Influencing Factors of Social Media's Negative Impacts On Adolescents' Mental Health: A Systematic Review

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ABSTRACT

This systematic review aims to examine the influencing factors of the known negative impacts of social media, such as depression, anxiety, low self-esteem, poor psychological well-being on adolescents' mental health. It provides an overview of existing evidence and potential guidance for regulation of social media use. A comprehensive search strategy identified relevant studies from databases like PubMed, PsycNET, and EMbase. The search included keywords related to social media and mental health, without language or geographical restrictions. Studies published from 2004 were included. Screening process included assessment of eligibility based on titles and abstracts, followed by a full-text review of selected articles. Data extraction noted demographics, social media related variables, and influencing factors. Results discovered different mediating factors of the negative effects of social media on mental health and findings are discussed. The findings may have implications for individuals, mental health professionals, policymakers, and social media companies. Understanding the influencing factors associated with the negative effects of social media use on mental health can guide strategies to promote mental health and well-being in the digital age.

Introduction

Social networking services (SNS) have garnered widespread popularity across diverse demographics. As of 2020, a staggering 3.6 million people, constituting approximately more than 50 percent of the global population, actively engage with SNS [1] . Given that, it becomes imperative to comprehensively evaluate the nuanced impacts of these platforms. Existing literature acknowledges both positive and negative consequences[2], with a notable emphasis on researching the adverse effects, particularly concerning adolescents. The heightened vulnerability of adolescents during the crucial phase of character and ego development makes them susceptible to the potentially detrimental effects of SNS. This is underscored by a direct correlation between the increased suicidal rates among adolescents and their SNS usage [3]. Notwithstanding the extensive exploration of negative repercussions, there is a noticeable gap in research focusing on identifying the high-risk profiles that are more susceptible to the negative effects of social media, as well as the mediating or moderating factors (influencing factors) that could shield or expose adolescents from these negative impacts of SNS.

Research [4, 5] efforts have explored how social media can affect mental health. Evidence suggests that [6] only ten to twenty minutes of using SNS is enough to have either positive or negative effects on people's mental health. The deleterious impacts of SNS are that people feel meaninglessness while using SNS and become to have a lower state of self-esteem and self-evaluation. While the negative impacts of social media on mental health are evident, there is a dearth of literature that systematically identifies potential influencing factors to mitigate these effects. Some authors have acknowledged factors contributing to SNS addiction, such as the reinforcement and reward system linked to dopamine, sustaining user engagement and influencing mental health outcomes Additionally, others [7] have discussed about other mediating factor: the fear of missing out. This fear motivates users to stay connected on SNS,

driven by the concern that they might miss captivating activities or events shared by friends or acquaintances. Despite these insights, there is a notable absence of research papers that comprehensively review and synthesize mediating factors in the existing literature.

This study aims to investigate and synthesize mediating or moderating factors that could shape the impact of social media on the mental health of adolescents. The findings have the potential to pinpoint particular profiles that may be more or less susceptible to the adverse effects of social media and to identify factors that could be targeted for prevention strategies, thereby minimizing the negative consequences of social media use. The findings from this study can offer valuable insights for individuals, mental health professionals, policymakers, and social media companies alike. A comprehensive understanding of the risks and benefits linked to social media usage can inform strategies aimed at promoting mental health and well-being in the digital era. Furthermore, the review has the potential to illuminate existing research gaps and offer guidance for future studies.

Methods

To investigate and synthesize mediating or moderating factors of the effects of social media on the mental health of adolescents, a systematic review was performed. This systematic review was conducted according to the Preferred Reporting Items for Systematic Reviews guidelines[8]. As no primary data collection is involved, ethical approval was not required.

Search Strategy

PubMed, Embase, and APA PsycInfo databases were systematically searched for relevant articles using a comprehensive research strategy detailed in Table 1. The strategy employed diverse forms of key terms such as mental health, social media, negative, adolescents, along with Medical Subject Headings (MeSH). The search initiation date across all databases was September 7, 2023, and searches were conducted without language restrictions. To ensure a thorough search, a snowballing technique was applied by examining the references of the studies retrieved during the initial search.

Table 1. Review Search Strategy

PubMed database:
(Negative or Detrimental or Deleterious or Harmful or Destructive or poor or prejudicial or hurtful or damaging or damage or dangerous) AND (Mental Health or well-being or mental well-being or mental illness or psychological health or emotional health or mental balance or psychological state or mental stability or mental disease) AND (Social Media or social network or social platform or SNS or Social Network Service or social networking or facebook or twitter or instagram or snapchat or Youtube or tiktok or pinterest) AND (Adolescent or teenager or young adults or youth or juvenile or minor or boys or girls)
Embase database:
(Negative OR Detrimental OR Deleterious OR Harmful OR Destructive OR poor OR prejudicial OR hurtful OR damaging OR damage OR dangerous) AND (Mental Health OR well-being OR mental well-being OR mental illness OR psychological health OR emotional health OR mental balance OR psychological state OR mental stability OR mental disease) AND (Social Media OR social network OR social platform OR SNS OR Social Network Service OR social networking OR facebook OR twitter OR instagram OR snapchat OR Youtube OR tiktok OR pinterest) AND (Adolescent OR teenager OR young adults OR youth OR juvenile OR minor OR boys OR girls)
APA PsycInfo

(Negative or Detrimental or Deleterious or Harmful or Destructive or poor or prejudicial or hurtful or damaging or damage or dangerous) AND (Mental Health or well-being or mental well-being or mental illness or psychological health or emotional health or mental balance or psychological state or mental stability or mental disease) AND (Social Media or social network or social platform or SNS or Social Network Service or social networking or facebook or twitter or instagram or snapchat or Youtube or tiktok or pinterest) AND (Adolescent or teenager or young adults or youth or juvenile or minor or boys or girls)

Selection Criteria

Research articles which have explored or investigated any mediating or moderating factor of the negative effects of social media on mental health were considered for the study. We included articles with the following inclusion criteria: 1)Studies that have been officially published on peer reviewed journals; 2) Studies that focused on adolescents, defined by age range from 13 to 18 years old; 3) Studies that were published after 2004, the year when social media started to spread widely; 4) Studies that investigated or explored the negative effects of social media on mental health. The exclusion criterias were as follows: 1) Published abstracts, conference papers, oral or poster presentations, and dissertations; 2) Studies performed in adults or any age range other than adolescents; 3) studies related specifically to the COVID19 pandemic; 4) Studies related to video-game types of social media; 5) Case-report studies; 5) Qualitative Studies; 6) Studies that did not use any methodology on assessing mediation/moderation on the relationship of negative effects of social media on mental health; 7).

Screening and Data Extraction

The Covidence web-based systematic review software facilitated the organization and screening of search results. Initial screening involved evaluating titles and abstracts to ascertain article eligibility, followed by a comprehensive review of full-text articles against inclusion and exclusion criteria. Two independent assessors (P.T. and P.N.), proficient in clinical trial methodology and evidence synthesis, were responsible for screening and selecting articles. Any instances of non-unanimous criteria judgment between the two assessors necessitated a full-text review by each assessor to confirm their decision. If discrepancies persisted even after the full-text review, a third independt assessor conducted a final review for an ultimate decision.

Data extraction was performed by two authors and entered into a systematic spreadsheet containing all predetermined variables. Information related to study methodology, population characteristics, and mediating/moderating factors was extracted to form the variables used in the subsequent analysis (refer to table 1).

Statistical Analysis

In the study, the statistical analysis primarily involved descriptive techniques, particularly the use of percentages to analyze categorical variables. The research focused on elucidating the mediating or moderating factors influencing the negative impact of social media on mental health. The main findings were examined and presented in a table. Through a comprehensive descriptive analysis, the study aimed to provide an understanding of the relationships between various variables, shedding light on the intricate dynamics between social media usage and mental health outcomes. This approach not only allowed for a thorough exploration of the data but also facilitated a clear and concise presentation of the findings for effective interpretation.

Results

The result of the search strategy revealed 1478 potential articles. After duplicates were removed, 1434 articles were considered for the first level of screening. After all levels of screening and selection, 9 articles were selected. Figure 1 shows the CONSORT diagram for the selection of the final articles. Table 2 shows a summary of selected studies. Studies were performed between 2015-2022 in 4 different countries: Italy, Netherlands, Singapore, China. The total number of adolescents among the studies were 12727 with a mean age across all studies of 14.3 and with an average percentage of females of 40%.

The negative aspects of social media explored among the selected studies include depression, poor life satisfaction, poor affective well-being, poor well-being, addiction (including social media addiction and internet addiction), stress, poor emotional well-being, poor mood symptoms, high comorbidity, problematic Facebook use, and poor mental states. The education levels from which the selected studies collected data include secondary school (high school), lower/upper primary, lower/upper secondary school, middle school, and middle-high school. "NR" stands for not reported. The social media platforms explored in the selected studies include general platforms not specified, with examples such as Facebook, Twitter, Instagram, Google+, or Pinterest (Social Media Platforms), and WhatsApp or SnapChat (IM). Additionally, Instagram and WhatsApp were specifically mentioned in some studies, while Qzone and Facebook were also included in the exploration. Again, "NR" denotes cases where the information regarding the social media platform is not reported. The study designs used in the selected studies encompassed various approaches, including three-wave longitudinal, four-wave longitudinal, cross-sectional/survey, longitudinal, and cross-sectional designs. The studies employed both longitudinal designs, tracking participants over multiple waves, and cross-sectional designs, capturing data at a single point in time.
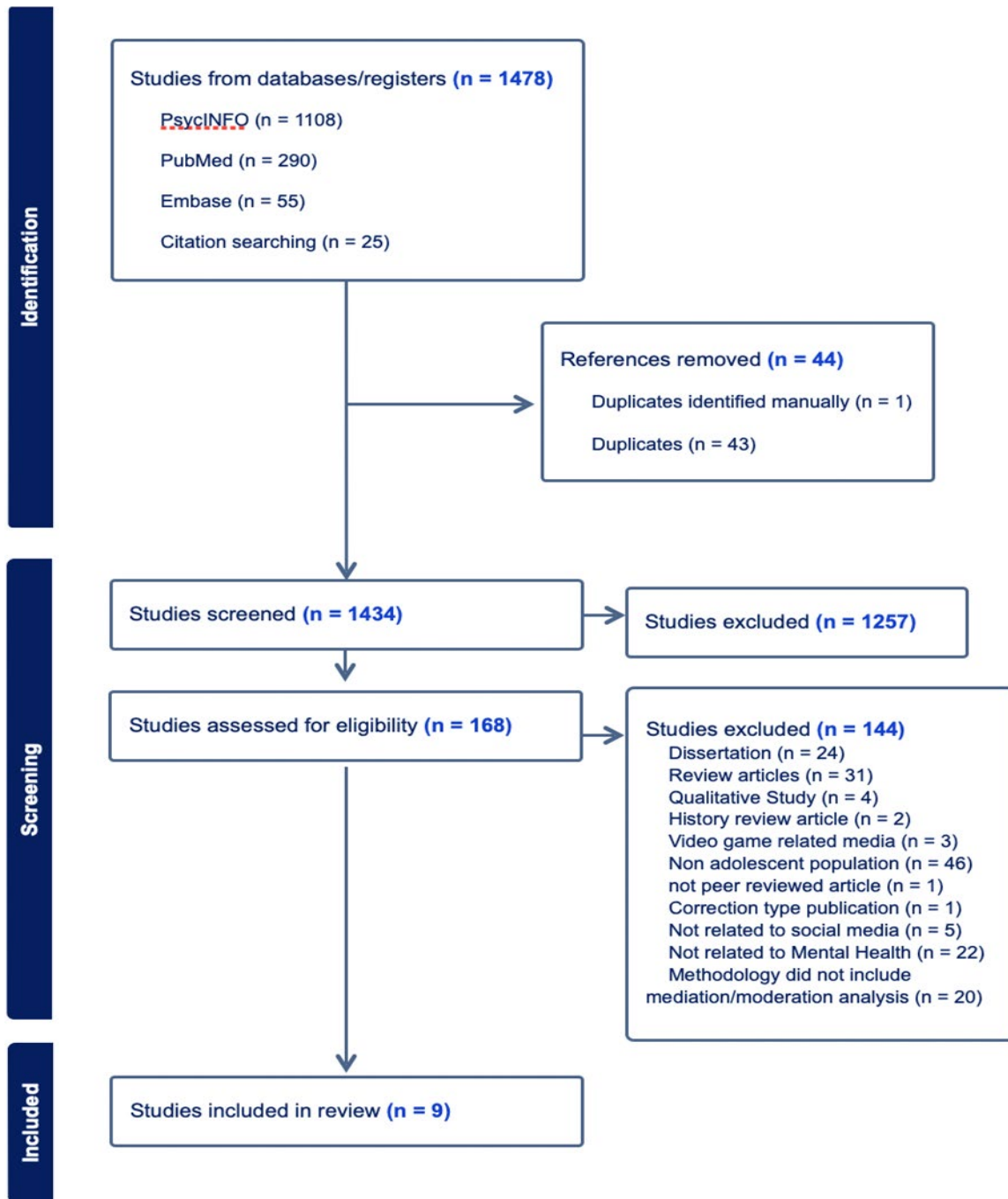
Figure 1. Consort Diagram.

Table 2. 🌐 Journal of Student Research

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No.	Author (last name)	Date (year of publication)	Location (country)	Study Design	Sample Size	% of females	Mean Age (years)	SD	Race	Educational Level	Social Media Platform	Assessment Tools	Respective Explored Factors (Assessments' constructs)	Negative Aspect of Social Media Explored	Mediating Factors Explored	Findings
1	Boer	2020	Netherlands	Three-wave longitudinal	2109	0.46	13.1	0.8	NR	Secondary School (High School)	General - Not Specified Included examples (but not limited to): Facebook, Twitter, Instagram, Google+, or Pinterest (Social Media Platforms), and WhatsApp or SnapChat (IM)	9-item Social Media Disorder Scale 6-item Depressive Mood List 7-item Student's Life Satisfaction Scale 5-item Upward Social Comparisons Scale (developed within the study) 10-item Multidimensional Online Peer Victimization Scale 3-item Subjective School Achievements (developed within the study) The Frequency of Peer Contact Questions	SMU Problems SMU Intensity Depressive Symptoms Life Satisfaction Engagement in Upward Social Comparison Level of Online Peer Victimization Subjective School Achievements Intensity of Face-to-Face Contact with Friends	Depression Poor Life Satisfaction	Upward social comparisons Cybervictimization Decreased subjective school achievements Less face-to-face contact	> Adolescents whose SMU problems increased reported increased depressive symptoms and decreased life satisfaction one year later. > SMU problems predicted upward social comparisons and cybervictimization over time. > Upward social comparisons and cybervictimization **DID NOT** mediate the observed effect of SMU problems on mental health. > Over time, SMU intensity and mental health were not associated in any direction; neither directly, nor indirectly through any of the mediators.
2	Boer	2022	Netherlands	Four-Wave Logitudinal	1419	0.4595	12.51	0.6	NR	Secondary School (High School)	General - Not Specified Included examples (but not limited to): Facebook, Twitter, Instagram, Google+, or Pinterest (Social Media Platforms), and WhatsApp or SnapChat (IM)	7-item Student's Life Satisfaction Scale 5-item Upward Social Comparisons Scale 9-item Social Media Disorder Scale	Life Satisfaction Engagement in Upward Social Comparison SMU Problems SMU Intensity Activities (SNS Related: Viewing, Posting, Liking, Responding; IM Related: Viewing, Sending)	Poor Life Satisfaction (Poor Well-being)	SMU Intensity Activities (SNS Related: Viewing, Posting, Liking, Responding; IM Related: Viewing, Sending)	> Individuals with higher average intensity of some more passive activities (i.e., SNS and IM viewing) and one more active activity (i.e., IM sending) were associated with lower average life satisfaction (small effect size). > The association between SMU intensity and wellbeing is dependent on a combination of passive and active SMU activities (specifically SNS and IM viewing and IM sending).

No	Author	Year	Country	Design	N	% Female	Mean Age	SD			Setting	Platform	Measures	Independent Variables	Outcomes	Mediators / Moderators	Key Findings
3	Cala...						13	SD = 0.3	NR	NR		Instagram and WhatsApp	Self-reported hours/day spent communicating online with friends through social networks; Multidimensional Negative Regulatory Emotional Self-Efficacy Scale; Center for Epidemiological Studies Scale (CESD-10); Positive Affect and Negative Affect Schedule (PANAS); Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS)	Social media Use; Emotional Self-Efficacy; Depressive Symptoms; Affective Well-Being; Life Satisfaction	Depression; Poor Life Satisfaction; Poor Affective Well-Being	Emotional self-efficacy; Gender	> High social media use was related to higher depressive symptoms, lower affective well-being and lower life satisfaction among girls with lower emotional self-efficacy. > High social media use was related to higher affective well-being and higher life satisfaction for girls with higher emotional self-efficacy.
4	Chng	2015	Singapore	Logitudinal	3,079	49.60%	13.01	SD = 2.40	NR		Lower/upper primary Lower/upper secondary school	NR	The Active and Restrictive Mediation Scales (EU Kids Online Project); Child–Parent Apprehension Scale; Parent and Child Attachment (IPPA-R); The Pathological Internet Use scale; 5-Item questionnarie on level of comfort at home	Parental Guidance and Advice; Family Communication; Participants' attachment to parents; Behavioral Addiction to the Internet; Supportive and loving family environment	Poor Well-Being; Addiction	Family Functioning; Parental use of active and restrictive mediation; Supportive and loving family environment	> parental restrictive mediation is a significant protective factor for pathological internet use, but without a supportive and loving family environment, the effectiveness of this strategy cannot be ensured
5	Fabris	2020	Italy	Crossectional	472	50%	13.5	SD = 1.87	NR		Middle school	NR	Italian Version of the FoMO Scale; Self-reported sensitivity to stress associated with experiences of neglect by other users; The Italian Bergen Social Media Addiction Scale; Emotional Symptoms subscale of the Strengths and Difficulties Questionnaire (SDQ)	Fear of missing out; Stress associated with neglect by online peers; Social Media Addiction; Emotional Symptoms	Social Media Addiction; Stress; Poor Emotional well-being	Fear of Missing Out Emotional symptoms; Stress associated with neglect by online peers	> FoMO is associated with decreased emotional well-being in adolescents, but stress associated with neglect by online peers mediates the association between FoMO and addiction to social media platforms and emotional well-being.

#	Author	Year	Country	Design	N	%	Mean age	SD		Education	Platform	Measures	Variables	Outcome	Correlates	Key findings
6	Gao						15.99	SD = 0.91	NR	High school	NR	The Young Diagnostic Questionnaire; The Chinese version of the Depression, Anxiety, and Stress Scale; Family Adaptation and Cohesion Evaluation Scales II (FACES II); Individual Questions	Internet Addiction; Mood Symptoms; Parent-child relationship; Internet Use; Lifestyle Factors	Poor Mood Symptoms; High Comorbidity; Internet Addiction	Gender, smoking, sleep deprivation, time for the use of the Internet, social networking sites' frequency, game, parent-child relationship	> Kids who were current smokers, had more than 1.5 h sleep deprivation per day on weekdays, used the Internet for more than 30 and 240 min per day on weekdays and weekends, respectively, used social networking sites more than 6 times per day, were Internet gamers, and/or reported poor parent-child relationships reported higher rates of comorbid internet addiction and mood symptoms. > Adolescents exposed to more of these correlates would have a higher risk of internet addiction, mood symptoms, and their comorbidity.
7	Marino	2016	Italy	Crossectional	968	37.70%	17.19	SD = 1.48	NR	Secondary school	Facebook	15-item Scale adapted from the Generalized Problematic Internet Use Scale 2 (GPIUS2); 5-point scale for Facebook Use (0="never" to 4=very often"); The Italian version of the Big Five Questionnaire; Scale adapted from Dholakia et al., 2004	Problematic Facebook Use; Perceived frequency of Facebook use; Personality Traits (agreeableness, conscientiousness, emotional stability, extraversion, and openness); Social influence processes (Subjective norms, Group norms, Social identity)	Problematic Facebook Use	Personality traits and social influence processes	> Emotional stability, extraversion, conscientiousness and norms directly predicted Problematic Facebook Use, whereas gender, group norms and social identity predicted perceived frequency of Facebook use.

#	Author	Year	Country	Design	N	%female	Age	SD	Language	Setting	Platform	Measures	Definitions	Predictor	Outcome	Findings
8	Mus...						16.27	SD = 1.48	Italian(91.5%)	High school	NR	The Italian version of the Internet Addiction Test-Social Networking Site (IAT-SNS) The Emotional Abuse subscale of the Italian version of the Childhood Trauma Questionnaire-Short Form (CTQ-SF) The Italian version of the Self-Other Differentiation Scale (SODS) The Reflective Functioning-Uncertainty (RFQu) subscale of the Italian version of the Reflective Functioning Questionnaire	Internet addiction. Participants' overall perception of emotional abuse during childhood. The degree to which adolescents experience a separate sense of self in their relationships with others. Participants' uncertainty about mental states.	Internet Addiction Poor Mental States	Self-other differentiation and uncertain reflective functioning	> Difficulties in self-other differentiation and uncertain reflective functioning partially mediated the relationship between CEA and problematic SNS use.
9	Niu	2018	China	Crossectional	764	46.86%	14.23	SD = 1.75	NR	Middle-high school	Qzone	The Facebook intensity scale (adapted questions) Adapted questions The Chinese version of the ten-item Rosenberg self-esteem scale The Chinese version of the Center for Epidemiologic Studies Depression Scale	Qzone use The degree of negative social comparison Self-Esteem Depression	Depression	Self-esteem Negative Social Comparison	> Higher level of negative social comparison on Qzone fully mediated the association between Qzone use and depression especially among those adolescents with low self-esteem.

*NR: Not Reported; SMU: Social Media Use; IM: Instant Messaging; SNS: Social Network Site; CEA: Childhood emotional abuse

Discussion

Our results discovered different mediating factors of the negative effects of social media on mental health. The study conducted by Gao et al.[9] utilizing a cross-sectional design provided valuable insights into the associations between various factors and the prevalence of comorbid internet addiction and mood symptoms among adolescents. The identified correlates, including being female, current smoking, sleep deprivation, extensive internet and social media use, engagement in online gaming, and perceived poor parent-child relationships, underscore the multifaceted nature of these issues. Importantly, the research highlighted that adolescents exposed to a higher number of these correlates faced an elevated risk of developing internet addiction, mood symptoms, and the co-occurrence of both. This finding holds significance in the realm of adolescent mental health as it emphasizes the interconnectedness of diverse risk factors contributing to internet addiction and mood-related issues. Understanding these associations can inform targeted interventions and preventive strategies aimed at addressing multiple risk factors simultaneously. Moreover, the study contributes to the existing literature by providing a comprehensive examination of various correlates within a single investigation, offering a nuanced perspective on the complexity of the relationship between internet addiction, mood symptoms, and associated factors. This comprehensive approach aligns with a growing recognition in research that mental health outcomes are often influenced by a confluence of interacting variables. Comparatively, Gao et al.'s study[9] contributes uniquely to the field by shedding light on specific correlates and their cumulative impact, providing a valuable addition to the broader body of research on adolescent mental health and internet-related behaviors.

Other study's highlighted findings regarding the relationship between social media use, emotional self-efficacy, and mental well-being among adolescent girls[10] carry significant importance and have noteworthy implications for future research and interventions. The study's[10] identification of differential effects based on emotional self-efficacy levels adds nuance to our understanding of the complex interplay between social media engagement and mental health outcomes. For girls with lower emotional self-efficacy, higher social media use was associated with elevated depressive symptoms, lower affective well-being, and diminished life satisfaction. This suggests that, in this subgroup, social media may serve as a platform where negative emotional experiences are heightened, potentially contributing to mental health challenges. On the other hand, for girls with higher emotional self-efficacy, high social media use correlated with improved affective well-being and life satisfaction. This indicates that, in certain contexts, social media engagement might have positive implications for emotional well-being among individuals who possess a keen sense of emotional self-efficacy. These findings emphasize the need for a refined understanding of individual differences and the moderating role of factors like emotional self-efficacy in the relationship between social media use and mental health outcomes. Future research should delve deeper into the mechanisms underlying these associations, considering factors such as online interactions, content exposure, and coping mechanisms. Additionally, interventions aimed at promoting emotional well-being could benefit from considering individuals' emotional self-efficacy levels when addressing the impact of social media use. Overall, this study [10] opens avenues for more targeted and personalized approaches in both research and mental health interventions related to adolescent girls and social media use.

A single article [11] within the selected studies delved into the fear of missing out (FoMO) as a potential mediating factor. The study revealed that FoMO was correlated with decreased emotional well-being in adolescents. Intriguingly, the research uncovered a nuanced relationship wherein stress associated with perceived neglect by online peers played a mediating role. Specifically, this stress mediated the association between FoMO and addiction to social media platforms, as well as its impact on emotional well-being. The findings shed light on the intricate interplay between FoMO, social media addiction, and emotional well-being, underscoring the importance of considering mediating factors in understanding the nuanced effects of social media on adolescents' mental health. This insight contributes to a more comprehensive understanding of the complex dynamics involved in the impact of social media on emotional well-being among adolescents.

Our search strategy also revealed studies that delved into potential mediating factors, including hypothetical ones like upward social comparison, only to find that they did not confirm as true mediating factors. For instance, one

study [12] discovered that adolescents experiencing increased problems with social media use (SMU) reported heightened depressive symptoms and reduced life satisfaction a year later. Surprisingly, SMU problems were found to predict upward social comparisons and cybervictimization over time. However, contrary to expectations, neither upward social comparisons nor cybervictimization served as mediators for the observed impact of SMU problems on mental health. Intriguingly, the study found that over time, there was no discernible association between SMU intensity and mental health in any direction—neither directly nor indirectly through any of the potential mediators examined. These findings underscore the complexity of understanding the mechanisms underlying the relationship between social media use and mental health outcomes, emphasizing the need for a careful examination of proposed mediating factors.

Throughout the selected studies, a notable gap exists in the exploration of family function or family structure as a potential influencer of the negative effects of social media on mental health. By definition, FF is how a family manages their daily routines, fulfill their roles in the family, communicate and connect emotionally [13]. Family functioning is a key factor as it can significantly impact adolescents' physical, social, and emotional well-being. Despite its significance as a mediating factor, few articles delved into this aspect. Musetti et al. [14] found in 1308 adolescent students that aspects of poor family functioning, such as childhood emotional abuse, was strongly correlated with problematic SNS use. This may suggest that parents' awareness of their family functioning, and how they can care for their children, can directly affect how social media impacts their children's mental health. Therefore, the development of preventive measures based on family function programs may be an effective target to minimize the negative effects of social media in adolescents' mental health. Only one paper among the selected studies delved into specific aspects of family structure and function. This particular study[15] revealed that parental restrictive mediation emerged as a significant protective factor against pathological internet use. However, the study also highlighted a crucial caveat – the effectiveness of this strategy hinges on the presence of a supportive and loving family environment. The findings underscore the intricate relationship between parental mediation strategies and the broader context of family dynamics. It suggests that while certain approaches may be effective in mitigating negative outcomes, the overall familial atmosphere plays a pivotal role in determining their success. This insight emphasizes the need for a better understanding of family structures and functions when exploring the impact of social media on mental health, pointing towards the complexity that future research in this area may need to address. To note, the scarcity of research in this area may be attributed to the inherent challenges associated with collecting comprehensive data on family structures. Privacy concerns, the complexity of familial dynamics, and the need for nuanced understanding make it difficult to obtain accurate and meaningful information. For instance, individuals may be reluctant to disclose sensitive family details, and variations in family compositions pose challenges in standardizing data collection methods. Despite these challenges, recognizing the potential impact of family structure on social media's effects on mental health highlights an avenue for future research. Investigating the role of family dynamics could provide valuable insights into the complex interplay between social media use and mental well-being.

Conclusion

In conclusion, the results of this systematic review have unveiled a spectrum of mediating factors that contribute to the negative impacts of social media on mental health. These findings, thoroughly discussed throughout the study, hold significant implications for various stakeholders, including individuals, mental health professionals, policymakers, and social media companies. By recognizing and understanding the influencing factors associated with the adverse effects of social media use on mental health, informed strategies can be devised to promote mental well-being in the digital age. This knowledge empowers individuals to navigate social media platforms more mindfully, aids mental health professionals in tailoring interventions, guides policymakers in formulating regulations that safeguard mental health, and prompts social media companies to adopt responsible practices. The comprehensive understanding derived from this review serves as a foundation for future initiatives aimed at creating a healthier and more supportive digital environment for individuals of all ages.

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