

## The Impact of Social Media on Self-Harm Prevention: Systematic Literature Review International Research UMPO Indonesia – UTM Malaysia

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### Abstract

Despite extensive public and academic discussions regarding the impact of social media on self-harm (SH), a comprehensive quantitative synthesis of the existing literature has been lacking. This systematic review aimed to assess the associations between social media use and SH, encompassing suicidal ideation, suicide plans, suicide attempts, and nonsuicidal self-injury (NSSI). The review examined a range of social media behaviors and experiences, including cyber victimization, cyber perpetration, exposure to and generation of SH-related content, problematic use, sexting, the perceived importance of social media, and usage frequency. A thorough search of PubMed, Scopus, PsycINFO, Medline, CINAHL, and references from prior reviews yielded 50 eligible studies. The findings predominantly indicated medium effect sizes for relationships between specific social media constructs—such as cyber victimization, SH-related social media use, and problematic social media use—and SH. Cyber victimization emerged as a significant predictor of SH, with individuals experiencing online harassment or bullying exhibiting higher rates of SH behaviors. Problematic social media use, defined by excessive and uncontrollable usage, was consistently linked to an increase in SH incidents. Exposure to and creation of SH-related content also demonstrated a notable association, suggesting that engaging with such content could normalize SH behaviors or trigger tendencies among vulnerable individuals. A significant relationship was identified between the frequency of social media use and SH, although studies on this aspect were limited. High-frequency users were more likely to report SH behaviors, indicating that spending excessive time on social media could exacerbate mental health issues. However, the causality of these relationships remains unclear, necessitating further research to determine whether social media use directly contributes to SH or if individuals with a predisposition to SH are more inclined to engage heavily with social media. Additionally, the review highlighted the role of cyber perpetration, suggesting that individuals who participate in online bullying may also be at risk for SH. The perceived importance of social media in one's social life was also correlated with SH, indicating that the more central social media is to an individual's self-worth and social identity, the higher the risk for SH behaviors. This review emphasizes the complex interplay between various social media behaviors and SH, highlighting the need for targeted interventions and further research to better understand and mitigate these risks.

**Keywords:** Social Media, Self-Harm, Suicide Plans, Suicide Attempts, Adolescents

### INTRODUCTION

The increased prevalence of social media use in recent years has raised significant concerns about its impact on mental health, particularly regarding self-harm (SH) (Andreassen, Pallesen, & Griffiths, 2017). With social media platforms becoming integral to daily life, especially among adolescents and young adults, there has been growing evidence suggesting a link between online

behaviors and various forms of SH. Self-harm encompasses a range of behaviors, including suicidal ideation (thinking about or planning suicide), suicide plans, actual suicide attempts, and nonsuicidal self-injury (NSSI), which refers to intentional self-inflicted harm without suicidal intent. Each of these behaviors reflects different degrees of distress and presents unique challenges for intervention and prevention (Vakhitova, Reynald, & Townsley, 2016). The pervasive use of social media raises questions about whether these platforms exacerbate SH tendencies or can play a role in offering support and resources for those at risk.

Despite the public and academic interest in understanding how social media use correlates with SH, there remains a lack of comprehensive quantitative synthesis in the literature. Numerous studies have explored various aspects of social media behaviors, such as cyberbullying, exposure to harmful content, and problematic use, yet the findings have often been inconsistent or limited in scope. While some research suggests that frequent social media use may increase exposure to triggering content, leading to higher risks of SH, other studies have reported protective factors, such as access to supportive communities and mental health resources (Paternoster, & Reys, 2011). The divergent conclusions highlight the complexity of the issue and underscore the need for systematic analysis to better understand these relationships.

This review aims to address the current gap by evaluating the associations between different social media behaviors and SH. The focus is on examining a range of online activities, including cyber victimization (being bullied or harassed online), cyber perpetration (engaging in online bullying), exposure to SH-related content, and problematic social media use characterized by excessive or uncontrollable engagement. Furthermore, the review seeks to understand the extent to which these behaviors contribute to or mitigate the risk of SH across different user groups. By synthesizing findings from multiple studies, this review intends to provide a clearer picture of how social media use influences SH, informing future research directions and public health strategies.

The review's approach includes analyzing the frequency of social media use and its perceived importance in individuals' social lives. For example, spending excessive amounts of time on social media may be linked to mental health problems due to increased exposure to harmful content or feelings of inadequacy from social comparison. However, it is also possible that individuals who are already struggling with mental health issues may be more inclined to use social media as a coping mechanism. Therefore, the causality between social media use and SH remains a topic of debate, with implications for how to best intervene.

Moreover, special attention is given to the role of user-generated content, as the nature of online interactions may either normalize SH behaviors or offer opportunities for recovery. The engagement with SH-related content, whether through sharing or viewing, could potentially trigger harmful behaviors in vulnerable individuals, whereas positive interventions in digital spaces may offer avenues for prevention. Understanding these dynamics is critical for designing effective strategies to reduce the risks associated with social media use.

Ultimately, the review underscores the need for targeted interventions that take into account the diverse ways in which individuals use social media and how these behaviors intersect with mental health outcomes. By providing a detailed synthesis of the available literature, the review aims to contribute to the development of informed public health policies and evidence-based recommendations for safer social media practices.

## METHODS

The study design of this research is a systematic review, which involves a comprehensive and structured approach to identifying, evaluating, and synthesizing findings from existing studies on a particular topic. This method ensures that the review captures a broad range of relevant literature and allows for a detailed analysis of the patterns and associations found across various studies. The purpose of conducting a systematic review is to provide a high level of evidence by integrating results from multiple sources, thereby giving a clearer understanding of the relationship between social media use and self-harm (SH) (Juvonen, & Gross, 2008). In this review, the focus is on summarizing quantitative findings from peer-reviewed studies, enhancing the validity of the conclusions drawn.

The inclusion and exclusion criteria for selecting studies are rigorously defined to ensure that only relevant and high-quality research is considered. Inclusion criteria specify that studies must involve quantitative data on the relationship between social media use and SH behaviors, such as cyber victimization, cyber perpetration, problematic use, exposure to SH-related content, sexting, and frequency of social media use. Studies published in English and involving human participants, particularly adolescents and young adults, are prioritized. Conversely, exclusion criteria include studies that lack empirical data, focus on non-social media forms of internet use, or are published in languages other than English. The data sources for this systematic review include prominent databases such as PubMed, Scopus, PsycINFO, Medline, and CINAHL. Additionally, reference lists from previous reviews are examined to identify any potentially relevant studies. The search strategy follows a systematic process, involving keyword searches and manual screening to select studies that meet the inclusion criteria. Ultimately, 50 studies are considered eligible for analysis, covering various variables related to social media use and its associations with SH.

## RESULTS

The review findings indicate a moderate effect size in the relationship between certain social media constructs and self-harm (SH). Specific behaviors such as cyber victimization, SH-related social media use, and problematic use of these platforms show a significant association with SH. This suggests that while the connection between social media engagement and SH is not universally strong, certain patterns of use are clearly linked to higher risks. These moderate effect sizes emphasize the need for a nuanced understanding of which online behaviors may exacerbate SH tendencies and which might serve as protective factors.

Cyber victimization has emerged as a significant predictor of SH, with studies showing that individuals who experience online harassment or bullying are more likely to engage in SH behaviors. This association may be due to the psychological distress and social isolation that can result from being targeted online. The constant exposure to negative interactions and the inability to escape from these experiences, which can persist across various social media platforms, potentially contribute to feelings of hopelessness or desperation that manifest in SH.

Problematic social media use, characterized by excessive and uncontrollable engagement with these platforms, is consistently linked to increased SH incidents. Such use can lead to a range of negative outcomes, including sleep disruption, heightened anxiety, and diminished self-esteem, which in turn

contribute to SH. Additionally, engagement with SH-related content—whether through viewing or creating such posts—is associated with a greater likelihood of SH. This engagement may normalize harmful behaviors or serve as a trigger for individuals who are already vulnerable. Moreover, high-frequency social media users are more likely to report SH behaviors, potentially due to the cumulative effects of prolonged exposure to distressing content or unhealthy social comparisons. Lastly, cyber perpetration, or engaging in online bullying, and the perceived importance of social media to one's social identity also show correlations with SH, suggesting that the more integral social media is to an individual's self-worth, the higher the associated risks.

## **DISCUSSION**

The findings of this review reveal the complex relationship between social media behaviors and self-harm (SH). Social media platforms serve as both a potential source of support and a risk factor for harmful behaviors. The complexity arises from the fact that these platforms facilitate diverse experiences: some users may encounter positive influences, such as online communities offering support for mental health issues, while others face detrimental effects, such as exposure to cyberbullying or SH-related content. These conflicting outcomes suggest that the impact of social media on SH is not uniform but varies significantly based on individual circumstances, types of engagement, and pre-existing vulnerabilities. Understanding these nuances is critical to formulating effective intervention strategies.

The limitations of this review primarily relate to the nature of the existing literature. There is a lack of longitudinal studies that can help determine causality in the relationship between social media use and SH. Most studies rely on cross-sectional data, which makes it difficult to ascertain whether social media use contributes to SH or if individuals predisposed to SH are more likely to use social media in problematic ways. Additionally, the heterogeneity of measures used across studies, such as differences in how SH or problematic social media use is defined, complicates the synthesis of findings. There is also a potential publication bias, where studies showing significant associations may be more likely to be published than those that do not. These limitations highlight the need for more rigorous research to better understand the directionality and mechanisms underlying these associations.

To address the risks associated with social media use, targeted interventions should focus on reducing harmful behaviors while promoting safer online interactions. One potential strategy is the implementation of digital literacy programs aimed at educating users, especially adolescents, about the risks of cyberbullying, the negative impact of harmful content, and the importance of responsible social media use. Additionally, platform-specific interventions, such as content moderation tools that flag or remove SH-related posts and automated responses offering mental health resources to users searching for SH-related content, could help mitigate risks. There is also a need for tools that encourage healthy online behavior, such as reminders for taking breaks from social media use.

The conclusion emphasizes the necessity for further research to explore whether social media use directly contributes to SH or if individuals prone to SH tend to engage with social media more intensively. Understanding causality is crucial for developing effective prevention strategies. If social media use is found to exacerbate SH, then stricter regulations or platform modifications might be warranted. Conversely, if SH predisposes individuals to problematic social media use, then interventions should be tailored to address underlying mental health issues rather than focusing solely on reducing social media exposure.

Ultimately, while current evidence suggests a significant association between specific social media behaviors and SH, there remains a need for more comprehensive studies that incorporate longitudinal data and account for confounding factors. This approach will allow for a clearer understanding of the mechanisms at play and the development of nuanced intervention strategies that take into account the individual differences in social media experiences.

In summary, the review underscores the multifaceted nature of social media's impact on SH and highlights the need for a balanced approach in research and intervention. Future studies should aim to address existing methodological limitations, explore different types of social media content and their effects, and identify the factors that may either increase vulnerability or foster resilience in social media users.

## CONCLUSION

The conclusion of this systematic review highlights the intricate relationship between social media use and self-harm (SH), suggesting that specific online behaviors are associated with an elevated risk of SH. Notably, cyber victimization, problematic social media use, and exposure to SH-related content were consistently linked to higher instances of SH behaviors, indicating that certain patterns of social media engagement may exacerbate underlying mental health vulnerabilities. However, due to the limitations of the available literature, including the predominance of cross-sectional studies and variability in measurement approaches, establishing a clear causal relationship remains challenging.

The findings underscore the need for more longitudinal research to determine whether social media use directly contributes to SH or if individuals with pre-existing tendencies toward SH are more likely to engage with social media in problematic ways. Understanding these dynamics will be crucial for guiding future interventions and policy recommendations aimed at reducing the risks associated with social media use.

To address these risks, targeted intervention strategies are necessary. These could include digital literacy programs that educate users on safe social media practices, platform-specific measures to moderate harmful content, and tools to encourage balanced online engagement. Additionally, interventions should consider the diverse ways in which social media is experienced, recognizing that while it can pose risks, it may also provide opportunities for support and recovery.

In conclusion, while there is significant evidence linking social media behaviors to SH, further comprehensive studies are required to clarify causality and develop more effective prevention and intervention strategies. These efforts will help to create safer online environments and improve mental health outcomes for individuals at risk of SH.

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