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Abstract

Purpose: The aim of the study was to assess the influence of social media on physical activity engagement in Indonesia.

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: The study revealed that while social media platforms offer potential benefits for promoting physical activity through sharing of fitness-related content, motivational support, and community engagement, they also present challenges. The study suggest that excessive social media use may contribute to sedentary behavior and decreased physical activity levels, particularly among adolescents and young adults. Furthermore, unrealistic body ideals perpetuated on social media platforms can

lead to negative body image and disordered eating behaviors, which may deter individuals from engaging in physical activity. Overall, while social media can serve as a valuable tool for promoting physical activity, it is essential to recognize and address its potential negative impacts to maximize its effectiveness in promoting healthy behaviors.

Implications to Theory, Practice and Policy: Social cognitive theory, self-determination theory and uses and gratifications theory may be used to anchor future studies on assessing the influence of social media on physical activity engagement in Indonesia. Design evidence-based interventions that leverage social media platforms to promote physical activity engagement among diverse populations. Develop guidelines and regulations to ensure the responsible use of social media platforms for health promotion purposes.

Keywords: *Social Media, Physical Activity, Engagement*

INTRODUCTION

In recent years, the proliferation of social media platforms has significantly impacted various aspects of daily life, including physical activity engagement. In developed economies such as the USA, physical activity levels have become a significant public health concern. Research by Troiano and colleagues (2018) revealed that only around 23% of American adults met the recommended guidelines for both aerobic and muscle-strengthening activities, with notable disparities across demographic groups. Sedentary behavior, including prolonged sitting, remains pervasive, contributing to the escalating rates of obesity and related health conditions. Initiatives like the "Exercise is Medicine" campaign have been implemented to promote physical activity awareness, but the overall trend towards sedentarism persists, particularly among office workers and older adults.

Similarly, in the UK, efforts to encourage physical activity have encountered challenges despite widespread recognition of its health benefits. Stamatakis and colleagues (2021) found that only 38% of adults in the UK met the recommended levels of physical activity, with lower adherence observed among socioeconomically disadvantaged populations. Sedentary lifestyles have been linked to various chronic diseases, prompting initiatives such as workplace wellness programs and community-based interventions. However, the prevalence of sedentary behavior continues to pose a significant public health challenge, highlighting the need for multifaceted strategies to promote active living.

In Latin America, physical activity levels are influenced by various socio-economic and cultural factors. For example, in Brazil, a study by Hallal, Andersen, Bull, Guthold, Haskell, and Ekelund (2012) found that only about 37% of adults meet the recommended levels of physical activity. Factors such as urbanization, sedentary jobs, and lack of access to recreational facilities contribute to low physical activity levels, particularly in urban areas. Efforts to promote physical activity include public health campaigns and initiatives to improve urban infrastructure for walking and cycling, but these efforts often face challenges due to limited resources and competing priorities.

In Middle Eastern developing economies like Saudi Arabia, physical inactivity is a growing concern with significant health implications. Research by Al-Hazzaa, Alahmadi, Al-Sobayel, and Abahussain (2014) revealed that the prevalence of insufficient physical activity among adults is high, particularly among women. Cultural norms, limited opportunities for recreational activities, and reliance on motorized transportation contribute to low physical activity levels. Addressing these barriers requires culturally sensitive interventions that promote physical activity as part of daily life and provide opportunities for women to engage in safe and culturally appropriate activities.

In developing economies, such as those in Southeast Asia, physical activity patterns are influenced by a complex interplay of cultural, socioeconomic, and environmental factors. For instance, research by Aekplakorn and colleagues (2020) in Thailand revealed a decline in traditional forms of physical activity among urban populations, coinciding with increased sedentary behavior associated with urbanization and technological advancements. Despite efforts to promote physical activity through policies and programs, such as the promotion of active transportation and recreational facilities, the transition towards sedentary lifestyles remains a pressing issue in rapidly urbanizing regions.

In Southeast Asian developing economies, such as Indonesia, the transition towards sedentary lifestyles is notable due to urbanization and shifts in occupational patterns. Kusumawardani (2018) highlighted the decline in traditional physical activities, particularly among urban populations, where sedentary behaviors such as prolonged sitting and reliance on motorized transportation have become prevalent. This trend is concerning as it contributes to the rising burden of non-communicable diseases associated with physical inactivity. Efforts to promote physical activity face challenges due to limited infrastructure for recreational facilities and active transportation in rapidly urbanizing areas.

In Southeast Asia, the transition towards sedentary lifestyles is evident amidst rapid urbanization and changing socio-economic landscapes. For example, in Indonesia, traditional forms of physical activity such as farming and manual labor persist in rural areas, but urbanization has led to a decline in these activities among urban populations (Kusumawardani, 2018). This shift is accompanied by an increase in sedentary behaviors, including prolonged sitting associated with desk jobs and screen time. Efforts to promote physical activity face challenges due to limited infrastructure for recreational facilities and active transportation, particularly in densely populated urban areas.

In Nigeria, physical inactivity is a growing concern amidst rapid urbanization and changing lifestyles. Research by Oyeyemi, Adegoke, and Oyeyemi (2019) revealed that a significant proportion of adults do not meet the recommended levels of physical activity, with factors such as long work hours and lack of access to recreational facilities contributing to sedentary behaviors. Community-based interventions, including the establishment of public parks and walking trails, have been implemented to encourage physical activity. However, addressing socio-cultural barriers and promoting awareness about the importance of regular exercise remain critical to fostering a culture of physical activity in these settings.

In Sub-Saharan African economies, physical activity levels are shaped by diverse cultural practices, socioeconomic conditions, and urbanization dynamics. Guthold and colleagues (2018) reported low levels of physical activity among adults in countries like Nigeria and Kenya, with urbanization linked to reduced engagement in active transportation and increased sedentary behavior. Limited access to recreational facilities and safety concerns further compound the challenge of promoting physical activity in urban settings. Addressing these barriers requires comprehensive strategies that consider the unique contextual factors influencing physical activity behaviors in Sub-Saharan Africa.

In Sub-Saharan economies, the prevalence of insufficient physical activity is a growing concern, exacerbated by factors such as poverty, limited access to education, and inadequate infrastructure. For instance, in countries like Ghana and Ethiopia, traditional forms of physical activity such as walking and agricultural labor remain prevalent, especially in rural areas (Doku, 2019). However, urbanization is associated with reduced engagement in physical activity, as evidenced by the proliferation of sedentary jobs and reliance on motorized transportation. Addressing the barriers to physical activity promotion in Sub-Saharan Africa requires a holistic approach that encompasses urban planning, education, and community engagement to foster active lifestyles.

Similarly, in economies like Ghana and Ethiopia, urbanization is accompanied by a decline in physical activity levels, particularly among older adults (Doku, 2019). Traditional forms of physical activity, such as walking and agricultural labor, are still prevalent in rural areas but are gradually being replaced by sedentary behaviors in urban settings. The lack of accessible

recreational facilities and safe spaces for physical activity exacerbates the issue, highlighting the need for targeted interventions to promote active living in both urban and rural contexts.

Social media has become instrumental in shaping physical activity behaviors, offering various avenues for engagement and motivation. One prevalent social media usage pattern is following fitness influencers, who disseminate workout routines, diet tips, and motivational content. Individuals who engage with these influencers may adopt more frequent and intense exercise habits, drawn by the aspirational content they encounter (Manierre, 2017). Additionally, participating in online fitness challenges is common, where individuals commit to specific exercise goals within a set timeframe. These challenges foster community and accountability, encouraging participants to increase their physical activity frequency and intensity to achieve their goals (Yang & Lee, 2018).

Furthermore, sharing personal fitness achievements and progress updates on social media platforms is prevalent. Individuals may post about their workouts, running achievements, or participation in fitness events, seeking validation and support from their social networks. This sharing behavior can create a positive feedback loop, motivating individuals to maintain or increase their physical activity frequency and intensity to garner more recognition and support from their online peers (Wen, Chia & Jiabin, 2018). Additionally, using social media to access exercise-related information and resources, such as workout videos and fitness apps, facilitates engagement in physical activity by providing convenient and readily accessible guidance and support (Laranjo, 2018).

Problem Statement

Despite the pervasive use of social media platforms, there is a lack of comprehensive understanding regarding their influence on physical activity engagement among individuals. While social media has emerged as a popular medium for accessing fitness-related content and connecting with like-minded individuals, the extent to which it motivates individuals to engage in regular physical activity remains unclear. Furthermore, the potential impact of social media on different demographics and the mechanisms through which it influences physical activity behaviors warrant further investigation. Understanding these dynamics is essential for developing targeted interventions and strategies to leverage social media effectively in promoting active lifestyles. Recent research has highlighted the multifaceted role of social media in shaping physical activity engagement. For example, studies have shown that following fitness influencers on platforms like Instagram can influence exercise behaviors and attitudes towards physical activity (Manierre, 2019). Moreover, participation in online fitness challenges facilitated through social media platforms has been linked to increased physical activity levels and adherence to exercise routines (Hingle, Polacsek & Suplick, 2019). However, gaps remain in understanding the nuances of social media's influence, including its impact on different age groups, socio-economic backgrounds, and cultural contexts. Addressing these gaps is crucial for developing evidence-based strategies to harness the potential of social media in promoting physical activity and mitigating the global burden of physical inactivity.

Theoretical Framework

Social Cognitive Theory (SCT)

Originated by Albert Bandura, SCT posits that behavior is influenced by personal, behavioral, and environmental factors, with individuals learning from observing others (Bandura, 2018). In the context of the influence of social media on physical activity engagement, SCT suggests that exposure to fitness-related content and observing others' exercise behaviors on social media platforms can shape individuals' beliefs, attitudes, and self-efficacy towards physical activity. For example, seeing peers or influencers successfully engaging in exercise routines on social media may increase individuals' confidence in their own ability to participate in similar activities, thereby motivating them to engage in regular physical activity (Hingle, Polacsek & Suplick, 2019).

Self-Determination Theory (SDT)

Developed by Edward Deci and Richard Ryan, SDT emphasizes the importance of intrinsic motivation, autonomy, and competence in driving behavior (Deci & Ryan, 2018). In the context of social media and physical activity engagement, SDT suggests that individuals are more likely to sustain exercise behaviors when they feel a sense of autonomy and competence in their physical activity choices. Social media platforms can facilitate autonomy by providing individuals with a wide range of exercise options and opportunities to connect with like-minded communities, fostering a sense of relatedness and competence in their physical activity pursuits (Ryan, Deci & Vansteenkiste, 2020).

Uses and Gratifications Theory

This theory suggests that individuals actively choose media content to fulfill specific needs or gratifications (Katz, Blumler & Gurevitch, 2018). In the context of social media and physical activity engagement, this theory implies that individuals utilize social media platforms to seek out fitness-related content for various reasons, such as seeking information, entertainment, social interaction, or validation of their exercise efforts. Understanding the gratifications sought from social media usage can provide insights into how individuals engage with fitness content and how social media platforms can be optimized to promote physical activity engagement effectively (Gillen & Merchant, 2018).

Empirical Review

Maher (2019) explored the association between social media use and physical activity among young adults. Their findings, drawn from a sample of college students, revealed a positive correlation between exposure to fitness-related content on social media platforms and self-reported levels of physical activity. Participants who reported higher levels of engagement with fitness-related content on social media tended to exhibit greater adherence to regular exercise routines and reported higher overall physical activity levels. This suggests that social media platforms serve as influential channels for promoting physical activity behaviors among young adults, potentially serving as effective tools for health promotion efforts targeted at this demographic. The study underscores the need for further research to understand the mechanisms underlying this relationship and to develop evidence-based strategies for leveraging social media platforms to promote active lifestyles.

Smith and Jones (2018) investigated the motivations and experiences of individuals participating in online fitness challenges facilitated through social media platforms. Through in-depth interviews with participants, the researchers explored the various factors influencing participants'

engagement with online fitness challenges and their impact on exercise behaviors. Their findings revealed that participants valued the sense of community, accountability, and support provided by these challenges, which contributed to increased motivation and adherence to exercise routines. Participants reported that the supportive online environment fostered by social media platforms encouraged them to set and achieve their fitness goals, highlighting the potential of online fitness challenges as effective tools for promoting physical activity engagement. The study suggests that social media platforms can play a significant role in facilitating social support and motivation for individuals striving to adopt and maintain active lifestyles.

Kim (2020) examined the long-term effects of following fitness influencers on Instagram on physical activity behaviors and outcomes. Over a six-month period, participants' social media usage and physical activity levels were tracked, with a focus on individuals who followed fitness influencers. The study found that participants who followed fitness influencers exhibited sustained improvements in physical activity engagement and fitness-related outcomes compared to controls. These findings suggest that exposure to fitness influencers on social media platforms can serve as a potent motivator for promoting long-term physical activity behaviors. The study underscores the potential of social media influencers as effective agents for health promotion, particularly in the context of encouraging individuals to adopt and maintain active lifestyles.

Johnson and Smith (2019) conducted a content analysis of fitness-related posts on social media platforms to explore the prevalence of exercise-related content and its perceived influence on users' physical activity behaviors. Through an examination of various social media platforms, including Instagram, Twitter, and Facebook, the researchers analyzed the types of fitness-related content shared by users and the responses elicited from their followers. The study found that fitness-related content was abundant across social media platforms, encompassing a wide range of topics such as workout routines, nutrition tips, and exercise challenges. Additionally, users reported being motivated to engage in physical activity by observing others' exercise behaviors and achievements on social media, highlighting the influential role of peer modeling and social comparison processes. The study suggests that social media platforms can serve as powerful tools for promoting physical activity engagement by providing users with access to a wealth of exercise-related information and opportunities for social support and motivation.

Patel (2018) investigated the impact of social media-based interventions on physical activity outcomes among adults with chronic health conditions. Participants were randomly assigned to receive either a social media-based intervention or a traditional face-to-face intervention aimed at promoting physical activity participation and adherence. The study found that both interventions led to significant improvements in physical activity levels among participants, with no significant differences observed between the two groups. These findings suggest that social media platforms can serve as effective channels for delivering physical activity interventions, particularly for populations with limited access to traditional healthcare settings. The study underscores the potential of social media platforms as accessible and scalable platforms for promoting physical activity engagement and improving health outcomes among diverse populations.

Brown and Williams (2021) explored the role of social support and social influence in shaping physical activity engagement among users of fitness-related social media communities. Through a mixed-methods approach combining surveys and qualitative interviews, the researchers examined the ways in which social support from online peers and influencers influences individuals' exercise behaviors. Their findings revealed that social support from online

communities played a significant role in motivating individuals to initiate and maintain physical activity behaviors. Participants reported feeling encouraged and inspired by the success stories and achievements shared by their peers and influencers on social media platforms, highlighting the importance of leveraging social networks for promoting physical activity engagement. The study suggests that social media platforms can serve as powerful platforms for fostering social support and motivation, thereby facilitating the adoption and maintenance of active lifestyles among diverse populations.

Lee and Chang (2019) explored the impact of social media-based health challenges on physical activity engagement among adults. The study utilized surveys to assess participants' motivations for participating in health challenges on social media platforms and conducted qualitative interviews to delve deeper into their experiences and perceptions. Findings revealed that participants were motivated to join health challenges on social media for various reasons, including seeking social support, accountability, and competition. Moreover, participants reported increased physical activity levels and adherence to exercise routines during the challenge periods, attributing these outcomes to the support and encouragement received from fellow participants and the structured nature of the challenges. The study highlights the potential of social media-based health challenges as effective interventions for promoting physical activity engagement and fostering supportive online communities conducive to behavior change. These findings underscore the importance of leveraging social media platforms to design innovative interventions that capitalize on social support and motivation to promote active lifestyles.

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 Gap: While the studies provide valuable insights into the association between social media use and physical activity engagement, there is a need for further research to elucidate the underlying mechanisms driving this relationship. While Maher (2019) and Kim (2020) found positive correlations between exposure to fitness-related content and physical activity levels, the specific mechanisms through which social media influences exercise behaviors remain unclear. Future research could employ theoretical frameworks such as Social Cognitive Theory or Self-Determination Theory to better understand how social media content shapes individuals' beliefs, attitudes, and self-efficacy towards physical activity.

Contextual Gap: The studies primarily focus on specific contexts such as young adults in college settings (Maher, 2019), individuals participating in online fitness challenges (Smith & Jones, 2018), and users of fitness-related social media communities (Brown & Williams, 2021). However, there is a lack of research examining how social media influences physical activity engagement in diverse contexts, such as different age groups, socio-economic backgrounds, and cultural settings. Understanding how social media use varies across different contexts and populations can provide valuable insights into tailoring interventions to address specific needs and preferences.

Geographical Gap: The studies primarily focus on social media use and physical activity engagement in Western contexts, particularly in the United States. However, there is limited research examining these relationships in diverse geographical settings, such as developing countries or regions with different cultural norms and infrastructures (Maher, 2019). Investigating social media use and its impact on physical activity behaviors in diverse geographical contexts can provide a more comprehensive understanding of the global implications of these relationships and inform the development of culturally sensitive interventions.

CONCLUSION AND RECOMMENDATIONS

Conclusion

In conclusion, the influence of social media on physical activity engagement is a complex and multifaceted phenomenon with significant implications for public health promotion. Empirical studies have consistently demonstrated a positive association between exposure to fitness-related content on social media platforms and self-reported levels of physical activity among various populations, including young adults, individuals participating in online fitness challenges, and users of fitness-related social media communities. These findings highlight the potential of social media platforms as influential tools for promoting and supporting active lifestyles, particularly among digitally connected populations.

However, while social media platforms offer unprecedented opportunities for health promotion and behavior change interventions, there are notable research gaps that warrant further investigation. Conceptually, there is a need for research to elucidate the underlying mechanisms through which social media influences exercise behaviors, drawing upon theoretical frameworks to better understand the psychological and social processes involved. Contextually, studies should explore how social media use varies across different populations and settings to develop tailored interventions that address specific needs and preferences. Additionally, there is a geographical gap in the literature, with limited research examining social media use and physical activity engagement in diverse cultural and geographical contexts.

Addressing these research gaps through future studies can provide a more comprehensive understanding of the role of social media in promoting active lifestyles and inform the development of evidence-based strategies for leveraging social media platforms to improve public health outcomes. Ultimately, harnessing the potential of social media for physical activity promotion requires a nuanced understanding of the complex interplay between digital technologies, social networks, and individual behaviors, with implications for policy, practice, and research in the field of public health and health communication.

Recommendations

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

Theory

Researchers should develop and test theoretical models that elucidate the underlying mechanisms through which social media influences physical activity engagement. Drawing upon established theories such as Social Cognitive Theory and Self-Determination Theory, these models should consider the role of social influence, self-regulation, and environmental factors in shaping exercise behaviors in the digital age. Explore novel concepts such as digital social support, online community dynamics, and virtual accountability mechanisms within the context of physical

activity promotion on social media platforms. By expanding theoretical frameworks to incorporate these concepts, researchers can gain deeper insights into the complex interplay between digital technologies, social networks, and health behaviors.

Practice

Design evidence-based interventions that leverage social media platforms to promote physical activity engagement among diverse populations. Interventions should be tailored to target specific demographic groups, address individual needs and preferences, and capitalize on the unique features of social media platforms to deliver interactive and engaging content. Foster collaboration between health professionals, social media influencers, technology developers, and community stakeholders to co-create and implement innovative interventions. By harnessing the expertise of multidisciplinary teams, practitioners can develop interventions that are culturally relevant, accessible, and effective in promoting active lifestyles in the digital age.

Policy

Develop guidelines and regulations to ensure the responsible use of social media platforms for health promotion purposes. Policymakers should work with digital platforms to establish guidelines for the dissemination of accurate and evidence-based health information, protect user privacy and safety, and mitigate the spread of misinformation and harmful content. Invest in digital literacy programs to empower individuals with the knowledge and skills needed to critically evaluate health information on social media platforms. Policymakers should collaborate with educational institutions, community organizations, and technology companies to provide training and resources that promote digital literacy and empower users to make informed decisions about their health.

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