

Social Media Rumination as the Missing Link Between Online Activity and Anxiety in Socioeconomically Disadvantaged Adolescents: An Integrative Review and Conceptual Model for the United Kingdom

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How to cite this article:

Umar, F. (2025). Social Media Rumination as the Missing Link Between Online Activity and Anxiety in Socioeconomically Disadvantaged Adolescents: An Integrative Review and Conceptual Model for the United Kingdom. *Journal of Excellence in Social Sciences*, 4(2), 62–78.

Received: 7 May 2025 / Accepted: 11 November 2025 / Published online: 27 Dec 2025

Abstract

Although the use of social media is almost universal among adolescents in the United Kingdom, evidence regarding the link between social media use and anxiety has been inconsistent, indicating that psychological processes related to the use of social media may be more important than the time spent online. This integrative review seeks to explore the social media rumination process, which involves rethinking one's own posts and others' posts, as well as expected social outcomes, as a mechanism that connects social media use to adolescent anxiety, specifically for socioeconomically disadvantaged youth. The review builds on the transdiagnostic model of repetitive negative thinking, evidence from clinical psychology, developmental science, and affordance-based perspectives. Current evidence supports that rumination is a transdiagnostic risk factor for adolescent anxiety; and emerging cross-sectional, longitudinal and mixed studies provide evidence that social media rumination may act as a mediator between social media use and psychological distress. Qualitative research also reveals that adolescents often use social media as an evaluative and performative space in which they expect to receive reactions from others such as peers, friends, and family. These processes are likely to be exacerbated by socioeconomic disadvantage, which can result in chronic stress, reduced offline sources of belonging, and increased reputational concerns. It is suggested that an integrative model could be proposed in which social media rumination could account for the connections between social media use and anxiety, focusing on ruminative engagement instead of screen time in future research and prevention.

Keywords: social media rumination; anxiety; adolescents; socioeconomic disadvantage; United Kingdom; Response Styles Theory; repetitive negative thinking; integrative review

1 Introduction

Few questions in developmental science have attracted as much public attention as whether social

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media is harming young people's mental health. In the United Kingdom, online life is close to universal: Ofcom's (2025) annual survey of children's media use shows that nearly all children and adolescents go online, and that ownership of personal devices and social media profiles rises sharply in the transition to secondary school. At the same time, national surveillance continues to record a high prevalence of probable mental disorders among children and young people in England, with emotional difficulties, including anxiety, forming the largest share (NHS England, 2023). School-based screening of more than 28,000 adolescents in England similarly found that around two in five scored above thresholds for emotional or behavioural difficulties (Deighton et al., 2019), and cohort comparisons indicate that emotional problems have risen among recent generations of UK adolescents (Patalay & Gage, 2019). It is unsurprising that these two trends have been read together, and early population-level analyses reported that rising adolescent distress coincided with the spread of smartphones and social media (Twenge et al., 2018), and a systematic review concluded that time spent on social media, activities undertaken online, investment in social media and addictive use were all correlated with depression, anxiety and psychological distress in adolescents (Keles et al., 2020).

The evidence actually tells another more complex story, however. Recent large-scale analyses of adolescent cohort's report that the overall links between digital technology use and wellbeing is small but negative (Orben & Przybylski, 2019), and umbrella reviews of the literature indicate that the literature shows inconsistent findings, a lack of consensus regarding how to measure the phenomenon, and excessive use of crude measures of time spent online (Odgers & Jensen, 2020; Valkenburg et al., 2022). The UK Chief Medical Officers agreed, stating that there was not enough evidence to conclude there was a causal link between screen time and mental health issues (Davies et al., 2019). Self-reported and logged digital media use are only moderately correlated (Parry et al., 2021), and estimates of use are themselves unreliable. However, when the same adolescents are studied intensively, there are some who experience a decrease in wellbeing as a result of their social media presence, others who experience an increase, and for the majority, there is no significant shift in wellbeing at all (Beyens et al., 2020). There are also indications that sensitivity to social media use differs as a function of developmental stage; in the UK, data indicate that social media use peaks in early adolescence and that this is predictive of lower life satisfaction during the late teens and 20s (Orben et al., 2022). The scientific question has now become not so much what is the harm in using social media, but when, for whom and how is it harmful.

One of the most hopeful solutions, this article suggests, is a cognitive mechanism that adolescents often report – but research only recently started quantifying – one social media rumination. One of the strongest predictors of internalising symptoms during adolescence is rumination, which is the repetitive and passive focus on negative feelings, their causes and their consequences (McLaughlin & Nolen-Hoeksema, 2011; Nolen-Hoeksema, 2000; Nolen-Hoeksema et al., 2008). Social media rumination is a form of this thinking that is experienced in online life. It reflects the adolescent who reads a post 12 times, continually checks who has responded to their post, is concerned with the meaning of a peer's comment, or replays a post by a friend and compares it with their own (Lannin et al., 2025; Parris et al., 2020). It would account for the weak average associations and significant individual differences that are typical of social media if this type of thinking is what connects social media to anxiety, and not exposure itself.

A second gap concerns who has been studied. Research on adolescent social media use has drawn disproportionately on relatively advantaged samples, even though socioeconomic disadvantage is one of the most consistent predictors of mental health problems in childhood and adolescence (Evans, 2004; Reiss, 2013) and subjective social status is itself associated with adolescent health (Quon & McGrath, 2014). Access to platforms may now be close to equal, but experiences on them are not. Adolescents who perceive their family as less well off report more negative experiences on social media, and these experiences are associated with poorer mental health

(Skogen et al., 2022). For young people who face chronic stress and fewer offline opportunities for recognition and belonging, the evaluative pressures of social media may carry higher stakes.

The United Kingdom offers a particularly important context for this question. Longitudinal analyses of UK cohorts have linked heavier social media use to later mental health difficulties, with pathways running through experiences such as online harassment, poor sleep and low self-esteem (Kelly et al., 2018; Plackett et al., 2023; Viner et al., 2019), and short-term UK survey data link night-time social media use to poorer sleep, higher anxiety and lower self-esteem (Woods & Scott, 2016). Gender differences in the association between social media interaction and wellbeing emerge early in adolescence (Booker et al., 2018), and health inequalities by deprivation in England have widened over the past decade (Marmot et al., 2020). The regulatory environment has also changed, with the Online Safety Act 2023 placing new duties on platforms to protect children. Yet UK research has rarely examined the cognitive processes that might explain these associations, and even more rarely among adolescents living in disadvantage.

The aim of this integrative review is to bring these strands together. Specifically, we address three questions. First, what is social media rumination, and how does it relate to established theories of rumination and anxiety? Second, what does current evidence say about social media rumination as a mechanism linking social media use to anxiety in adolescents? Third, why might this pathway be especially relevant for socioeconomically disadvantaged adolescents, and what would a UK research and practice agenda built on it look like? We answer these questions by synthesising the literature, proposing an integrative conceptual model with testable propositions, and setting out implications for theory, practice and policy.

2. Method of the Review

We adopted an integrative, theory-driven narrative review design. This approach is suited to research areas in which the relevant evidence is spread across disciplines, uses varied designs, and is not yet numerous enough to support meta-analysis (Whitemore & Knafl, 2005). Following Grant and Booth's (2009) typology, the review is best described as a critical review, in that its goal is to evaluate and integrate existing evidence into a new conceptual model rather than to summarise it exhaustively. Our purpose was not to estimate a pooled effect but to build and justify a conceptual model that can guide future empirical work.

Literature was identified through searches of PsycINFO, PubMed, Scopus and Google Scholar using combinations of the terms social media, social networking, online activity, rumination, repetitive negative thinking, worry, anxiety, internalising, adolescent, youth, socioeconomic, deprivation and United Kingdom, supplemented by backward and forward citation tracking of key papers. We prioritised peer-reviewed empirical studies of adolescents aged 10 to 19 years, systematic and umbrella reviews, foundational theoretical papers on rumination, and authoritative UK sources on adolescent media use and mental health. Studies of adult or university samples were included only where they tested mechanisms directly relevant to the model. Evidence was organised thematically around the three review questions and then integrated into the model presented in Section 6.

3. Conceptual Foundations

3.1 Rumination and Response Styles Theory

Response Styles Theory proposes that the way people respond to low mood shapes how long and how severe that mood becomes (Nolen-Hoeksema, 1991). A ruminative response involves repeatedly and passively focusing on one's distress and its possible causes and consequences, rather than taking action to solve the problem or shifting attention elsewhere (Nolen-Hoeksema & Morrow, 1993). Rumination prolongs negative affect, magnifies negative interpretations, impairs problem solving and erodes social support (Nolen-Hoeksema et al., 2008). Although the theory was first developed to explain depression, later work has shown that rumination is equally relevant to anxiety. A multimodal meta-analysis found that rumination is associated with anxiety symptoms at a magnitude comparable to its association with depression (Olatunji et al., 2013), and

prospective adolescent data show that rumination predicts later increases in both anxiety and depressive symptoms, while symptoms in turn predict later rumination (McLaughlin & Nolen-Hoeksema, 2011). Rumination also helps explain how stress becomes symptoms: in a longitudinal study of early adolescents, rumination mediated the association between stressful life events and later anxiety as well as depression (Michl et al., 2013).

These findings have led to rumination being understood as one form of repetitive negative thinking, a transdiagnostic process that maintains distress across emotional disorders (Ehring & Watkins, 2008; Watkins, 2008). In anxiety specifically, cognitive models describe how socially anxious individuals engage in anticipatory processing before social events and a detailed post-event review afterwards, both of which keep perceived social threat alive (Clark & Wells, 1995). Repetitive thinking is not always harmful. Watkins (2008) distinguished constructive forms, which are concrete and oriented towards solving problems, from unconstructive forms, which are abstract, evaluative and focused on the self. It is the unconstructive, evaluative variety that predicts poor outcomes, and it is this variety that seems especially easy to trigger online (Watkins & Roberts, 2020).

3.2 Defining social media rumination

Social media rumination refers to repetitive, hard-to-control thinking about one's social media activity, the situations surrounding it and its perceived consequences (Lannin et al., 2025; Parris et al., 2020). It includes thoughts before posting (whether content is good enough, how it will be received), after posting (checking reactions, regretting what was shared, interpreting silence as rejection), and in response to other people's content (comparing oneself with peers' curated images, dwelling on events one was left out of). Recent psychometric work with young adolescents found that the Social Media Rumination Scale separates into two related dimensions: rumination about one's own content and rumination about others' content (Chen et al., 2026). The distinction matters because the two forms may map onto different threats, namely fear of negative evaluation on the one hand and unfavourable social comparison on the other. Social comparison theory holds that people evaluate themselves by comparing with others (Festinger, 1954), and social media makes such comparisons unusually frequent, selective and upward (Vogel et al., 2014). The pre-posting and post-posting forms of social media rumination also closely resemble the anticipatory and post-event processing described in cognitive models of social anxiety (Clark & Wells, 1995).

Social media rumination is distinct from both general rumination and problematic social media use. Unlike general rumination, it is anchored to a specific and constantly available set of cues. Unlike problematic or addictive use, which describes loss of control over behaviour (Andreassen et al., 2017), it describes a style of thinking. Social media rumination is also related to, but distinct from, fear of missing out, the pervasive worry that others are having rewarding experiences from which one is absent (Przybylski et al., 2013), which has itself been linked to anxiety and problematic smartphone use (Elhai et al., 2016). An adolescent can use social media heavily without ruminating, or lightly while ruminating intensely. This makes it a plausible candidate for explaining why similar levels of use produce very different outcomes.

3.3 Why adolescence is a period of heightened vulnerability

Adolescence is a period in which peer acceptance, social status and identity become central concerns, and in which sensitivity to social evaluation is heightened (Blakemore & Mills, 2014; Somerville, 2013). Peer feedback carries particular weight at this age: in a neuroimaging study, adolescents were more likely to like photographs that appeared to have received many likes from peers, and viewing their own photographs with many likes activated reward-related brain regions (Sherman et al., 2016). Social media transforms the peer context in ways that intensify these concerns. Nesi et al. (2018) describe how features such as the permanence of content, the size and visibility of audiences, the availability of quantifiable feedback and the visual nature of communication change the frequency, immediacy and meaning of ordinary peer experiences (see also Moreno & Uhls, 2019). Adolescents who use social media to seek out feedback and make social comparisons report more depressive symptoms, especially for those who are already

vulnerable (Nesi & Prinstein, 2015). There is an additional layer of apparent appearance-focused platforms; adolescents who are high on the sensitivity of how they appear in images report higher levels of body dissatisfaction and distress (Choukas-Bradley et al., 2020), and experimental research indicates that when adolescents view brief images of peers' social media profiles, they become more appearance concerned and distressed (Fardouly et al., 2015). All of these provide opportunities for repetitive evaluative thinking, and all of these are exaggerated during the developmental period when adolescents have the least resources for removing themselves from the evaluative thought.

4. Evidence Synthesis: Social Media Use, Rumination and Anxiety

4.1 Social media use and anxiety: small, heterogeneous associations

Systematic reviews consistently report associations between social networking and both depression and anxiety, but they also emphasise that the quality of interactions, the type of activity and individual factors such as rumination shape whether these associations are positive or negative (Seabrook et al., 2016). Adolescents themselves describe both helpful uses, such as seeking support and entertainment, and harmful ones, such as comparison and exposure to conflict (Radovic et al., 2017), and social networking can build social capital as well as undermine wellbeing (Ellison et al., 2007). Distinctions between active and passive use have proved less clear-cut than once assumed, and newer models suggest that the effects of passive browsing depend on whether it triggers upward social comparison and envy or, conversely, inspiration (Verduyn et al., 2017, 2022). Experience-sampling data from young adults showed that Facebook use predicted subsequent declines in momentary wellbeing (Kross et al., 2013), whereas a short experimental reduction in social media use lowered loneliness and depressive symptoms (Hunt et al., 2018). Social comparison on social media is reliably linked to lower self-esteem (Vogel et al., 2014). Taken together, these findings indicate that exposure alone is a weak predictor and that psychological responses to online content are likely to carry more explanatory weight.

4.2 Social media rumination as a mediating mechanism

Studies with young adults provided the first indications that rumination might be the link. Among young adults, negative social comparison on Facebook was associated with higher depressive symptoms through its association with rumination (Feinstein et al., 2013), and the quality of social networking interactions, rather than their frequency, was associated with depressive symptoms and with both rumination and co-rumination (Davila et al., 2012). Co-rumination, the extensive discussion of problems with a friend, is more common among adolescent girls and is associated with both closer friendships and greater internalising symptoms (Rose, 2002), and messaging platforms offer a continuous channel through which such discussion can take place.

Direct evidence with adolescents has since emerged. Parris et al. (2020) developed a measure of social media rumination and showed that it was associated with bullying, cyberbullying and distress in adolescents. Most relevant to the present review, Lannin et al. (2025) studied 171 adolescents from low-income households in the United States who completed surveys, together with 199 adolescents who took part in focus groups. They found a significant indirect effect of social media use on mental distress through social media rumination ($\beta = 0.14$, 95% CI [0.06, 0.24]). Adolescents who used social media more often reported more rumination about it, and it was this rumination, rather than use itself, that was associated with greater distress. To our knowledge, this is the first mixed-methods study to test the pathway in a socioeconomically disadvantaged adolescent sample, and it provides the empirical starting point for the model developed here.

Longitudinal evidence now strengthens the case that rumination precedes anxiety rather than merely accompanying it. In a two-wave study of 126 early adolescents, both rumination about one's own content and rumination about others' content predicted anxiety symptoms several months later, whereas only rumination about others' content predicted later depression, with no significant gender differences in these associations (Chen et al., 2026). Experimental and daily-life evidence adds a further piece. Adolescent girls reported ruminating more after negative peer

interactions that took place on social media than after comparable interactions in person (Kilic et al., 2024), which suggests that something about the online context makes negative social events harder to let go of.

4.3 Platform affordances: why some contexts invite more rumination

The affordance perspective helps explain why rumination might be triggered more readily online than offline. Content persists and can be revisited endlessly. Feedback is public and countable, so a post that receives few reactions provides a visible record of apparent rejection. Audiences are large and partly invisible, so it is difficult to know who has seen a post or how they judged it (Nesi et al., 2018). Visual and appearance-centred environments place the self on display and invite comparison (Choukas-Bradley et al., 2020). Rather than claiming that any single platform causes anxiety, the more defensible conclusion is that platforms differ in how strongly they combine these features, and that combinations of visibility, permanence, metrics and appearance salience are most likely to provoke repetitive evaluative thinking. What adolescents do on a platform, and how they interpret it, is likely to matter more than which platform they use (Valkenburg et al., 2022).

4.4 Adolescents' own accounts: posting as a performance for close audiences

Qualitative research gives these mechanisms a human texture. In the focus groups reported by Lannin et al. (2025), the reactions of close friends and family were the main considerations shaping what adolescents chose to post. Adolescents in that and similar work describe social media as a space where others present idealised versions of themselves, while they themselves carefully curate what they share. This double position, being critical of others' self-promotion while privately managing one's own image, reflects what boyd (2014) and Marwick and boyd (2011) describe as the problem of networked audiences: because family members, close friends and distant acquaintances all share the same space, young people must imagine how every post will look to every audience at once. Imagining multiple judging audiences before and after each post is, in essence, a recipe for rumination, and closely mirrors the anticipatory and post-event processing that maintains social anxiety (Clark & Wells, 1995).

These accounts also help explain why rumination may translate specifically into anxiety. The content of social media rumination is anticipatory and evaluative: Will people think this is stupid? Why has no one reacted? What did they mean by that? Such questions are directed at future social threat and uncertainty, which are the core concerns of anxiety, rather than at past loss, which is more characteristic of depression. This interpretation is consistent with the longitudinal finding that both forms of social media rumination predicted later anxiety (Chen et al., 2026).

5. Socioeconomic Disadvantage: Why the Pathway May Be Stronger

Children and adolescents from socioeconomically disadvantaged families are two to three times more likely to develop mental health problems than their more advantaged peers (Reiss, 2013), and in English schools deprivation is among the characteristics that most consistently predict mental health difficulties (Deighton et al., 2019). There are at least three reasons to expect that disadvantage also strengthens the pathway from social media use to anxiety through rumination. The first is stress load. Rumination is triggered by negative events and unresolved concerns, and adolescents living in disadvantage typically experience more chronic stressors, from financial strain and housing insecurity to neighbourhood adversity (Evans, 2004). When online evaluative threats arrive on top of these stressors, the capacity to disengage from them may already be depleted. The second is reduced offline buffering. Opportunities for recognition, belonging and identity exploration, such as paid extracurricular activities, travel or stable friendship groups, are less evenly distributed, so social media may carry a larger share of an adolescent's social life and social worth. When more is at stake online, the motive to monitor and re-evaluate what happens there is stronger. The third is unequal online experience. Digital inclusion is graded rather than simply present or absent, and young people from less advantaged households tend to use the internet in narrower ways and with fewer supportive resources (Helsper, 2021; Livingstone & Helsper, 2007). Periods of reduced face-to-face contact further illustrate how dependent adolescent wellbeing is on peer interaction (Orben et al., 2020). Adolescents who perceive their family's

socioeconomic status as lower also report more negative experiences on social media (Skogen et al., 2022).

Measurement deserves attention here. In UK education research, eligibility for free school meals is widely used as an indicator of disadvantage, but it is an imperfect proxy that misclassifies some families and captures only one dimension of deprivation (Taylor, 2018). Studies testing this pathway in the UK should therefore combine free school meals status with area-based deprivation indices and adolescents' own subjective sense of social status (Quon & McGrath, 2014).

6. An Integrative Model of Social Media Rumination and Adolescent Anxiety

Drawing the preceding evidence together, we propose the model shown in Figure 1. At its core is a mediation pathway: social media use is associated with more social media rumination (path a), which is in turn associated with more anxiety symptoms (path b), while the direct association between use and anxiety (path c') is expected to be small once rumination is taken into account. Around this core, three groups of factors shape how strongly each path operates, and a reciprocal loop captures the likelihood that anxiety feeds back into checking and further rumination.

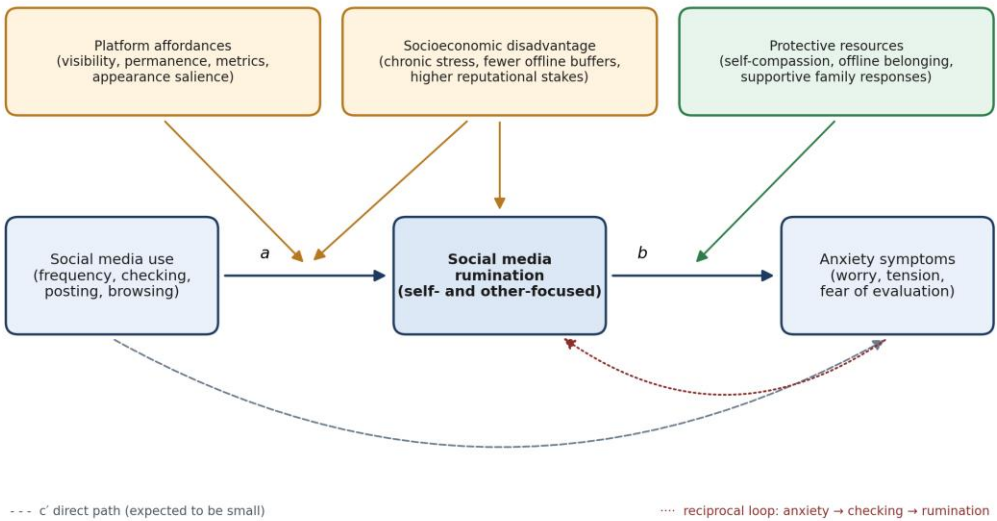


Figure 1. Integrative model of social media rumination linking social media use and anxiety symptoms in socioeconomically disadvantaged adolescents. Solid arrows show the hypothesised mediation pathway; orange arrows show factors expected to strengthen it; the green arrow shows protective resources expected to weaken the link between rumination and anxiety; the dotted arrow shows the proposed reciprocal loop.

Platform affordances are expected to strengthen path a, because contexts that combine visibility, permanence, quantifiable feedback and appearance salience supply more material for repetitive evaluative thought. Socioeconomic disadvantage is expected both to raise baseline levels of rumination and to strengthen path a, because heightened stress and higher social stakes make online evaluative cues harder to set aside. Protective resources are expected to weaken path b. Self-compassion is negatively associated with rumination and appears to reduce anxiety and depression partly by reducing it (Raes, 2010), and higher self-compassion, understood as treating oneself with kindness and recognising difficulties as part of shared human experience (Neff, 2003), is associated with lower distress in adolescents (Marsh et al., 2018). Secure offline belonging and supportive, non-punitive family responses to online activity may operate in a similar way by making any single online event less threatening. Finally, anxiety is likely to increase checking and reassurance seeking, which in turn provide more occasions for rumination, forming a self-maintaining cycle consistent with the reciprocal associations observed between rumination and

symptoms in adolescence (McLaughlin & Nolen-Hoeksema, 2011; Michl et al., 2013). Table 1 translates the model into testable propositions.

Table 1. Propositions derived from the integrative model and the evidence needed to test them

Proposition	Testable prediction	Suggested design
P1. Social media rumination mediates the association between social media use and anxiety.	The indirect effect of use on anxiety through rumination is significant, and the direct effect is small once rumination is controlled.	Longitudinal panel with at least three waves (cross-lagged or random-intercept models).
P2. Rumination about one's own content and about others' content carry distinct risks.	Both forms predict anxiety; rumination about others' content is more strongly linked to social comparison.	Two-factor measurement of social media rumination; comparison of paths.
P3. Platform affordances strengthen the path from use to rumination.	Use of contexts high in visibility, metrics and appearance salience predicts more rumination than use of other contexts.	Ecological momentary assessment linked to platform and activity type.
P4. Socioeconomic disadvantage raises rumination and strengthens the use–rumination path.	Rumination is higher, and path a is steeper, among adolescents with more indicators of disadvantage.	Moderated mediation using free school meals, area deprivation and subjective status.
P5. Protective resources weaken the rumination–anxiety path.	Path b is weaker among adolescents with higher self-compassion and stronger offline belonging.	Moderated mediation; randomised trials of self-compassion or rumination-focused interventions.
P6. Anxiety and rumination reinforce each other over time.	Anxiety predicts later checking and rumination, as well as the reverse.	Cross-lagged models; daily diary studies.

7. Implications

7.1 Theoretical implications

The model makes three contributions. First, it moves the field beyond exposure-based explanations by specifying a proximal cognitive mechanism that can account for both the small average associations and the wide individual differences observed in the literature (Beyens et al., 2020; Orben & Przybylski, 2019). Second, it extends Response Styles Theory into the digital environment. In the original theory, rumination is triggered by a mood state or discrete stressor; in the online context, the stressor is a continuous stream of posts, reactions and comparisons, which may explain why social media rumination is so easily sustained (Nolen-Hoeksema et al., 2008; Watkins & Roberts, 2020). Third, it integrates affordance-based (Moreno & Uhls, 2019; Nesi et al., 2018) and inequality-based (Helsper, 2021; Reiss, 2013) perspectives, proposing that platform design and social position shape the same psychological process rather than operating as separate influences.

7.2 Practical implications

If rumination rather than use is the active ingredient, then generic messages to reduce screen time are likely to be of limited value, and may even be counterproductive for adolescents whose social lives depend heavily on online contact. Schools and youth services could instead teach young people to notice ruminative loops (for example, recognising that one is rereading the same post or refreshing for reactions), to limit checking, to question catastrophic interpretations of silence or ambiguous comments, and to shift attention towards concrete action. Interventions that target repetitive negative thinking have shown promise in reducing emotional symptoms (Watkins & Roberts, 2020); in a randomised controlled trial with adolescents and young adults, a group programme targeting worry and rumination reduced repetitive negative thinking and lowered the incidence of anxiety and depressive disorders over follow-up (Topper et al., 2017), and self-compassion training offers a complementary route by reducing the self-criticism that fuels evaluative rumination (Marsh et al., 2018; Neff, 2003; Raes, 2010).

For screening, school wellbeing teams could pair a brief measure of anxiety, such as the GAD-7, which has shown good psychometric properties in adolescent samples (Mossman et al., 2017; Spitzer et al., 2006), with a short measure of social media rumination. This would help practitioners distinguish adolescents who simply use social media a great deal from those who ruminate about it, and who are more likely to be at risk. Families also have a role. Because adolescents' posting decisions are organised around the anticipated reactions of close others (Lannin et al., 2025), parents and carers can help by avoiding shaming responses to posts, by offering reassurance and belonging offline, and by talking about online experiences in a way that reduces rather than amplifies worry.

7.3 Policy and platform design

The impact of the model is felt in the regulation as well as in the design. Features that promote rumination – like visible like counts, streaks, and read receipts – are the features most likely to lead to rumination (Nesi et al., 2018; Sherman et al., 2016). Some design decisions that add friction, give adolescents the ability to hide metrics, and influence to set private defaults could lower the risk of anxiety indirectly. The duty on child safety under the Online Safety Act 2023 in the UK is a chance to assess the impact of these changes on a reduction in ruminative engagement, and research based on the present approach could help to inform that assessment. Policy should be about mechanisms and affordances, not specific platforms.

8. A Research Agenda for the United Kingdom

The evidence reviewed here comes largely from studies conducted outside the UK, and the only mixed-methods test of the pathway in a low-income adolescent sample was conducted in the United States (Lannin et al., 2025). Replication in UK samples is therefore the first priority, ideally within a mixed-methods framework that integrates quantitative tests of the pathway with young people's own accounts (Creswell & Plano Clark, 2018). Table 2 sets out the key questions and the designs best suited to answering them.

Table 2. Priorities for UK research on social media rumination and adolescent anxiety

Priority question	Recommended approach
Does the mediation pathway replicate among socioeconomically disadvantaged adolescents in the UK?	School-based surveys in areas of high deprivation using the GAD-7 and a validated measure of social media rumination, with pre-registered analyses.
Is the Social Media Rumination Scale valid and equivalent across UK groups?	Confirmatory factor analysis and measurement invariance testing across gender, ethnicity and socioeconomic groups.

Priority question	Recommended approach
Does rumination precede anxiety, or the reverse?	Multi-wave longitudinal designs, ideally embedded in existing UK cohort studies.
Which online events trigger rumination in daily life?	Ecological momentary assessment combined with consented digital trace data.
How do disadvantaged adolescents themselves describe online evaluation and worry?	Qualitative interviews and focus groups, co-designed with young people, integrated with quantitative findings in a mixed-methods framework.
Can rumination-focused prevention reduce anxiety?	Cluster-randomised trials in schools comparing rumination-focused or self-compassion programmes with standard digital-literacy teaching.

There are a number of methodological principles that span the priorities. Social media use should be assessed using validated multi-item scales, for example, the general social media usage subscale of Media and Technology Usage and Attitudes Scale (MTUAS) (Rosen et al., 2013), and, if possible, with objective device data, as self-reported hours online are often inaccurate (Parry et al., 2021). Tests of mediation should be based on regression-based techniques that account for the indirect effect including bootstrapped confidence intervals (Hayes, 2022), and longitudinal analyses should differentiate between between-person and within-person change (e.g., random-intercept cross-lagged panel models; Hamaker et al., 2015).

Ecological momentary assessment is well suited to capturing rumination as it unfolds after specific online events (Shiffman et al., 2008), and qualitative data should be analysed with transparent procedures such as reflexive thematic analysis (Braun & Clarke, 2006). Anxiety should be assessed with measures validated in adolescents rather than with general distress scales. Socioeconomic position should be measured with several indicators, as outlined in Section 5. Samples should include enough boys and gender-diverse young people to test gender differences, which remain inconsistent: girls tend to ruminate more than boys from adolescence onwards (Jose & Brown, 2008; Rood et al., 2009), yet the association between social media rumination and later anxiety did not differ by gender in early adolescence (Chen et al., 2026). Finally, co-production with young people from disadvantaged communities would strengthen both the validity of measures and the acceptability of any interventions that follow.

9. Limitations of This Review

Several limitations should be acknowledged. As a narrative integrative review, this article did not follow a systematic protocol or quantify effects across studies, and the selection and interpretation of evidence may reflect the authors' theoretical perspective. The direct evidence base on social media rumination in adolescents is still small, consists largely of North American samples, and relies mainly on self-report. Some of the evidence on which the model draws comes from young adult samples, and processes may operate differently at younger ages. The model is presented as a framework for testing rather than as an established account, and several of its paths, particularly the moderating roles of socioeconomic disadvantage and protective resources, have not yet been examined directly.

10. Conclusion

The debate about adolescents and social media has too often been framed as a question about the quantity of use. The evidence reviewed here points to a different answer: what matters most is the repetitive, evaluative thinking that social media can provoke. Social media rumination offers a theoretically grounded and empirically supported explanation for why social media use is associated with anxiety in some adolescents but not others, and it is consistent with long-standing evidence that repetitive negative thinking maintains anxiety across disorders (Ehring & Watkins,

2008; Olatunji et al., 2013). There are also good reasons to expect this pathway to be especially important for young people growing up in disadvantage. For the United Kingdom, where online life is near universal and adolescent mental health need remains high, the priority is to test this pathway in diverse local samples and, if it is confirmed, to shift prevention from limiting screen time towards helping young people step out of the ruminative loop.

Declarations

Data Availability Statement

All relevant data generated or analysed during this study are included within the article. No additional data is available from the corresponding author.

Conflict of Interest Statement

The author declares that there is no conflict of interest regarding the publication of this paper.

Funding Statement

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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