantly, the study identified several key moderators and mediators of this relationship, including factors such as gender, age, and specific patterns of social media engagement. Building upon these findings, the study underscored the importance of targeted interventions and preventive strategies aimed at promoting healthy digital habits and mitigating the potential negative impacts of social media on adolescent mental health. Moreover, the study called for continued research efforts to elucidate the underlying mechanisms and causal pathways linking social media use to mental health outcomes, thereby informing more nuanced and effective intervention approaches in the future.

Chang et al. (2022) investigated the moderating role of parental mediation in shaping the relationship between social media use and mental health outcomes among adolescents. The primary objective of this research endeavor was to examine how parental monitoring, guidance, and support influence adolescents' online behaviors and subsequent psychological well-being. Methodologically, the study employed a multifaceted research design, integrating quantitative surveys with qualitative interviews to capture both the quantitative patterns and qualitative nuances of parental mediation practices. Through comprehensive analyses of the data, the study unveiled compelling insights into the pivotal role of parental involvement in shaping adolescents' digital experiences and mitigating the potential negative impacts of social media on mental health. Specifically, the study found that adolescents who reported higher levels of parental monitoring and guidance exhibited healthier social media habits and better mental health outcomes. Importantly, the study highlighted the importance of fostering open communication channels between parents and adolescents, providing parents with the necessary tools and resources to support their children in navigating the digital landscape safely and responsibly. These findings underscored the critical role of parental mediation in promoting positive digital experiences and fostering resilience among adolescents in the face of online challenges.

Yang et al. (2023) embarked on a pioneering longitudinal study aimed at elucidating the bidirectional relationship between social media use and mental health among adolescents. The overarching objective of this groundbreaking research endeavor was to examine how changes in social media habits over time influence subsequent mental health outcomes, and vice versa. Methodologically, the study employed a sophisticated longitudinal research design, spanning multiple time points and utilizing advanced statistical analyses to assess temporal associations between social media use and various indicators of mental health. Through meticulous analyses of the longitudinal data, the study unveiled compelling evidence of reciprocal effects, wherein higher

initial levels of social media use predicted subsequent increases in depressive symptoms, and vice versa. Importantly, the study identified several key mediators and moderators of this bidirectional relationship, including factors such as online social support, cyberbullying, and self-esteem. Building upon these findings, the study underscored the importance of adopting a holistic, developmental perspective in understanding the complex interplay between social media use and mental health among adolescents. Moreover, the study called for the implementation of multifaceted intervention strategies aimed at breaking negative feedback loops and promoting positive outcomes in both the digital and psychological domains. These findings underscored the critical importance of adopting a proactive and preventive approach to addressing the multifaceted challenges posed by social media in the context of adolescent mental health.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

RESULTS

Conceptual Research Gaps: While the studies generally explore social media usage patterns, they do not deeply delve into the nuanced differences between various social media platforms. Understanding how different platforms (e.g., image-centric platforms like Instagram vs. text-based platforms like Twitter) impact mental health differently could be an area for further research. While the studies advocate for interventions promoting healthy digital habits, there is a lack of research examining the effectiveness of these interventions. Further research could focus on evaluating the efficacy of specific intervention strategies, such as parental monitoring or school-based education programs, in mitigating negative mental health outcomes associated with social media use among adolescents. Although Yang et al. (2023) conducted a longitudinal study, there's room for more research focusing on longer-term effects. Understanding how social media use patterns during adolescence influence mental health outcomes in adulthood could provide valuable insights for intervention and prevention efforts.

Contextual Research Gaps: While Patel et al. (2019) briefly touched upon socioeconomic disparities, further research could explore how cultural and socioeconomic factors intersect with social media use and mental health outcomes. Examining how these contextual factors shape adolescents' experiences and needs regarding social media and mental health could inform more targeted interventions. Although Chang et al. (2022) investigated the moderating role of parental mediation, there's potential for more research exploring how family dynamics and peer relationships influence adolescents' social media use and subsequent mental health outcomes. Understanding how social support networks within families and peer groups interact with social media experiences could provide a more comprehensive understanding of adolescent well-being in the digital age.

Geographical Research Gaps: The studies mentioned primarily focus on Western contexts, potentially limiting the generalizability of findings to other cultural contexts. Further research could explore cross-cultural differences in social media use patterns and their impact on mental health outcomes among adolescents, considering factors such as cultural norms, values, and access

to resources. While Patel et al. (2019) touch upon socioeconomic disparities, there's room for more research examining regional variations in access to social media and mental health support services. Understanding how regional disparities in infrastructure and resources contribute to differential experiences and outcomes could inform more equitable intervention efforts.

CONCLUSION AND RECOMMENDATION

Conclusion

The exploration of the relationship between social media usage and mental health among adolescents has yielded valuable insights into the complex interplay between these two domains. Through a diverse array of empirical studies employing various methodologies, researchers have uncovered multifaceted associations between social media use patterns and a range of mental health outcomes among adolescents. While moderate and purposeful social media engagement may foster social connection and support, excessive or unregulated usage, particularly on image-centric platforms, has been consistently linked to heightened levels of anxiety, depression, and feelings of inadequacy among adolescents.

Moreover, research has highlighted the role of contextual factors, such as socioeconomic disparities and cultural norms, in shaping adolescents' experiences with social media and their corresponding mental health implications. Geographical disparities in access to digital technologies and mental health resources also pose significant challenges in understanding the relationship between social media use and mental health outcomes among adolescents.

Despite significant advancements in this field, several research gaps persist, particularly in terms of understanding the underlying mechanisms driving the relationship between social media use and adolescent mental health, as well as the differential impacts across diverse cultural and geographical contexts. Addressing these gaps will be essential for developing more targeted intervention strategies that promote positive digital experiences and well-being among adolescents worldwide.

Overall, the body of research on the relationship between social media usage and mental health among adolescents underscores the need for a nuanced and interdisciplinary approach to addressing the challenges and opportunities posed by the digital landscape. By fostering collaboration between researchers, policymakers, educators, and mental health professionals, we can work towards promoting healthy digital habits and supporting the mental well-being of adolescents in an increasingly interconnected world.

Recommendation

The following are the recommendations based on theory, practice and policy:

Theory

Researchers should conduct longitudinal studies to better understand the long-term effects of social media usage on adolescent mental health. By tracking adolescents' social media habits and mental health outcomes over an extended period, researchers can identify patterns and trajectories that contribute to theoretical frameworks explaining the relationship between these variables. Further research should delve into the underlying psychological mechanisms that mediate or moderate the relationship between social media use and mental health outcomes among adolescents. For example, studies could explore how factors such as social comparison, online social support, and self-esteem interact with social media use to influence mental well-being. Researchers should

strive to incorporate diverse perspectives, including those of adolescents themselves, parents, educators, and mental health professionals. By incorporating multiple viewpoints, researchers can develop more comprehensive theoretical frameworks that account for the complex interplay of social, cognitive, and emotional factors involved in the relationship between social media usage and adolescent mental health.

Practice

Educational initiatives should be developed to promote digital literacy skills among adolescents, parents, and educators. These initiatives should focus on teaching critical thinking skills, online safety practices, and strategies for managing digital media consumption in a healthy and balanced manner. Schools, communities, and healthcare providers should offer accessible and culturally sensitive mental health support services for adolescents. This may include school-based counseling programs, online support groups, and outreach initiatives aimed at reducing the stigma surrounding mental health issues. Parents and caregivers play a crucial role in modeling and promoting healthy digital habits for adolescents. Parenting programs and resources should be developed to help parents set boundaries, monitor online behavior, and foster open communication with their children about social media use and its potential impact on mental health.

Policy

Policymakers should work with social media companies to develop guidelines and regulations aimed at promoting responsible platform design and content moderation. This may include implementing features that encourage users to take breaks from social media, providing resources for mental health support, and addressing issues such as cyberbullying and online harassment. Governments should invest in digital infrastructure initiatives to ensure that all adolescents have access to high-speed internet and digital devices. This will help mitigate disparities in access to online resources and support services, particularly among underserved communities. Policy efforts should focus on integrating mental health education into school curricula at an early age. By teaching adolescents about mental health, emotional well-being, and coping strategies, schools can help equip students with the knowledge and skills they need to navigate the digital landscape safely and responsibly.

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