

**The Relationship between Social Media Use, Emotion Regulation and Mental Well-being: A Systematic Review**

Cedric Leonard Middendorf

University of Twente

Psychology

Positive Clinical Psychology and Technology

Supervisor: Marcel Pieterse

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## **Abstract**

This study systematically reviews the relationship between social media use (SMU), emotion regulation (ER), and mental well-being (MWB) among adolescents and young adults. By synthesizing findings from 12 studies, it highlights ER's role as both a mediator and moderator in this relationship. SMU influences MWB through adaptive and maladaptive ER strategies, with outcomes shaped by individual, contextual, and platform-specific factors. Adaptive strategies like cognitive reappraisal have been found to increase resilience and emotional recovery, decreasing the negative influence of SMU. Maladaptive strategies such as rumination and suppression are linked to emotional distress and problematic SMU behaviors. Developmental factors, gender related factors, and platform features further moderate these influences. On the one hand, platforms that promote passive consumption amplify emotional dysregulation. On the other hand, active engagement on SM platforms may support healthy ER patterns and positive MWB outcomes. Also, Neurocognitive factors played a moderating role, here stronger frontoparietal connectivity was associated with greater use of adaptive ER strategies. These findings imply a bidirectional and reinforcing nature of the SMU, ER and MWB relationship, where maladaptive SMU sustains emotional distress, increasing reliance on maladaptive ER behaviors. Thus, this review calls for targeted interventions, including digital literacy programs, mindfulness training, and platform design changes to promote active and meaningful engagement on SM platforms reducing risks of passive SMU. Future research should strive for longitudinal and experimental studies to establish causality and explore the unique impacts of emerging social media platforms. Thus, this study provides crucial insights into fostering healthier social media habits and enhancing emotional resilience in an increasingly digital world.

## **Introduction**

In today's digitalized world, social media use has become an integral part of daily life for many individuals. Platforms like WhatsApp, Instagram, and the newer addition, TikTok, are used by over 4.6 billion people worldwide (Bazarova et al., 2017; Wadley et al., 2020). Social media use (SMU) has been linked to various factors affecting well-being, social relationships, and mental health, including depression and anxiety (Iwanski & Zimmermann, 2014; Cauberghe et al., 2021). This presence introduces unique pressures and opportunities that impact emotional and social development (MacKenzie et al., 2022; Wadley et al., 2020). As users navigate these platforms, they encounter situations that play a significant role in

both positive and negative psychological outcomes. The impact becomes visible both directly, through effects on self-perception and emotional well-being, and indirectly, by influencing behaviours linked to mental health, such as social comparison and validation-seeking behaviours (Baum et al., 2013; Gioia et al., 2021). One factor that has received growing attention in this dynamic is emotion regulation.

Emotion regulation (ER) refers to the processes responsible for monitoring, evaluating, and modifying emotional reactions (Thompson, 1994, MacKenzie et al., 2022). It is considered crucial for well-being and mental health (Gross, 1998). Humans select ER strategies depending on situational demands, personal goals and abilities and other contextual factors (Gross, 1998). These strategies are driven by two underlying mechanisms: (1) The need to minimize or alleviate negative emotions such as fear or sadness, and (2) The desire to increase or sustain positive emotions (Koole, 2009). This choice is also influenced by other factors like a person's developmental stage, cultural background or prior experience (Thompson, 1994). For example, younger individuals that are still in development regarding higher brain functions like executive functions and social competencies, may lean towards ER strategies that provide immediate relieve but are less effective in the long-term such as avoidance or suppression (Zimmer-Gembeck & Skinner, 2011). Therefore, ER is critical for maintaining emotional balance and promoting adaptive responses for the emotional challenges we may face.

Among the various emotion regulation strategies identified in the literature, two key ones are cognitive reappraisal and expressive suppression (Gross & John, 2003). Cognitive reappraisal is an antecedent-focused strategy involving changing the way one thinks about a situation to alter its emotional impact (Gross & John, 2003). For instance, when reading a negative post on SM, one might reframe it as an opportunity to understand different perspectives, which can help to manage emotional responses effectively (Webb et al., 2012). Although reappraisal is generally associated with beneficial emotional outcomes, such as reduced negative affect and improved mental well-being, some may use it to rationalize or dismiss serious issues, potentially leading to avoidance behaviours (Cutuli, 2014). In contrast, expressive suppression is a response-focused strategy often utilized to inhibit outward signs of internal emotions after they have been generated, especially in response to negative events (Gross, 1998). Habitual use of suppression is linked to poorer emotional outcomes, including increased negative affect and diminished interpersonal functioning (Gross & John, 2003; John & Gross, 2004).

Understanding these strategies is essential for exploring how SMU and emotion regulation skills interact, to influence mental well-being. For instance, the frequent reinterpretation of SM content, where users personally reassess or reframe posts or images, can enhance reappraisal abilities and promote adaptive ER skills, potentially benefitting mental health outcomes (Gross & John, 2003). Conversely, the pressure to present oneself positively online might encourage suppression, or scrolling on SM and suppressing negative emotional experiences, affecting emotional experiences and mental well-being. Overall, developing effective emotion regulation techniques, such as reappraisal, has been shown to improve well-being by promoting healthier ways to manage emotional responses (Cutuli, 2014; Webb et al., 2012).

Previous research has found that effective emotion regulation may be a protective factor against addictive behaviors, including problematic SMU. There is a clear association between deficits in ER and an increased risk for problematic SMU, which can negatively affect mental well-being. For example, individuals who tend to suppress their emotions or engage in habitual rumination, a strategy that can act both as a symptom of emotional distress and a maladaptive regulation attempt, are more likely to use SM compulsively (Aldao et al., 2010). Hormes et al. (2014) found that difficulties in emotion regulation are linked to addictive behaviors related to online SM, leading to adverse mental health outcomes. Similarly, Wegmann et al. (2015) demonstrated that low self-regulation and ER capacities contribute to the addictive use of social networking sites.

While considerable research has examined how ER influences problematic SMU, the reverse relationship — how SM impacts ER and consequently mental well-being — is less extensively explored but equally significant (Marino et al., 2018). Individuals may use SM as a coping strategy to deal with negative emotions such as stress, anxiety, or loneliness (Hormes et al., 2014). While SM provides opportunities to regulate emotions through social interaction, distraction, or validation (Wegmann et al., 2015), reliance on these platforms for ER may reinforce maladaptive coping strategies. This may lead to excessive or problematic SMU, further impacting mental well-being (Casale et al., 2016). Dependence on SM for ER may result in the development of unhealthy coping mechanisms, exacerbating mental health issues. SMU may thus play a complex role in ER, functioning both as a moderator, shaping how individuals engage with and respond to emotional content, and as a mediator, where emotional regulation itself is impacted by SM exposure.

Existing studies suggest that SMU can significantly affect ER processes, yet comprehensive analyses are limited (Marino et al., 2018). SM platforms often expose users to

a barrage of emotional stimuli, such as curated images and status updates, which can evoke negative feelings through social comparison and fear of missing out (Casale & Fioravanti, 2015). These negative emotions can challenge individuals' ability to regulate their emotions effectively, potentially compromising their mental well-being. For instance, Kross et al. (2013) found that increased Facebook use predicts declines in moment-to-moment emotional well-being and overall life satisfaction among young adults. Similarly, Sagioglou and Greitemeyer (2014) reported that passive Facebook usage correlates with a decrease in affective well-being due to heightened envy and reduced emotional self-control. Despite these findings, the mechanisms by which SMU impacts specific emotion regulation strategies and consequently mental well-being are not well understood (Heffer et al., 2019). Most studies have been cross-sectional, limiting the ability to draw causal inferences (Shensa et al., 2018). Additionally, there is a lack of research focusing on diverse populations and the long-term effects of SM on ER development and mental health outcomes.

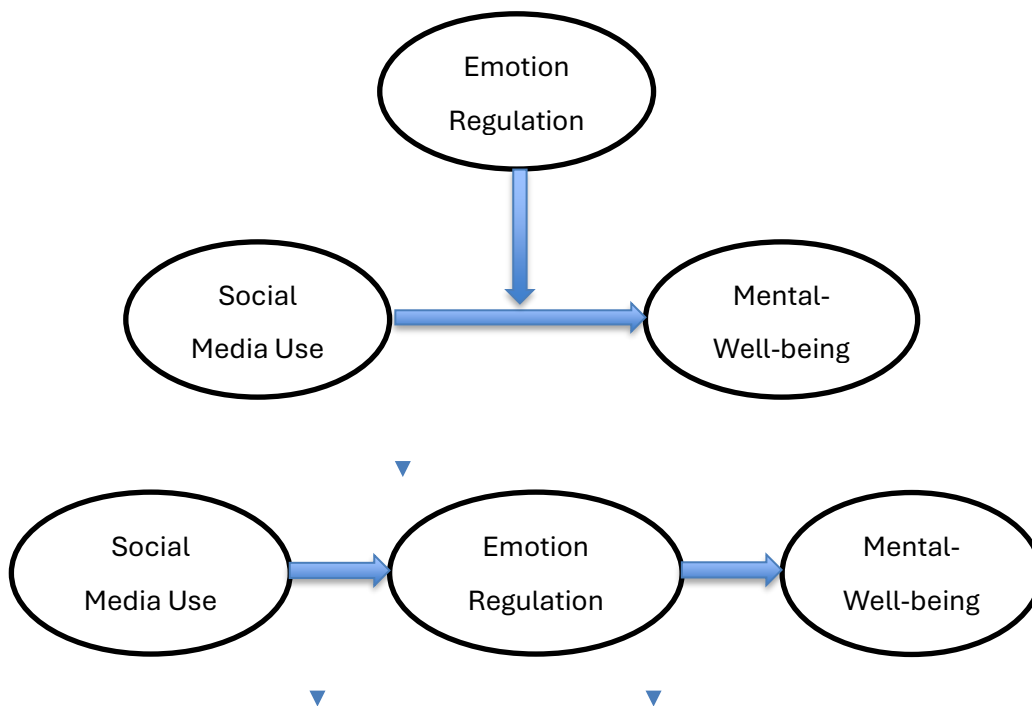
Understanding how SM influences emotion regulation is crucial for several reasons. First, it can shed light on the potential negative impact of SM on mental well-being, particularly among vulnerable populations like adolescents (Vannucci et al., 2017). Adolescents are in a critical developmental period for ER skills, and disruptions caused by SMU may have lasting effects on their mental health. Second, exploring this relationship can inform the creation of interventions aimed at promoting healthier SMU and enhancing emotion regulation skills to improve mental well-being (Gentzler et al., 2011). Lastly, addressing this research gap contributes to a more comprehensive understanding of the potentially multidirectional relationship between SM, emotion regulation, and mental well-being.

### **The Current Study**

Given this context, the current study aims to synthesize existing literature to draw more comprehensive conclusions about the influence of SMU on ER and the role of ER in the interaction between SMU and mental well-being. By addressing these variables, this study intends to fill a critical gap in the literature and contribute to a holistic understanding of the interplay between SMU, ER, and mental well-being. This enhanced understanding is essential for developing effective interventions and supporting individuals in navigating the emotional mechanisms of SMU, which may promote better mental health outcomes.

To explore these complex dynamics, the present study undertakes an exploratory review to examine the complex and potentially multidirectional relationships between SMU, emotion regulation strategies, and mental well-being. Past research indicates moderator and

mediator relationships between SMU, ER and MWB where ER may be both a mediator and a moderator leading to different MWB outcomes (Heffer et al., 2019; Marino et al., 2018). By investigating these interactions, we aim to provide a nuanced understanding of the mechanisms underlying these relationships. This approach will help to shed light on how SM can serve both as a tool for emotion regulation and as a source of emotional challenges, influencing mental well-being in complex ways (Gentzler et al., 2011; Vannucci et al., 2017).



Specifically, we seek to answer the following research question:

- What is the relationship between SMU, emotion regulation strategies, and mental well-being?

## Methodology

This review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, for a structured approach that ensures a comprehensive and transparent synthesis of existing research.

The search for literature was performed across seven electronic databases: PsycINFO, Web of Science, Scopus, PubMed, PsycARTICLES, PSYINDEX, and ScienceDirect. These were chosen for their coverage of psychological, social sciences, and health-related studies. Both English and German language terms were included due to the language of the researcher.

Search terms were selected to capture the key concepts of SMU, ER, and MWB. For SMU, keywords included "social media," "soziale Medien," "online social network," "soziale Netzwerke online," as well as specific platform names like "Facebook," "Instagram," "Twitter," and "TikTok." ER was covered by terms such as "emotion regulation," "Emotionsregulation," "emotional control," "emotionale Kontrolle," "affective regulation," "affektive Regulation," "emotional management," "Emotionsmanagement," "coping skills," and "Bewältigungsstrategien." MWB terms included "mental well-being," "psychisches Wohlbefinden," "mental health," "psychische Gesundheit," "psychological well-being," "psychologisches Wohlbefinden," "depression," "Depression," "anxiety," "Angst," "stress," and "Stress."

Boolean operators were used to combine the specific term into a search string tailored to the database. For example: ("social media" OR "soziale Medien" OR "online social network" OR "soziale Netzwerke online" OR "Facebook" OR "Instagram" OR "Twitter" OR "TikTok") AND ("emotion regulation" OR "Emotionsregulation" OR "emotional control" OR "emotionale Kontrolle" OR "affective regulation" OR "affektive Regulation" OR "emotional management" OR "Emotionsmanagement" OR "coping skills" OR "Bewältigungsstrategien") AND ("mental well-being" OR "psychisches Wohlbefinden" OR "mental health" OR "psychische Gesundheit" OR "psychological well-being" OR "psychologisches Wohlbefinden" OR "depression" OR "Depression" OR "anxiety" OR "Angst" OR "stress" OR "Stress").

The search only included peer-reviewed journal articles published between 2019 and 2024. This was done to ensure that the findings were relevant to current SM platforms and recent research trends. Only studies involving adolescents and young adults were considered, as these populations are most engaged with SM and are within the developmental stages where emotion regulation is critical.

Due to the inclusion criteria studies had to specifically focused on the relationship between SMU, ER, and mental health. This included explicit measurements and operational definitions of the variables. Studies that were not peer-reviewed journal articles, were not written in English or German, or lacked specific measures of SMU, emotion regulation, or mental health outcomes were excluded from the review.

The initial search across all databases resulted in 427 articles. Duplicate records were identified and removed manually and through using Covidence.org, an online tool designed to help with the systematic review process. A total of 130 duplicates were removed, resulting in 297 unique articles for further screening. The titles and abstracts of these 297 articles were

then screened against the inclusion and exclusion criteria. This process was facilitated by Covidence.org, which allowed for efficient organization and tracking of articles. During this stage, 209 articles were excluded because they did not meet the inclusion criteria. Common reasons for exclusion included a lack of focus on the key concepts, irrelevant populations, or being non-peer-reviewed publications such as conference abstracts or editorials. Following the title and abstract screening, 88 articles were identified as potentially relevant and were selected for full-text review. The full-text screening excluded 76 articles and assessed each article regarding eligibility based on the predefined criteria, this ensured that only studies of sufficient quality and relevance were included in the final analysis. After the final exclusions, 12 studies were deemed appropriate for analysis.

By adhering to the PRISMA guidelines and utilizing Covidence.org to manage the screening process, the methodology ensured a systematic and replicable approach up to the full-text screening point. This selection process established a solid foundation for the subsequent synthesis and analysis of the studies included in the review.

A detailed PRISMA flow diagram is presented in Figure 1, illustrating the progression of articles through the stages of identification, screening, and inclusion.

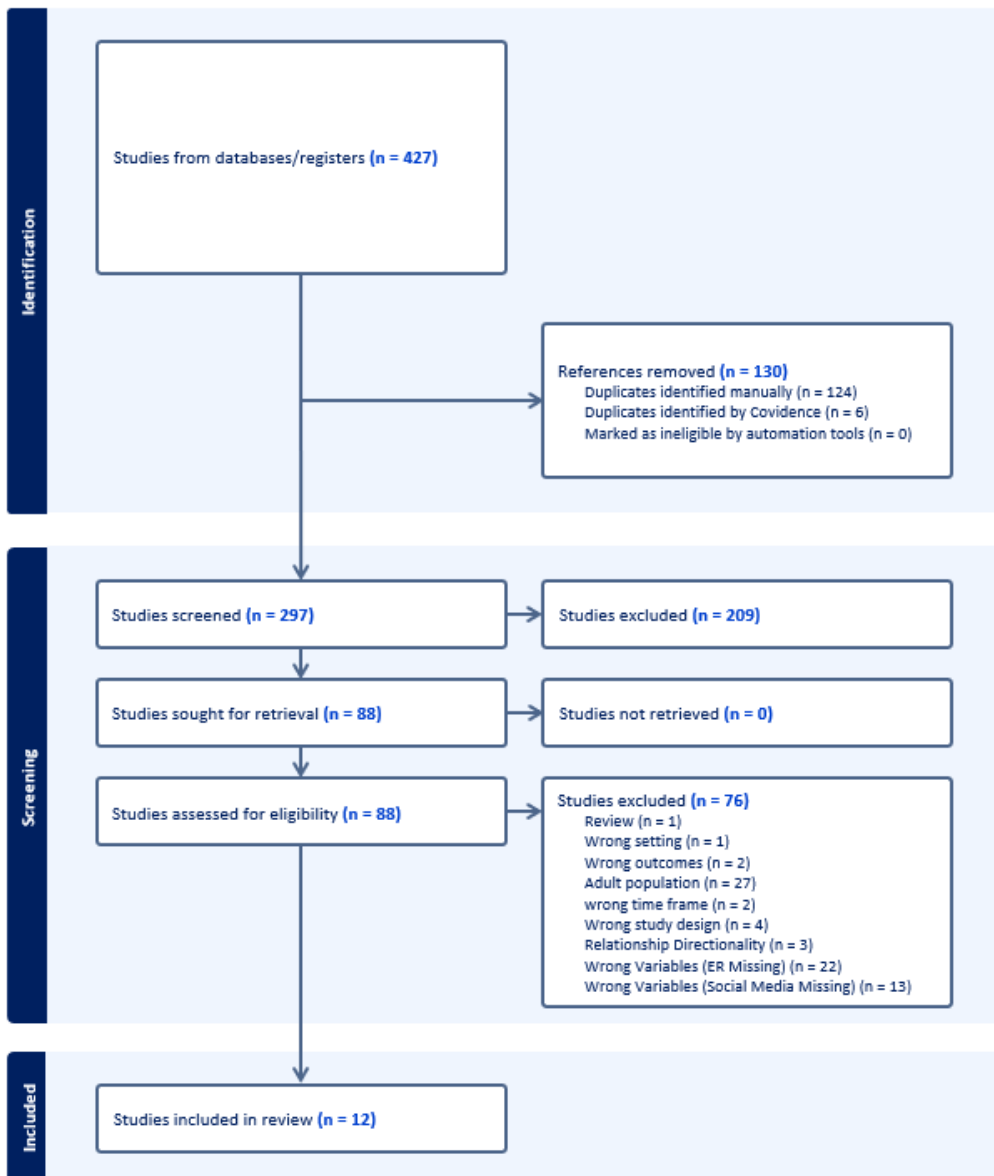
### ***Quality Assessment***

Each included study was appraised based on design (e.g., experience sampling vs. cross-sectional), sample size, and the measures used for social media use (SMU), emotion regulation (ER), and mental well-being (MWB). Longitudinal approaches (e.g., Faelens et al., Battaglini et al., Kang et al., Kilic et al.) generally offered stronger insights into causal or temporal relationships, whereas cross-sectional studies (e.g., Rasmussen et al., Wartberg et al., Muth et al.) provided more limited evidence. Sample sizes ranged widely (N=54 to N=721), affecting the statistical power and generalizability of findings. We also considered the clarity of reported effect sizes (e.g., B coefficients, OR values) and whether researchers employed validated scales or logs for SMU and ER. Although no study was excluded purely on quality grounds, these factors helped contextualize the reliability of each paper's outcomes and guided interpretation in the overall synthesis.



**Figure 1**

Social Media and Emotion regulation in adolescents and young adults



## Results

All 12 included studies were conducted within the past five years. The age of the participants in the included studies ranged from 10 to 35 years. One study by Myruski et al. (2020), had a sample age range of 18–47 ( $M=20.07$ ,  $SD=4.06$ ), but since the mean age was 20 and the variance was approximately 4, it can be concluded that at least 95% of the participants fell below the age of 35. Thus, the study was included. Overall, the studies focused on adolescents and young adults, typically ranging from 13–25 years. Some studies, like Battaglini et al. (2024), investigated early adolescence, examining adolescent girls aged 11–13, a demographic that is less commonly studied in this field. Sample sizes in the included studies ranged widely, from  $N=98$  to  $N=721$  participants. Larger studies, such as Iannattone et al. (2024), which included  $N=721$  participants, enabled analyses incorporating multiple mediators and moderators, providing stronger generalizability. Conversely, smaller studies, like Faelens et al. (2021) with  $N=98$  participants, were less generalizable but facilitated more detailed data collection using methods such as experience sampling methodology (ESM).

Studies often had a higher proportion of female participants, reflecting differences in how men and women interact with social media and how its effects manifest across genders. Some studies directly examined gender differences within their sample populations; for instance, Giordano et al. (2022) analyzed gender-specific predictors of social media addiction. Other studies, like Kilic et al. (2024), exclusively focused on adolescent girls, exploring how social media influences rumination and peer interactions.

Most studies were conducted in Western countries, such as the United States, Europe, and Australia, making the sample less applicable to non-Western populations. However, Ekşi (2019) offered valuable insights by examining a Turkish sample, providing perspectives on social media use and emotion regulation in a non-Western context. Additionally, some of the included studies investigated high-risk or clinical subgroups. For example, Giordano et al. (2022) studied adolescents with tendencies toward social media or gaming addiction.

*Table 1*

Study, Authors (Year)	Design	Measures	Key Findings	Moderation	Sample	Limitations	
1. Faelens et al. (2021)	Longitudinal ESM (14 days) High-detail data collection	- SMU logs (Facebook, Instagram) - Self-esteem - Rumination (RNT) - Negative affect measures	- SNS-use → self-esteem ( <b>B = -0.25</b> ) - Self-esteem → RNT ( <b>B = 0.40</b> ) - RNT → negative affect ( <b>B = 0.35</b> ) - <b>Active</b> SMU fostered adaptive strategies (reappraisal), while <b>passive</b> SMU linked to maladaptive patterns	Not explicitly stated as “mediation,” but results show SMU → ER (reappraisal or rumination) → MWB	Not explicitly tested. Adaptive vs. maladaptive ER implied as conditional factors	N=98, Age ~18–35 Belgian sample recruited for ESM study	Small sample Limited generalizability Primarily Android-based logging
2. Scott et al. (2023)	7-day diary (longitudinal) Multilevel path modeling	- Digital ER (active vs. passive SM actions) - Daily mood/affect - Loneliness	- Digital ER → same-day recovery from sadness ( <b>B = 0.04</b> ) & worry ( <b>B = 0.05</b> ) - Digital ER → next-day sadness ( <b>B = 0.06</b> ), worry ( <b>B = 0.05</b> ), anger ( <b>B = 0.03</b> ), loneliness ( <b>B = 0.05</b> ) - Loneliness → increased next-day digital ER ( <b>B = 0.11</b> )	<b>Yes.</b> Active SMU (digital ER) mediated short-term emotional improvements	Not explicitly tested as a formal moderator; focus on short-term vs. next-day carryover	N=326, Age ~14 Australian adolescents	Self-reports Single-item measures No strong causal claims
3. Battaglini et al. (2024)	Longitudinal survey (6 waves, ~2 years)	- Co-rumination (text, phone, in-person) - Depressive symptoms - Friendship quality	- In-person co-rumination → depressive symptoms (NS) - Text co-rumination → <b>reduced</b> depressive symptoms ( <b>B = -1.14</b> , $p < .05$ )	Not explicitly tested as ER mediation, but shows how different co-rumination	Not tested	N=109, Age ~11–13 Canadian adolescent girls transitioning to high school	Small sample No platform-specific SM details Narrow age range

			- Phone co-rumination → <b>increased</b> depressive symptoms ( <b>B = 1.25</b> , $p < .05$ ) - Highlights how <b>modality</b> of SM-based interaction affects MWB	forms impact depression			
4. Kang et al. (2023)	Longitudinal EMA (28 days)+fMRI Correlational	- SMU frequency - Negative affect - fMRI (frontoparietal connectivity)	- SMU → <b>increased negative affect (B = 4.38</b> , $p = .006$ ) - Low connectivity → stronger SMU–NA link ( <b>B = -17.15</b> , $p = .019$ ) - Indicates <b>individual neural</b> differences in SMU → MWB pathways	Not tested as formal mediation	<b>Yes.</b> Frontoparietal connectivity moderated SMU → negative affect link	<b>N=54</b> , Age ~18–25 U.S. university students	Small sample fMRI findings limit generalizability
5. Kilic et al. (2024)	Longitudinal (16 days), EMA Logistic multilevel models	- Negative SM interactions - Rumination & other ER strategies - Anxiety/depression	- Negative SM interactions → rumination ( <b>OR = 2.08</b> , $p = .031$ ) - Intensity of negative emotion → rumination ( <b>OR = 2.29</b> , $p = .001$ ) - Emphasizes rumination as <b>key</b> mechanism linking SM triggers to mental health outcomes	<b>Yes.</b> Rumination mediates negative SM interactions → worse mental health	Not tested	<b>N=106</b> , Age ~11–13 U.S. adolescent girls (some high risk)	Self-reports Small sample Limited to female adolescents
6. Rasmussen et al. (2020)	Cross-sectional Correlational, mediational	- SMU frequency - ER (DERS) - Stress - Mental health (MH) index	- SMU → ER non-significant ( <b>B = 0.038</b> , $p = .068$ ) - ER → Stress ( <b>B = 0.242</b> , $p < .001$ ) - Stress → MH ( <b>B = 0.391</b> ,	<b>Yes.</b> Demonstrates ER/stress path mediates SMU's effect on MH	Not tested	<b>N=546</b> , Age ~18–34 U.S. undergraduates	Cross-sectional Self-reports Homogeneous sample

			<i>p</i> < .001) - SMU → ER → Stress → <b>MH indirect (B = 0.002,</b> 95% CI [0.0002, 0.0075]) indicates partial mediation				
7. Wartberg et al. (2021)	Cross-sectional Correlational, regression	- Problematic SMU (PSMU) - Impulse control, stress - Age differences (10–17)	- PSMU → impulse control difficulties ( <b>B = 0.09</b> ), stress ( <b>B = 0.14</b> ) - Stronger associations for younger adolescents (10–13) vs. older teens - Suggests emotional/behavioral dysregulation may link PSMU to negative outcomes	Not explicitly tested	Possibly implied (difference by younger vs. older adolescents), but no formal moderation tested	<b>N=1,221</b> , Age 10–17 German adolescents	Cross-sectional No direct measure of ER mediation Short stress measure (PSS-4)
8. Muth et al. (2023)	Cross-sectional Correlational	- SMU usage - Emotional suppression norms - Depressive symptoms	- SMU correlated with <b>increased ER difficulties</b> (suppression) and elevated depressive symptoms - Cultural norms emphasizing suppression intensified negative outcomes	Not explicitly tested	Not explicitly tested; suggests cultural context might moderate SMU → ER link	<b>N=200</b> , Age ~adolescents Non-Western/cultural emphasis	Cross-sectional Female-focused Self-reports
9. Giordano et al. (2022)	Cross-sectional Correlational, regression	- SMU intensity - Rumination - Depressive symptoms	- Rumination mediated link between <b>excessive SMU</b> and depressive symptoms - Conflict-driven SM interactions amplified negative thoughts - Indicates SMU → RNT → depression	<b>Yes.</b> Rumination is a mediator for SMU → depressive outcomes	Not tested	<b>N=350</b> , Age ~12–17 U.S. adolescents	Self-reports Crowdsourced sample Moderate reliability in ER measure

10. Myruski et al. (2020)	Cross-sectional, multi-method Correlational	- SM use (active vs. passive) - Emotional sensitivity/resilience - Loneliness	- Greater CMC use → emotional sensitivity ( <b>B</b> = - <b>0.231</b> , $p < .05$ ), but lower well-being (ER difficulties, <b>B</b> = <b>0.155</b> , $p < .10$ ) - Passive SMU increased loneliness, decreased resilience - Active FB use associated with improved well-being	Not explicitly tested	Not explicitly tested but shows <i>active vs. passive</i> SMU can shape outcome differences	<b>N=123</b> , Age ~18–47 (mostly ~20) U.S. sample	Small lab-based sample Focus on FB Possible reduced ecological validity
11. Iannattone et al. (2024)	Cross-sectional Correlational	- Emotion dysregulation (ED) - Boredom, PSMU - Internalizing & externalizing problems	- ED → boredom ( <b>B</b> = <b>0.69</b> ), PSMU ( <b>B</b> = <b>0.42</b> ) - Boredom → internalizing ( <b>B</b> = <b>0.20</b> ) & externalizing ( <b>B</b> = <b>0.21</b> ) - Suggests PSMU partially mediates ED → externalizing	<b>Yes</b> . Boredom & PSMU mediate ED → internalizing/externalizing paths	Not explicitly tested	<b>N=721</b> , Age ~13–19 Italian adolescents	Cross-sectional Mostly female sample Self-reports
12. Ekşi (2019)	Cross-sectional Correlational, mediational	- SMU frequency - Emotional suppression - Mental health scales	- EA → SM disorder ( <b>B</b> = <b>0.47</b> ) - SM disorder mediates EA → MH ( <b>B</b> = <b>0.20</b> , $p < .05$ ) - Distress endurance negatively predicted outcomes ( $\beta$ = -0.19) - High SMU often linked to suppressed emotions & elevated stress	<b>Yes</b> . SM disorder mediated link between emotional awareness (EA) → mental health	Not tested	<b>N=333</b> , Age ~18–33 Turkish undergraduates	Cross-sectional Self-reports Cultural specificity

**SMU:** Social Media Use, **ER:** Emotion Regulation, **MWB:** Mental Well-Being, **ESM:** Experience Sampling Method (repeated assessments over a specific period), **fMRI:** Functional Magnetic Resonance Imaging (used to measure brain activity), **RNT:** Repetitive Negative Thinking (e.g.,

rumination), **Active SMU:** Interactive behaviors (e.g., posting, commenting, seeking support), **Passive SMU:** Non-interactive behaviors (e.g., scrolling, viewing content without engagement), **DERS:** Difficulties in Emotion Regulation Scale, **EA:** Emotional Awareness

## **Social Media Use and Mental Well-Being**

SMU has a multi-faceted and often bidirectional relationship with MWB, its impact depending on the frequency, context, and manner of use. The reviewed studies revealed that SM usage can have both positive and negative effects on MWB, further emphasizing the pivotal role of moderating and mediating variables in shaping these outcomes.

On the one hand, SMU can be used positively, providing social connection and emotional support to its users, which can enhance MWB. Scott et al. (2023) highlighted that active SMU, such as active posting or engagement in conversations with peers, was associated with short-term improvements in mood and emotional recovery. Similarly, Faelens et al. (2021) found that active SMU supported adaptive emotional outcomes, such as improved resilience and cognitive reappraisal.

On the other hand, passive usage, like scrolling or passively viewing curated content, was often linked to negative outcomes. Myruski et al. (2020) found that passive SMU increased feelings of loneliness and reduced emotional resilience, contributing to decreased MWB. The moderate-quality cross-sectional studies by Giordano et al. (2022) and Iannattone et al. (2024) observed heightened levels of anxiety and depressive symptoms in adolescents prone to compulsive SMU, driven by factors related to passive scrolling like social comparison. Kilic et al. (2024), focusing specifically on adolescent girls, found that increased SMU was linked to cycles of rumination and negative mental health outcomes, underscoring the unique vulnerabilities of this demographic. This difference in the influence of passive vs. active use may point to factors making specific populations more vulnerable, while others may experience even positive effects—suggesting that the level of active SM usage could moderate the relationship between SM usage and MWB.

## **Emotion Regulation as a Mediator Between Social Media Use and Mental Well-Being**

### ***Social Media Use and Emotion Regulation***

Among the included studies, SMU has been shown to have a significant influence on ER strategies. Using SM often, and especially problematic SMU, is linked to both adaptive and maladaptive ER strategies. Studies such as Faelens et al. (2021) and Battaglini et al. (2024), which employed high-quality methodologies like experience sampling and longitudinal designs, found that maladaptive ER patterns, like suppression or rumination, often result from social comparison and attempts to maintain an idealized online persona. These processes were linked to emotional strain by amplifying self-critical thoughts and increasing the cognitive load required to manage one's online identity, thereby intensifying reliance on maladaptive ER strategies (Scott et al., 2023). For example, the cross-sectional



study by Ekşi (2019) found that participants engaging in high levels of SMU showed inhibited ER capabilities, especially when relying on suppression as their main regulation strategy. Muth et al. (2023) examined how cultural norms emphasizing emotional suppression influence maladaptive ER in SMU contexts, finding that participants in a non-Western cultural setting frequently resorted to suppression as a coping mechanism, reinforcing negative emotional outcomes associated with problematic SMU.

Some of the included studies also showed evidence supporting the positive influence of SMU on adaptive ER strategies. Faelens et al. (2021) demonstrated that engaging in active forms of SMU, such as posting content or engaging in supportive interactions, can support cognitive reappraisal by fostering positive reinterpretation of emotional situations. This high-quality evidence is complemented by the findings of Scott et al. (2023), which further supports SMU's potential for adaptive ER. However, these findings appear limited compared to the evidence showing the negative impact of passive SMU. For instance, Myruski et al. (2020) found that passive SM use is more closely related to maladaptive ER strategies such as suppression and decreased emotional resilience compared to the association between active use and adaptive ER.

### **ER as a Mediator**

One dominant pattern across the reviewed studies was the mediating effect of maladaptive ER strategies in the association between problematic SMU and poor mental health outcomes. Giordano et al. (2022) demonstrated that rumination acted as a key mediator, increasing depressive symptoms in adolescents engaged in excessive SMU. Here, SM effects fostered repetitive negative thinking that led to emotional distress, particularly in situations involving conflict-driven interactions. Similarly, Kilic et al. (2024) emphasized that adolescent girls experienced heightened symptoms of anxiety and depression due to rumination triggered by negative peer interactions on SM. This finding suggests a reinforcing cycle between SMU, ER, and MWB, where SMU exacerbates rumination, which in turn worsens mental health and increases reliance on SMU as a coping mechanism.

Ekşi (2019) further elaborated on this process by showing that individuals prone to emotional suppression were more likely to engage in problematic SMU behaviors, providing short-term relief while limiting long-term emotional recovery, ultimately contributing to elevated stress levels. Muth et al. (2023) extended this perspective by identifying that cultural contexts, emphasizing emotional suppression, amplified emotional distress linked to problematic SMU.

### ***Mediating Role of Adaptive ER***

Some evidence supported the mediating role of adaptive ER strategies. Scott et al. (2023), a high-quality study using a large and diverse sample, reported that participants employing cognitive reappraisal to reinterpret SM content experienced increased emotional stability and reduced negative affect. This suggests that using ER strategies effectively can enhance emotional resilience and mitigate negative outcomes. Similarly, Faelens et al. (2021) observed that users actively participating in social media interactions, such as commenting or sharing, were more likely to use adaptive ER strategies, resulting in more positive MWB outcomes compared to those using SM passively.

### ***Contextual and Platform-Specific Influences***

Several of the included studies highlighted how contextual factors influenced the mediating role of ER. Faelens et al. (2021) noted that platforms encouraging passive consumption (e.g., Instagram, Facebook) were more likely to foster maladaptive strategies like suppression, whereas platforms promoting active participation facilitated adaptive engagement. Muth et al. (2023) added that cultural expectations around platform usage influenced how individuals engaged in emotional regulation behaviors, further affecting the mediation pathway.

### ***ER as a Central Mechanism***

The findings suggest that using social media as a tool for emotion regulation in response to negative emotional states often results in adverse mental health outcomes. Negative emotional experiences drive individuals to seek relief through SM, but this shapes SMU in ways that reinforce maladaptive ER patterns through short-term relief. This may be beneficial initially but leads to a cycle of rumination, suppression, and dependency that foster distress in the long term and further increase reliance on SM.

### ***Emotion Regulation as a Moderator Between Social Media Use and Mental Well-Being***

The included studies showed that ER also plays a critical role in moderating the relationship between SMU and MWB. This depends on the strategies employed, with adaptive strategies such as cognitive reappraisal weakening the negative association between SMU and MWB, while maladaptive strategies such as rumination and suppression increase the risk for emotional distress and decreased MWB.

### ***Adaptive Emotion Regulation: A Protective Buffer***

Studies demonstrate that adaptive ER strategies foster emotional resilience, moderating the impact of SMU on MWB. The high-quality study by Scott et al. (2023) found that individuals actively engaging with SM (e.g., posting or seeking social support) while

applying cognitive reappraisal experienced fewer depressive symptoms and increased emotional stability. This suggests that the choice of ER strategies can influence the emotional impact of SMU from negative to neutral or even positive. Similarly, Faelens et al. (2021) showed that individuals engaging in active platform use (e.g., commenting or sharing) were more likely to reinterpret negative interactions constructively, applying cognitive restructuring to reduce emotional stress. These findings align with those of Myruski et al. (2020), which highlighted the significance of a preference for active communication over passive SMU in enhancing emotional well-being. Muth et al. (2023) added that cultural norms around SMU and emotional suppression influenced how effectively users applied adaptive ER strategies, moderating SMU's impact on MWB.

### ***Platform-Specific Moderators***

Platform-specific affordances also moderated how SMU influenced ER and MWB. Faelens et al. (2021) and Scott et al. (2023) found that active engagement on platforms (e.g., posting, commenting) was linked to adaptive ER, while passive behaviors (e.g., scrolling) were linked to suppression and poorer emotional outcomes. Myruski et al. (2020) emphasized how platform design influences emotional engagement, noting that platforms encouraging active participation reduced the emotional burden of negative interactions. Muth et al. (2023) added that the choice of SM platforms and cultural behaviors could vary significantly across contexts, influencing the moderating effects of ER on SMU–MWB relationships.

### **Synthesis of Findings**

The findings position ER as a central mechanism mediating and moderating the relationship between SMU and MWB. The mediation evidence illustrates how maladaptive ER strategies, such as rumination and suppression, act as pathways linking problematic SMU to negative emotional outcomes, sustaining cycles of emotional distress. Adaptive ER strategies, such as reappraisal, were shown to mediate positive impacts of active SMU on MWB by fostering emotional resilience and improving emotional recovery.

The included studies report unstandardized B values that cannot be directly compared because each study measures variables (e.g., self-esteem, negative affect) on different scales. Thus, a B of 0.40 might reflect a small effect in one study but a moderate effect in another. For example, Faelens et al. (2021) reports  $B = -0.25$  for SNS use  $\rightarrow$  self-esteem and  $B = 0.40$  for self-esteem  $\rightarrow$  RNT, both statistically significant yet representing only part of a larger interplay of factors (e.g., social comparison, negative affect). Similarly, Scott et al. (2023) shows B values around 0.04–0.06, which suggest small but significant associations. Overall, emotion regulation (ER) consistently emerges as a factor linking social media use and well-

being, yet these B values imply a modest explanatory role, highlighting that additional variables (e.g., social support, individual traits) also shape mental well-being.

Moderation effects highlight the role of ER in buffering or amplifying the emotional impacts of SMU. Adaptive strategies mitigate the adverse effects of SMU, while maladaptive strategies exacerbate negative outcomes, particularly for vulnerable groups like adolescents and young adults. These groups are uniquely susceptible to emotional stressors and social comparisons, which can undermine their ER capacity and magnify the risks of SMU.

Overall, the findings suggest slightly stronger support for mediation, with ER serving as a mechanism through which SMU behaviors influence MWB. Moderation effects, though somewhat less consistent, underscore the importance of individual differences in ER capacity and contextual factors—such as platform affordances and developmental stages—in shaping the SMU–MWB relationship. This dual role of ER as both mediator and moderator highlights its critical importance and the need for interventions aimed at promoting adaptive regulation strategies while reducing reliance on maladaptive patterns.

## **Discussion**

This study tried to explore the detailed relationship between Social Media Use (SMU), Emotion Regulation (ER) and Mental Wellbeing (MWB). This was done by systematically reviewing 12 relevant studies and synthesizing their results to provide more comprehensive conclusions about the nature of this relationship. One significant insight that this study has gained is the dual nature of SMU having both positive and negative influences on MWB and ER dependent on the context and other individual factors. Additionally, this study found that ER is both a significant mediator and moderator in the present relationship.

### **Mediating Role of ER**

The reviewed studies collectively showed strong evidence for ER as a mediating force between SMU and MWB. Specifically, passive SMU often fostered maladaptive ER strategies (e.g., rumination, suppression) that led to emotional distress. For instance, Giordano et al. (2022) and Kilic et al. (2024) found that rumination mediated the link between passive SMU and depressive symptoms, reinforcing the idea that certain SM behaviors (e.g., scrolling) trigger cognitive processes amplifying stress.

Similarly, active SMU (e.g., seeking social support, commenting) emerged in some studies (Scott et al., 2023) as a context where adaptive ER strategies like reappraisal can develop, improving MWB outcomes. Mediation thus implies a causal pathway: SMU shapes ER strategies, which in turn affect emotional health (Gross, 1998; Koole, 2009). These

findings align with Valkenburg and Peter (2011), indicating how the type of SM engagement significantly influences ER outcomes.

### **Moderating Role of ER**

Several studies highlighted ER as a moderator, indicating that preexisting ER skills determine whether SMU positively or negatively affects MWB. Individuals adept at reappraisal (Gross, 2015) were less impacted by passive SMU's potential harms. Conversely, those prone to suppressing negative emotions or ruminating (Aldao et al., 2010; Wegmann et al., 2015) were more vulnerable. For example, Giordano et al. (2022) showed that adolescents with poor emotional regulation experienced heightened depressive symptoms from passive SMU.

Platform features can also interact with ER tendencies. Faelens et al. (2021) noted that platforms emphasizing active use (posting, sharing) enable users to regulate more adaptively, while those centered on passive consumption intensify emotional strain. Keles et al. (2020) similarly reported that users who rely on passive SMU often experience distress, highlighting ER's crucial moderating role and platform-specific factors that shape emotional outcomes.

### **The Complex Relationship between ER and SMU**

One of the central explorations of this review is the complex relationship between SMU and ER strategies which includes potential benefits as well as risks of SMU. The results of the included studies showed that active SMU may foster adaptive ER strategies like cognitive appraisal. This aligns with previous research such as Valkenburg and Peter (2011) finding that active engagement on SM can enhance emotional resilience and promote social connectedness. In contrast, passive SMU has been found to be consistently linked to maladaptive ER strategies. This also aligns with past research linking maladaptive ER patterns to negative social comparisons and emotional contagion (Verduyn et al., 2017).

However, these findings also raise a question about the directionality in this relationship. It is thus not yet clear whether a tendency to use maladaptive ER is a cause of SMU or if predispositions of maladaptive ER led individuals to use SMU maladaptively. This knowledge gap is central to the question of whether ER is a moderator or a mediator in the SMU, ER, MWB relationship. The reviewed studies largely emphasize that SMU influences ER strategies which assumes that SMU drives changes in ER behaviours (Kang et al., 2023). For example, the reported link between passive SMU and rumination or suppression suggests that these maladaptive ER strategies arise in a response to SMU. It is however reasonable that individuals with preexisting emotion dysregulation issues are more inclined to engage with passive SMU, using it as a short-term way to regulate their emotions. This would indicate ER

to be a moderator rather than a mediator, amplifying the emotional consequences of passive SMU while limiting potential benefits.

Moreover, the bidirectional nature of the relationship between SMU and ER adds further complexion to the moderation, mediation discussion. For example, rumination that is triggered by passive SMU may worsen emotional distress, creating a reinforcing cycle where maladaptive ER strategies both shape and are shaped by SMU behaviours. This reinforcing cycle aligns with findings from studies such as Verduyn et al. (2017), demonstrating that passive SMU fosters negative social comparison and emotional contagion, and Myruski et al. (2019), which demonstrated how maladaptive ER strategies like suppression can perpetuate negative emotional outcomes over time.

### **Demographic and Contextual Variables**

Many included studies focused on adolescents and young adults, suggesting unique vulnerabilities during these developmental stages (Twenge et al., 2018). Reliance on maladaptive ER (e.g., rumination) and heightened sensitivity to peer feedback often place adolescents at greater risk for negative consequences of SMU (Schäfer et al., 2017; Zhou et al., 2020). Gender patterns also arose; adolescent girls, for example, were found to engage in more rumination following negative SM interactions, consistent with Nolen-Hoeksema's (2012) findings that females tend to internalize stressors.

These results point to a developmental lens: while adolescents may benefit from certain SMU features, they are also more susceptible to emotional harm if they lack effective ER strategies. Yet, without studies comparing other age groups, it remains unclear whether such vulnerabilities are adolescent-specific or more universal.

### **Theoretical Implications**

The findings of this systematic review have significant implications for the relationship between Social Media Use (SMU), Emotion Regulation (ER) and Mental Wellbeing (MWB). ER has been found to be a critical moderator and mediator of this relationship and thus this study expands previous frameworks to introduce new perspectives to the existing literature.

### ***Models of Emotion Regulation***

The current study builds on the framework of emotion regulation formulated by Gross's (1998) and extends it by introducing a digital context. Adaptive strategies such as cognitive reappraisal have shown to be protective mechanisms against negative emotional outcomes which is consistent with Gross's model of ER. However, the results also suggest that SMU can foster maladaptive ER strategies like rumination or suppression, implying that

digital environment such as SM may uniquely exacerbate emotional vulnerabilities. Here SMU plays the role of a digital extension of traditional ER models and may be important for understanding how individuals regulate their emotions in the digital age.

Several included studies used the concept of Digital Emotion regulation (Digital ER) synonymously with SMU. In this context, SMU is viewed as a tool to regulate emotions. This equivalence between SMU and Digital ER has important implications, suggesting that SMU is not only an external influence on emotion regulation, but may be deeply integrated into people's regulatory processes and ER capabilities (Faelens et al., 2021; Scott et al., 2023). This is also supported by the clear influence SMU had in the results of this study depending heavily on the type of engagement and the platforms feature focus for design. Platforms promoting passive use may thus contribute to increasing the risk for PSMU and emotional distress while platforms promoting active engagement promote the growth of adaptive ER strategies leading to positive outcomes (Scott et al., 2023; Muth et al., 2023). Recognizing this deep integration in the people's capability to emotionally regulate and dual potential of SMU's influence is critical for future interventions and mental health outcomes of SM users.

### ***The Reinforcing Cycle of SMU, ER, and MWB***

A critical implication of the findings is the identification of a self-reinforcing cycle involving SMU, ER, and MWB. This aligns with earlier work by Nesi and Prinstein (2015) and Marino et al. (2018), who describe reciprocal relationships where maladaptive SMU exacerbates emotional distress, which in turn promotes further reliance on maladaptive SMU behaviours. Similarly, Keles et al. (2020) and Twenge et al. (2018) underscore how such cycles may explain broader trends in declining mental health linked to social media use. Maladaptive ER strategies, such as rumination and suppression, not only amplify the negative emotional consequences of SMU but also increase reliance on SMU as a coping mechanism, perpetuating a cycle of emotional distress. For instance, negative interactions or curated content on social media can trigger maladaptive ER responses, which then leads individuals to engage in further SMU to alleviate emotional discomfort (Nesi et al., 2017). While this behaviour may provide temporary relief, it often results in greater emotional dysregulation and poorer mental health outcomes over time (Marino et al., 2018). This cyclical pattern underscores the complex interplay between SMU as both a cause and consequence of ER difficulties.

The cycle further reinforces the importance of platform design in shaping users' emotional experiences. Platforms fostering passive consumption or promoting idealized content may inadvertently trap users in this maladaptive loop, whereas platforms encouraging

supportive and active engagement have the potential to mitigate these effects. Recognizing the cyclical relationship among SMU, ER, and MWB offers critical insights into the broader dynamics of digital well-being and highlights the importance of a multidimensional approach to breaking this harmful pattern.

### **Practical Implications**

The results of this study bring important practical implications into awareness. This is related to promoting healthier SMU, improving ER skills and enhancing MWB especially in adolescents and young adults. SMU being emerging as a dual factor thus underscores the need for targeted interventions and changes regarding platforms and systemic support. Given the high prevalences of maladaptive ER strategies, educational interventions aiming to teach adaptive strategies like cognitive appraisal or mindfulness may prove crucial for the younger generation. This may help individuals better manage the emotional challenges associated with SMU. One example of such an intervention is digital literacy training. Digital literacy training emphasizes the risks of passive use and encourages mindful and intentional engagement with social media (Livingstone & Helsper, 2007). It could empower users to recognize harmful patterns, such as excessive comparisons or compulsive scrolling (Howard et al., 2021; Livingstone & Helsper, 2022). These interventions can be integrated into school curricula and mental health programs to provide adolescents with the tools needed to lower emotional risks.

The results highlight the role of platform-specific features in shaping ER and MWB. Platforms that prioritize active and meaningful engagement promote positive outcomes while passive use promotion is linked to negative outcomes (Verduyn et al., 2017). Developers and policymakers should consider implementing design changes to promote healthier interactions, such as personalized usage prompts, limiting exposure to idealized content, restricting access to sensitive content, or encouraging breaks from prolonged scrolling (Binns et al., 2021). Features that provide users with greater control over their content and interactions, such as curated “well-being modes,” could further reduce the emotional burden of SMU (Binns et al., 2021).

While addressing practical interventions it is important to consider recent developments in governmental efforts. For instance, the Australian government recently introduced the “Australian Online Safety act 2021” which is designed to implement measures to protect Australia’s young population from the negative effects of SMU. Measures include parental consent for platform use under the age of 16, mandatory age verification for SM platforms, and the introduction of penalties for non-compliance (Australian Government,



2021). While this legislation is primarily aimed at safety, it also aligns with this review for the goal of reducing the negative impact of SMU thus reducing emotional distress in adolescents. General implementation of such measures internationally could help to address the vulnerabilities identified in this review creating more protection for adolescents.

Practical efforts should also focus on disrupting the self-reinforcing cycle between maladaptive ER, SMU, and declining MWB. Interventions that encourage active engagement and offer alternative coping strategies, such as peer support programs or mindfulness-based therapy, may help individuals break this cycle (Keles et al., 2020). By fostering emotional awareness and adaptive coping, these approaches can reduce dependence on social media for short-term relief and improve long-term emotional well-being (Neumann et al., 2010).

### **Strengths**

The current review has several strengths contributing to the understanding of the relationship between (SMU), (ER), and (MWB). First, this review included studies of different designs including longitudinal, experience sampling methods (ESM), and cross-sectional surveys attempting to provide a broad and detailed perspective on the present relationship. Also, this review focused on a specific age group being adolescents and young adults which seems to be particularly vulnerable to the influences of SMU. Therefore, the current review addresses a critical age period where ER strategies are still forming. Additionally, Platform specific, demographic and neural factors add depth to the analysis offering a multidimensional understanding of the present relationship. Especially the inclusion of neural variables such as frontoparietal connectivity present a novel perspective strengthening the understanding of the relationship between SMU and ER.

### **Limitations**

Next to strengths of the review, it is also important to consider its limitations. In the included studies there were several using cross-sectional methodologies, which limit the ability to establish causal relationships and clear establishment of moderation or mediation effects. Without more longitudinal data, it remains unclear whether SMU drives changes in ER strategies or whether preexisting ER vulnerabilities amplify SMU's effects. Also, the heavy use of self-report questionnaires may bring about biases such as recall bias or social desirability effects. Although a strength of the review, the narrow focus on a specific age group brings about less generalizability for the general population and thus also poses a limitation. The samples focus on western populations also decreases generalizability to other cultures. Additionally, some of the included studies only had small sample sizes or limited longitudinal timelines which reduces the methodological robustness of their findings and the

ability to capture long-term impacts. While platform specific factors were explored, the review mainly focused on platforms like Instagram and Facebook, with less attention given to newer platforms like TikTok or snapchat. Beyond the constraints identified in the included studies, this review itself carries a few methodological limitations. First, the search and inclusion criteria may not capture all relevant SMU–ER–MWB literature, especially if certain databases or non-English publications were excluded, potentially introducing selection bias. Second, given the variety of research designs, no formal meta-analysis was conducted; consequently, the findings provide a narrative rather than an aggregated effect size across studies. Lastly, although multiple study designs were included (e.g., cross-sectional, longitudinal), the lack of uniform quality assessment or risk-of-bias evaluation for each study might limit the certainty of the conclusions drawn. These limitations show the need for further research to address these limitations and research gaps, thus strengthening the evidence base.

### **Future Directions**

Future studies should focus on the limitation of this review and expand on the insights gained. Longitudinal or experimental research will be essential to establish causality between the variables and advance understanding of the current relationship. This may be especially important for the clarification whether SMU drives changes in ER strategies or if preexisting ER vulnerabilities shape SMU behaviours. This would also provide insight into potential reinforcing cycles and enable researchers to explore the SMU, ER and MWB relationship over time. Expanding the sample to include broader age ranges and more cultural contexts will bring more generalizability of the findings and enable comparisons across demographics. Furthermore, exploring the influences of newer platforms such as TikTok or Snapchat could provide insights into unique platform features and affordances shaping social media behaviours and its psychological influences. These platforms have a higher focus on short form content and algorithm driven content which may pose distinct influences on SMU behaviours and their moderation or mediation effects MWB.

Additionally, future research should explore the different influences of passive versus active SM use. This may be particularly important in vulnerable demographics like adolescents and young adults. The expansion on factors like neural connectivity connected to SMU and ER may also deepen understanding of the relationship and potential causality. Digital interventions should also be developed and tested to address maladaptive SMU behaviors, such as rumination and compulsive scrolling, and to promote adaptive ER strategies. Finally, fostering interdisciplinary collaboration between researchers, educators,

mental health professionals, and social media developers will be crucial for creating holistic strategies that prioritize user well-being in the digital age.

## **Conclusion**

This review explores the complex relationship between SMU, ER and MWB in adolescence and young adults. By systematically reviewing 12 studies this review highlights the dual role of ER as both a mediator and moderator, revealing how SMU behaviours can lead to positive and negative emotional outcomes depending on individual, contextual and platform specific factors. Adaptive ER strategies emerged as a protective buffer, mediating the influence of SMU on MWB by fostering emotional resilience and constructive SM engagement. Maladaptive ER strategies emerged as a mediator for the negative effects of SMU, leading to a reinforcing cycle of emotional distress and problematic SMU. This cyclic relationship emphasizes the importance of addressing not only immediate effects of SMU but also long-term patterns which may sustain these outcomes. The perspective of ER as a moderator adds further complexity to this discussion. Here individual capacities, gender differences and platform specific features influence whether SMU amplifies emotional wellbeing or exacerbates distress. Additionally, factors such as neural connectivity provide promising pathways to understand individual differences in the current relationship.

Despite its strengths the review highlights some key limitations including the reliance on cross sectional studies, self-report measures, and culturally homogenous samples. These limitations impose future research to use longitudinal or experimental designs, more diverse cultural samples and studies on newer platforms to build a more comprehensive understanding of the SMU, ER and MWB relationship. The findings of this study also carry significant practical implications, calling for digital literacy interventions, incorporating mindfulness training and the promotion of adaptive ER strategies. This may lead at risk groups to such as adolescents to engage with SM more intentionally and constructively leading to more positive outcomes. These implications also call for the involvement of platform developers to collaborate in designing platforms that encourage meaningful interactions while mitigating the risks of passive SMU.

Finally, this review points to a multidimensional approach to better understand and address the impacts of SMU. Vulnerable groups may be better protected by encouraging change through healthier social media habits and enhancing ER capabilities in the ever increasingly digital landscape.

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## References

- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). *Emotion-regulation strategies across psychopathology: A meta-analytic review*. *Clinical Psychology Review, 30*(2), 217–237. <https://doi.org/10.1016/j.cpr.2009.11.004>
- Baum, F., Newman, L., & Biedrzycki, K. (2013). *Vicious cycles: Digital technologies and determinants of health in Australia*. *Health Promotion International, 29*(2), 349–360. <https://doi.org/10.1093/heapro/dat059>
- Baumgartner, S. E., Weeda, W. D., van der Heijden, L. L., & Huizinga, M. (2014). *The relationship between media multitasking and executive function in early adolescents*. *Journal of Early Adolescence, 34*(8), 1120–1144. <https://doi.org/10.1177/0272431614523133>
- Battaglini, A. M., Rnic, K., Jopling, E., Tracy, A., & LeMoult, J. (2024). *Communication modality matters: Co-rumination via in-person versus digital modalities has different prospective associations with depression and friendship quality*. *Journal of Adolescence, 96*, 645–658. <https://doi.org/10.1002/jad.12289>
- Bazarova, N. N., Choi, Y. H., Schwanda Sosik, V., Cosley, D., & Whitlock, J. (2017). *Social sharing of emotions on Facebook: Channel differences, satisfaction, and replies*. *Computers in Human Behavior, 73*, 24–30. <https://doi.org/10.1016/j.chb.2017.03.030>
- Casale, S., & Fioravanti, G. (2015). *Satisfying needs through social networking sites: A pathway towards problematic Internet use for socially anxious people?* *Addictive Behaviors Reports, 1*, 34–39. <https://doi.org/10.1016/j.abrep.2015.03.008>
- Casale, S., Fioravanti, G., & Rugai, L. (2016). *Grandiose and vulnerable narcissists: Who is at higher risk for social networking addiction?* *Cyberpsychology, Behavior, and Social Networking, 19*(8), 510–515. <https://doi.org/10.1089/cyber.2016.0189>
- Cauberghe, V., Van Wesenbeeck, I., De Jans, S., Hudders, L., & Ponnet, K. (2021). *How adolescents use social media to cope with feelings of loneliness and anxiety during COVID-19 lockdown*. *Cyberpsychology, Behavior, and Social Networking, 24*(4), 250–257. <https://doi.org/10.1089/cyber.2020.0478>
- Cutuli, D. (2014). *Cognitive reappraisal and expressive suppression strategies role in emotion regulation: An overview on their modulatory effects and neural correlates*. *Frontiers in Systems Neuroscience, 8*, 175. <https://doi.org/10.3389/fnsys.2014.00175>
- Ekşi, F. (2019). *The mediating role of social media disorder in the relationship of experiential avoidance with psychological symptoms*. *Addicta: The Turkish Journal on Addictions, 6*(3), 497–507. <https://doi.org/10.15805/addicta.2019.6.3.0025>

Faelens, L., Hoorelbeke, K., Soenens, B., Van Gaeveren, K., De Marez, L., & Koster, E. H. W. (2021). *Social media use and well-being: A prospective experience-sampling study*. *Computers in Human Behavior*, 114, 106510. <https://doi.org/10.1016/j.chb.2020.106510>

Gentzler, A. L., Oberhauser, A. M., Westerman, D., & Nadorff, D. K. (2011). *College students' use of electronic communication with parents: Links to loneliness, attachment, and relationship quality*. *Cyberpsychology, Behavior, and Social Networking*, 14(1–2), 71–74. <https://doi.org/10.1089/cyber.2009.0409>

Gioia, F., Griffiths, M. D., Boursier, V., & Cipolletta, S. (2021). *The effects of the COVID-19 lockdown on problem internet use among adolescents and young adults*. *Journal of Behavioral Addictions*, 9(4), 1–11. <https://doi.org/10.1556/2006.2020.00053>

Giordano, A. L., Schmit, M. K., & McCall, J. (2023). *Exploring adolescent social media and internet gaming addiction: The role of emotion regulation*. *Journal of Addictions & Offender Counseling*, 44(1), 69–80. <https://doi.org/10.1002/jaoc.12116>

Gross, J. J. (1998). *The emerging field of emotion regulation: An integrative review*. *Review of General Psychology*, 2(3), 271–299. <https://doi.org/10.1037/1089-2680.2.3.271>

Gross, J. J., & John, O. P. (2003). *Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being*. *Journal of Personality and Social Psychology*, 85(2), 348–362. <https://doi.org/10.1037/0022-3514.85.2.348>

Heffer, T., Good, M., Daly, O., MacDonell, E., & Willoughby, T. (2019). *The longitudinal association between social-media use and depressive symptoms among adolescents and young adults: An empirical reply to Twenge et al. (2018)*. *Clinical Psychological Science*, 7(3), 462–470. <https://doi.org/10.1177/2167702618812727>

Hoglund, E. (2019). *Social media use and emotion regulation: A study of the relationship between social media use and emotion regulation difficulties in young adults*. *Cyberpsychology, Behavior, and Social Networking*, 22(5), 327–332. <https://doi.org/10.1089/cyber.2018.0415>

Hormes, J. M., Kearns, B., & Timko, C. A. (2014). *Craving Facebook? Behavioral addiction to online social networking and its association with emotion regulation deficits*. *Addiction*, 109(12), 2079–2088. <https://doi.org/10.1111/add.12713>

Iwanski, A., & Zimmermann, P. (2014). *Emotion regulation from early adolescence to emerging adulthood and middle adulthood: Age differences, gender differences, and emotion-specific developmental variations*. *International Journal of Behavioral Development*, 38(2), 182–194. <https://doi.org/10.1177/0165025413515405>

John, O. P., & Gross, J. J. (2004). *Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development*. *Journal of Personality*, 72(6), 1301–1334. <https://doi.org/10.1111/j.1467-6494.2004.00298.x>

Kang, Y., Ahn, J., Cosme, D., Mwilambwe-Tshilobo, L., McGowan, A., Zhou, D., Boyd, Z. M., Jovanova, M., Stanoi, O., Mucha, P. J., Ochsner, K. N., Bassett, D. S., Lydon-Staley, D., & Falk, E. B. (2023). *Frontoparietal functional connectivity moderates the link between time spent on social media and subsequent negative affect in daily life*. *Scientific Reports*, 13, 20501. <https://doi.org/10.1038/s41598-023-46040-z>

Kilic, Z., McKone, K. M. P., Stout, C. D., Grad-Freilich, M. J., Ladouceur, C. D., Choukas-Bradley, S., & Silk, J. S. (2024). *Overthinking over screens: Girls ruminate more after negative social media interactions with peers compared to in-person interactions*. *Affective Science*. <https://doi.org/10.1007/s42761-024-00258-w>

Koole, S. L. (2009). *The psychology of emotion regulation: An integrative review*. *Cognition and Emotion*, 23(1), 4–41. <https://doi.org/10.1080/02699930802619031>

Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., ... & Ybarra, O. (2013). *Facebook use predicts declines in subjective well-being in young adults*. *PLOS ONE*, 8(8), e69841. <https://doi.org/10.1371/journal.pone.0069841>

Iannattono, S., Mezzalana, S., Bottesi, G., Gatta, M., & Miscioscia, M. (2024). *Emotion dysregulation and psychopathological symptoms in non-clinical adolescents: The mediating role of boredom and social media use*. *Child and Adolescent Psychiatry and Mental Health*, 18, 5. <https://doi.org/10.1186/s13034-023-00700-0>

MacKenzie, L. E., Goodwin, B., & Messing, S. B. (2022). *Social media use and social connectedness in adolescents: The positives and the potential pitfalls*. *Journal of Adolescent Health*, 70(3), 483–486. <https://doi.org/10.1016/j.jadohealth.2021.10.022>

Marino, C., Gini, G., Vieno, A., & Spada, M. M. (2018). *The associations between problematic Facebook use, psychological distress, and well-being among adolescents and young adults: A systematic review and meta-analysis*. *Journal of Affective Disorders*, 226, 274–281. <https://doi.org/10.1016/j.jad.2017.10.007>

Mesquita, B., & Boiger, M. (2014). *Emotions in context: A sociocultural model of emotion regulation*. *European Psychologist*, 19(3), 126–136. <https://doi.org/10.1027/1016-9040/a000189>

Muth, L., Leven, K.-H., Moll, G., Kratz, O., & Horndasch, S. (2022). *Effects of the COVID-19 restrictions on eating behaviour and eating disorder symptomology in female*

adolescents. *International Journal of Environmental Research and Public Health*, 19(14), 8480. <https://doi.org/10.3390/ijerph19148480>

Myruski, M., Gulyayeva, O., Miles, M., & Dennis-Tiwary, T. A. (2019). The role of emotion regulation strategies in moderating the relationship between Facebook use and negative emotional outcomes. *Journal of Youth Studies*, 22(5), 578–591.

<https://doi.org/10.1080/13676261.2019.1622816>

Myruski, S., Quintero, J. M., Deneffrio, S., & Dennis-Tiwary, T. A. (2020). Through a screen darkly: Use of computer-mediated communication predicts emotional functioning. *Psychological Reports*, 123(6), 2305–2332. <https://doi.org/10.1177/0033294119859779>

Nesi, J., Miller, A. B., & Prinstein, M. J. (2017). Adolescents' depressive symptoms and subsequent technology-based interpersonal behaviors: A multi-wave study. *Journal of Applied Developmental Psychology*, 51, 12–19. <https://doi.org/10.1016/j.appdev.2017.02.002>

Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science*, 3(5), 400–424. <https://doi.org/10.1111/j.1745-6924.2008.00088.x>

Rasmussen, E. E., Punyanunt-Carter, N., LaFreniere, J. R., Norman, M. S., & Kimball, T. G. (2020). The serially mediated relationship between emerging adults' social media use and mental well-being. *Computers in Human Behavior*, 102, 206–213.

<https://doi.org/10.1016/j.chb.2019.08.019>

Sagioglou, C., & Greitemeyer, T. (2014). Facebook's emotional consequences: Why Facebook causes a decrease in mood and why people still use it. *Computers in Human Behavior*, 35, 359–363. <https://doi.org/10.1016/j.chb.2014.03.003>

Schäfer, J. O., Naumann, E., Holmes, E. A., Tuschen-Caffier, B., & Samson, A. C. (2017). Emotion regulation strategies in depressive and anxiety symptoms in youth: A meta-analytic review. *Journal of Youth and Adolescence*, 46(2), 261–276.

<https://doi.org/10.1007/s10964-016-0585-0>

Scott, R. A., Zimmer-Gembeck, M. J., Gardner, A. A., Hawes, T., Modecki, K. L., Duffy, A. L., Farrell, L. J., & Waters, A. M. (2023). Daily use of digital technologies to feel better: Adolescents' digital emotion regulation, emotions, loneliness, and recovery, considering prior emotional problems. *Journal of Adolescence*, 96, 539–550.

<https://doi.org/10.1002/jad.12259>

Shensa, A., Escobar-Viera, C. G., Sidani, J. E., Bowman, N. D., Marshal, M. P., & Primack, B. A. (2018). Problematic social media use and depressive symptoms among U.S.



young adults: A nationally-representative study. *Social Science & Medicine*, 197, 123–131.  
<https://doi.org/10.1016/j.socscimed.2017.11.033>

Thompson, R. A. (1994). *Emotion regulation: A theme in search of definition*. *Monographs of the Society for Research in Child Development*, 59(2-3), 25–52.

Twenge, J. M., Martin, G. N., & Spitzberg, B. H. (2018). Trends in U.S. adolescents' media use, 1976–2016: The rise of digital media, the decline of TV, and implications for emotion regulation. *Psychological Bulletin*, 144(8), 800–829.  
<https://doi.org/10.1037/bul0000150>

Verduyn, P., Ybarra, O., Résibois, M., Jonides, J., & Kross, E. (2017). Do social network sites enhance or undermine subjective well-being? A critical review. *Social Issues and Policy Review*, 11(1), 274–302. <https://doi.org/10.1111/sipr.12033>

Vannucci, A., Flannery, K. M., & McCauley Ohannessian, C. (2017). Social media use and anxiety in emerging adults. *Journal of Affective Disorders*, 207, 163–169.  
<https://doi.org/10.1016/j.jad.2016.08.040>

Wadley, G., Vetere, F., Hopkins, L., Green, J., & Kulik, L. (2020). Exploring ambient technology for connecting hospitalised children with school and home. *International Journal of Human-Computer Studies*, 136, 102377. <https://doi.org/10.1016/j.ijhcs.2019.102377>

Wartberg, L., Thomasius, R., & Paschke, K. (2021). The relevance of emotion regulation, procrastination, and perceived stress for problematic social media use in a representative sample of children and adolescents. *Computers in Human Behavior*, 121, 106788. <https://doi.org/10.1016/j.chb.2021.106788>

Webb, T. L., Miles, E., & Sheeran, P. (2012). Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological Bulletin*, 138(4), 775–808. <https://doi.org/10.1037/a0027600>

Wegmann, E., Stodt, B., & Brand, M. (2015). Addictive use of social networking sites can be explained by the interaction of users' expectations and self-regulation. *Frontiers in Human Neuroscience*, 9, 478. <https://doi.org/10.3389/fnhum.2015.00478>

Zimmermann, P., & Iwanski, A. (2014). Emotion regulation from early adolescence to emerging adulthood and middle adulthood: Age differences, gender differences, and emotion-specific developmental variations. *International Journal of Behavioral Development*, 38(2), 182–194. <https://doi.org/10.1177/0165025413515405>

Zimmer-Gembeck, M. J., & Skinner, E. A. (2011). The development of coping: Implications for psychopathology and resilience. *Developmental Psychology*, 48(3), 575–583. <https://doi.org/10.1037/a0024118>

Zhou, L., Zhang, Q., Yang, L., & Wu, H. (2020). *The relationship between social media use and depression: A meta-analysis*. *PLOS ONE*, 15(12), e0243297.  
<https://doi.org/10.1371/journal.pone.0243297>