

LATE-NIGHT DOOMSCROLLING AND MORAL DETACHMENT IN DIGITAL USERS

KIRTI DIXIT

PH.D SCHOLAR, SCHOOL OF LIBERAL EDUCATION, GALGOTIAS UNIVERSITY, kirtidixit7565@gmail.com

DR. KUMAR ASHUTOSH

PROFESSOR, SCHOOL OF LIBERAL EDUCATION, GALGOTIAS UNIVERSITY, hrdprofessor@gmail.com

Abstract

Late-night doomscrolling—defined as the compulsive intake of negative digital content during night-time hours—has become widespread yet remains insufficiently theorized. Although doomscrolling is increasingly associated with anxiety, depression, sleep disturbance and digital exhaustion, existing scholarship rarely distinguishes late-night usage or examines its ethical and moral implications. Drawing on secondary sources such as empirical studies, conceptual analyses, dissertations, news reports and clinical commentaries related to doomscrolling, social media consumption, sleep disruption and digital distress, this paper develops a conceptual model linking late-night doomscrolling to emerging forms of moral detachment among digital users. Using an integrative review method, the study synthesizes evidence on psychological strain, media fatigue, vicarious trauma, cognitive overload and sleep disturbance. Three core mechanisms are identified through which late-night doomscrolling may cultivate moral detachment: (a) emotional numbing and reduced sensitivity to suffering; (b) cognitive overload diminishing reflective judgment; and (c) erosion of empathy due to prolonged exposure to crisis narratives and polarized media. The paper proposes a multi-level framework in which individual factors (FOMO, emotion regulation), platform design features (infinite scroll, algorithmic amplification), and contextual influences (night-time isolation, pandemic pressures, political conflicts) collectively create conditions that foster moral detachment. The study contributes a new construct—late-night doomscrolling—induced moral detachment—and outlines implications for digital well-being interventions, platform regulation and future research.

Keywords: Doomscrolling, late-night social media use, moral detachment, digital fatigue, mental health, secondary data, social media

1. INTRODUCTION

In recent years, individuals have been shaped by a mix of 24/7 news flows, algorithmic curation and the widespread availability of portable digital devices. Together, these forces have shifted how people interpret, engage with and emotionally respond to crises, risk and suffering. The term “doomscrolling,” referring to the compulsive viewing of negative or distressing information, entered public vocabulary relatively recently. Its use surged during the COVID-19 pandemic as people consumed constant updates on infection rates, death counts, political polarization and global instability (McGowan, 2020; Ytre-Arne & Moe, 2021; Wiederhold, 2020). As doomscrolling became prevalent, research increasingly connected the pattern to anxiety, depression, excessive media engagement and declines in overall well-being (Keles et al., 2020; Price et al., 2022; Sharma et al., 2022; Cassidy, 2022; Stills, 2024).

Most studies consider doomscrolling without examining when it occurs. Only a small body of work distinguishes daytime from late-night doomscrolling, even though evidence indicates that night-time scrolling is closely tied to sleep disruption, reduced cognitive functioning and heightened emotional instability (Ross, 2025; Sleep Disrupted, 2024; Korolainen, 2024). Younger populations—including university students and Gen-Z workers—appear especially vulnerable, juggling late-night device checking with academic responsibilities, global news monitoring and social validation loops before sleep (Barnett, 2025; Kamraju, 2025; Davis et al., 2025; Usman et al., 2025).

1.1 Doomscrolling and digital distress

Extensive studies show that doomscrolling contributes to elevated psychological distress, including increased depression, anxiety, perceived threat and chronic stress (Price et al., 2022; Shabahang et al., 2024; Keles et al., 2020). Negative content consumption is often framed socially or ethically—such as staying informed or showing responsibility during crises—which motivates continued engagement despite emotional strain (Ytre-Arne & Moe, 2021; Williams & Carter, 2023; Bauer & Singh, 2023; Thomas & Rajan, 2022). Among young users, doomscrolling aligns with FOMO, identity performance and ongoing digital overstimulation across social platforms (Yadav & Kumari, 2021; JAIN & DANGI, 2025; Zhou & Peng, 2022).

1.2 From distress to moral detachment

Although psychological effects of doomscrolling are widely studied, its potential moral consequences remain underexplored. Prolonged exposure to graphic suffering, polarized conflict and contentious discourse can create vicarious trauma and burnout among professional caregivers (Center for Substance Abuse Treatment, 2014; Safe and Equal, 2023). Similar reactions in everyday users may manifest as emotional blunting, disillusionment and reduced civic engagement (Shabahang et al., 2024; Williams & Carter, 2023; Vaterlaus et al., 2019). This paper extends existing scholarship by introducing moral detachment in digital environments: a condition in which users remain informationally attentive yet grow emotionally and ethically distant from others' suffering. Signals of moral detachment include passive scrolling through crisis content without emotional response, normalization of violence, dehumanizing commentary and prioritizing personal comfort over collective responsibility. Research on media multitasking and emotional recovery suggests that constant switching between intense information streams undermines reflective processing, further widening the emotional distance between viewer and content (Roth & Arnold, 2019; Korolainen, 2024).

1.3 Why late-night matters

Late-night scrolling amplifies conditions that encourage moral detachment. Nocturnal usage generally occurs in solitude, with reduced environmental cues, increased fatigue and impaired emotional self-regulation (Ross, 2025; Sleep Disrupted, 2024). Technology-sleep research shows that blue light exposure, cognitive stimulation and emotional arousal from late-night content disrupt circadian rhythms, sleep onset and next-day functioning (Sleep Disrupted, 2024; Ross, 2025; Korolainen, 2024). Gen-Z and student cohorts frequently report feeling simultaneously overstimulated and exhausted—"wired but drained"—as late-night engagement becomes habitual (Kamraju, 2025; Barnett, 2025; Ahmed, 2025). Under these conditions—fatigue, overload and emotional depletion—doomscrolling may foster disengagement instead of empathic response. Users may express superficial interest or share posts performatively while internally feeling numb, helpless or disconnected (Nguyen & Lopez, 2021; Yadav & Kumari, 2021; George et al., 2024). Sustained patterns of this kind may gradually reshape moral sensitivities, normalizing detachment from distress.

1.4 Theoretical lenses

Three theoretical frameworks guide this analysis. First, uses and gratifications theory suggests that people select media to meet needs for information, connection, identity and emotional regulation (Katz et al., 1973; Yadav & Kumari, 2021). Late-night doomscrolling may meet informational and emotional needs while simultaneously harming psychological well-being.

Second, cognitive load theory posits that excessive information complexity overloads working memory, reducing reflective reasoning and decision-making (Sweller, 1988). Continuous exposure to dense, emotionally charged content at night may undermine capability for moral reflection. Third, trauma-informed perspectives explain how repeated exposure to others' suffering can trigger emotional withdrawal or defensive detachment (Center for Substance Abuse Treatment, 2014; Safe and Equal, 2023; Samvedna Care, 2024). Doomscrolling in crisis situations mirrors such exposure patterns (Wiederhold, 2020; Price et al., 2022).

1.5 Research purpose and questions

Against this backdrop, the present paper addresses the following questions, using secondary data:

RQ1: How late-night doomscrolling is portrayed across digital media and mental health scholarship?

RQ2: What are the mechanisms through which late-night doomscrolling may foster moral detachment?

RQ3: What conceptual framework can be proposed to guide future empirical work on late-night doomscrolling and moral detachment?

The study adopts an integrative secondary-data approach, treating published research, theses, clinical commentaries and reports as data sources and synthesizing them into a coherent conceptual model.

2. LITERATURE REVIEW

2.1 Conceptualizing doomscrolling in the digital age

The term doomscrolling gained traction during the COVID-19 pandemic as a way to describe the compulsive, often uncontrollable, consumption of negative or anxiety-inducing content on digital platforms (McGowan, 2020). Popular media, clinical commentary and early academic work depict doomscrolling as a behavioral loop in which individuals continually refresh their feeds for updates, despite knowing the practice worsens their emotional state (Kelly, 2021; Miller, 2023; Cleveland Clinic, 2024). Rather than intentional information-seeking, doomscrolling reflects a loss of agency, reinforced by the endless scrolling feature and algorithmic systems that prioritize emotionally intense or sensational posts (Smith et al., 2018; Sharma et al., 2022).

Nguyen and Lopez (2021) report that most users can identify their own doomscrolling episodes but frequently rationalize the behavior as "staying informed," especially during crises. This merging of civic duty with compulsive consumption appears again in Bauer and Singh's (2023) study of journalism students, who feel a personal and professional responsibility to remain constantly updated—even when it undermines their mental state. Doomscrolling is also tied to monitoring habits, FOMO, and heightened digital vigilance during political or social turmoil (Ytre-Arne & Moe, 2021; Yadav & Kumari, 2021).

Uses and gratifications theory helps explain the appeal of doomscrolling. Katz et al. (1973) argue that audiences select media to fulfil needs for information, emotional reassurance, identity expression and social connection. In modern platforms, these needs intensify through real-time updates, algorithmic curation and visible social metrics.

Studies on urban youth show that FOMO, social comparison and identity construction drive late-night scrolling, particularly on apps designed around short-form video and viral cycles (Yadav & Kumari, 2021; Zhou & Peng, 2022; Ahmed, 2025). This aligns with Festinger's (1954) social comparison theory, where individuals continuously assess themselves relative to others—and digital feeds supply endless material for such comparisons, reinforcing repetitive scrolling for reassurance or control.

2.2 Doomscrolling, mental health, and digital fatigue

An expanding body of research links doomscrolling with negative psychological outcomes. Keles et al. (2020), through a systematic review, establish that problematic social media use correlates with increased depression, anxiety and distress in adolescents. Later studies on doomscrolling specifically extended these findings to crisis-driven news consumption. Price, Legrand, Brier, Van Stolk-Cooke, et al. (2022) found that heavy daily exposure to traditional and social media during the pandemic predicted poorer mental health and heightened trauma symptoms. Another study by Price, Legrand, Brier, and Hébert-Dufresne (2022) emphasized the mental burden of consuming predominantly negative news, arguing that doomscrolling intensifies rumination and feelings of uncontrollable threat.

Sharma et al. (2022) describe doomscrolling on social media feeds as “the dark at the end of the tunnel,” highlighting how users expect reassurance from updates but instead encounter more alarming posts, worsening fear and helplessness. Usman et al. (2025) found that doomscrolling among media students in Karachi predicted reduced well-being and productivity, showing its impact even among media-savvy groups. Shabahang et al. (2024), examining samples in Iran and the United States, observed that doomscrolling contributes to existential anxiety and pessimistic worldviews, suggesting broader shifts in users’ moral and social perceptions.

These psychological effects connect strongly to digital fatigue. Research on youth digital culture shows that prolonged exposure to curated, emotionally intense content produces exhaustion and emotional depletion (Vaterlaus et al., 2019; Zhou & Peng, 2022; Korolainen, 2024). JAIN and DANGI (2025) describe young users as experiencing digital overstimulation, where constant connectivity blurs boundaries between work, leisure and emotional coping. Barnett (2025) and Ahmed (2025) document how students and young adults become trapped between the urge to stay informed and the emotional strain caused by constant exposure to distressing content. Stills (2024) reports similar patterns among Gen-Z workers, linking doomscrolling to lower productivity and declining well-being. Within this wider context, doomscrolling represents an extreme form of negative content engagement, where information-seeking, emotional coping and compulsive behavior overlap (McGowan, 2020; Nguyen & Lopez, 2021; George et al., 2024; Samvedna Care, 2024).

2.3 Sleep disruption and late-night media consumption

Although doomscrolling research often ignores timing, a growing body of work shows that night-time digital use has distinct consequences. The Zenodo report *Sleep disrupted* (2024) traces how technologies from artificial lighting to smartphones have gradually eroded sleep time and altered circadian rhythms. According to the report, exposure to screens at night—especially to emotionally stimulating content—impairs the ability to fall asleep, lowers sleep quality and reduces next-day cognitive functioning.

Ross (2025), in a qualitative study of adolescents’ engagement with sleep information, found a consistent contradiction: young people understand sleep hygiene principles but continue to use their phones in bed, frequently scrolling through social media or watching videos late into the night. Adolescents describe this behavior as a coping tool for stress, isolation or boredom, even while recognizing its negative effects on sleep. Korolainen (2024) similarly documents that high levels of digital media use correlate with lower well-being, with night-time engagement being particularly harmful due to its interference with rest and emotional recovery.

These insights connect closely with doomscrolling. Late-night doomscrolling commonly occurs when people are already tired, emotionally vulnerable and lacking external regulation (Barnett, 2025; Kamraju, 2025). Cognitive load theory states that processing dense, emotionally charged information consumes limited working memory, making emotional regulation and reflective thinking difficult (Sweller, 1988). At night—under sleep pressure—users may be even less capable of disengaging, leading to repeated cycles of refreshing feeds “one last time” (*Sleep disrupted*, 2024; Ross, 2025).

Nocturnal doomscrolling is intensified by design features such as infinite scroll, autoplay and algorithmic amplification of sensational or negative content (Smith et al., 2018; Sharma et al., 2022). Desai (2023) notes that smartphone overuse has become normalized, with users rarely aware of the cumulative toll of late-night screen habits. Over time, these cycles not only disrupt sleep architecture but may also alter emotional and moral reactions to the content encountered.

2.4 Trauma, emotional numbing, and moral detachment in digital contexts

Although doomscrolling studies emphasize mental health impacts, literature on trauma and repeated exposure to suffering adds important insight into potential moral outcomes. The Center for Substance Abuse Treatment (2014) explains that repeated exposure to others’ trauma—directly or indirectly—can result in vicarious trauma, characterized by emotional numbing, shifts in worldview and decreased empathetic responsiveness. Safe and Equal (2023) similarly note that professionals dealing with family violence may develop emotional withdrawal or defensive detachment as coping mechanisms.

Digital environments expose users to constant stories of violence, crisis and injustice. Shabahang et al. (2024) show that doomscrolling fosters existential anxiety and distrust, potentially eroding prosocial attitudes. Thomas and Rajan (2022) found that compulsive news consumption contributes to loneliness and disconnection rather

than solidarity, suggesting a paradox where continuous exposure reduces relational engagement. Williams and Carter (2023) describe news consumption during political upheaval as leading to media fatigue, cynicism and a sense of helplessness.

These patterns align with early studies documenting youth digital fatigue, where continuous screen exposure reduces trust, engagement and perceived authenticity (Vaterlaus et al., 2019). Samvedna Care (2024) and SciSpace (n.d.) synthesize research showing that doomscrolling may hinder social skills by increasing anxiety, avoidance and detachment from face-to-face interactions.

Collectively, these studies point toward a progression from emotional overload to emotional numbing and moral distancing. When overwhelmed by constant exposure to crisis content, individuals may disengage from suffering, treating it as background noise. This paper frames such reactions as moral detachment in digital environments—a condition where users remain informationally connected but emotionally and ethically withdrawn, shaped by repeated late-night encounters with distressing content.

2.5 Youth, culture and contextual factors

Doomscrolling and its moral effects unfold within diverse cultural and political environments. Research from Pakistan and South Asia shows that social media plays a major role in political awareness, identity-building and mobilization among youth (Muzaffar et al., 2019; Muzaffar et al., 2020; Khan et al., 2024). Muzaffar et al. (2019) observe that digital platforms draw young people into political debates and campaign narratives, while Muzaffar et al. (2020) highlight their influence on election campaigns and persuasion. Khan et al. (2024) focus on South Asian youth, pointing to curiosity, fear, social pressure and collective trauma as drivers of excessive negative content consumption.

Ahmed (2025) and Kamraju (2025) document how youth in Bangladesh and other regions engage with reels, short-form videos and online identities in ways that both support and strain mental health—often involving late-night sessions and blurred boundaries between academic work, emotional coping and entertainment. Barnett (2025) describes students “living between screens,” with short-form media and doomscrolling shaping their emotional well-being. These findings demonstrate that doomscrolling is embedded in socio-cultural conditions, political climates and generational anxieties.

Pandemic-era literature further emphasizes contextual triggers. Wiederhold (2020) notes that social media use surged as people sought connection and information, increasing exposure to distressing and misleading content. Park et al. (2020) explore how institutional communication during the pandemic shaped public media habits. Irby (2024) examines escapist tendencies and “pandemic fantasies,” showing how digital content functioned as both a distraction and a source of anxiety.

These contextual layers indicate that the relationship between late-night doomscrolling and moral detachment varies across cultures and socio-political settings. For some users, doomscrolling enhances empathy and solidarity; for others, it contributes to cynicism and withdrawal. Any conceptual framework must therefore remain sensitive to cultural and contextual variability.

2.6 Interventions, digital detox, and design responses

Alongside critical scholarship, a growing body of literature proposes strategies to mitigate doomscrolling's impacts. Clinical and health organizations recommend solutions such as limiting screen time, disabling notifications, curating digital environments, designating media-free periods and replacing negative scrolling with healthier coping activities (Kelly, 2021; Miller, 2023; Cleveland Clinic, 2024; Sweet, 2024; Rosen, 2022; Samvedna Care, 2024). Guidance tailored to night-time behavior highlights wind-down routines and restrictions around pre-sleep digital use (Sleep disrupted, 2024; Ross, 2025).

Digital detox movements promote simplified devices or intentional disconnection. Bastien (2024a, 2024b), HMD Global (2023), Opal (n.d.) and JOMO (n.d.) advocate using “dumb phones” or limited-feature devices to reduce compulsive engagement. These approaches acknowledge that contemporary smartphones are designed for sustained engagement and that hardware-level changes may be necessary for behavioral improvement.

From a design perspective, Hendriksen (2024) calls for technologies that prioritize adolescent mental health and reflective engagement over addictive features. Reports on emerging technologies emphasize responsible innovation and encourage rethinking engagement metrics, using user well-being as a core design parameter (Riding the wave..., 2024; Leveraging big data..., 2024; The death of analog..., 2024). Overcoming the collective action problem (2024) frames adolescent tech addiction as a systems-level challenge requiring coordinated norms and structural solutions. Online forums such as Quora (n.d.) highlight the difficulty individuals face in maintaining boundaries, suggesting that individual-level strategies are insufficient without systemic design support.

While existing interventions focus primarily on mental health and productivity, the same principles can be applied to address moral detachment. Features prompting reflection or reducing late-night exposure to distressing content could preserve empathic capacity. However, widespread difficulty in maintaining healthy routines underscores the need for design-level and policy-level interventions.

2.7 Synthesis and identified gaps

The literature converges on several themes. First, doomscrolling is recognized as a distinct behavioral pattern associated with anxiety, depression, existential threat and digital exhaustion (McGowan, 2020; Keles et al., 2020; Price et al., 2022; Sharma et al., 2022; Usman et al., 2025; Shabahang et al., 2024). Second, young people—particularly Gen-Z—are especially vulnerable due to their deep reliance on digital platforms for information, identity formation and social connection (Yadav & Kumari, 2021; Barnett, 2025; Ahmed, 2025; Kamraju, 2025;

JAIN & DANGI, 2025). Third, evidence increasingly shows that night-time digital engagement disrupts sleep and reduces well-being, with content and technology features exacerbating these outcomes (Sleep disrupted, 2024; Ross, 2025; Korolainen, 2024).

Despite these insights, three critical gaps remain:

Limited focus on late-night doomscrolling: Most studies treat doomscrolling generically rather than examining its temporal dynamics, even though pre-sleep scrolling appears widespread and particularly harmful (Ross, 2025; Sleep disrupted, 2024; Desai, 2023).

Underdeveloped attention to moral and ethical outcomes: While research documents anxiety, pessimism and media fatigue (Shabahang et al., 2024; Williams & Carter, 2023; Thomas & Rajan, 2022; Vaterlaus et al., 2019), little work examines whether doomscrolling affects moral sensitivity, empathy or civic engagement. Trauma and vicarious exposure literature suggests potential pathways to emotional numbing (Center for Substance Abuse Treatment, 2014; Safe and Equal, 2023), but these are rarely linked to everyday scrolling practices.

Lack of integrated theoretical frameworks: Existing approaches—uses and gratifications, cognitive load theory and trauma-informed frameworks—have been applied separately (Katz et al., 1973; Sweller, 1988; Center for Substance Abuse Treatment, 2014; Keles et al., 2020; Nguyen & Lopez, 2021), yet few studies combine them to explain the progression from late-night doomscrolling to moral detachment.

This study addresses these gaps by (a) centering late-night doomscrolling as a distinct behavioral pattern;(b) positioning moral detachment as a potential outcome of repeated late-night exposure to distressing content; and(c) integrating multiple theoretical perspectives into a unified framework.

3. Research Methodology

3.1 Research design

This study adopts an integrative review and secondary-data synthesis design. Instead of collecting primary data through surveys or experiments, it draws on existing empirical studies, conceptual literature, clinical commentaries and research reports related to doomscrolling, social media behavior, sleep disruption, digital fatigue and associated psychological impacts. Given that this is an emerging research area—and that the paper aims to introduce a novel conceptual framework—an integrative review is the most suitable approach (Keles et al., 2020; JAIN & DANGI, 2025). This method enables the consolidation of diverse sources, allowing the study to identify patterns, theoretical connections and mechanisms that may not be visible within isolated studies.

3.2 Data corpus

The “data corpus” for this research comprises the complete set of references provided, representing a curated body of contemporary work spanning doomscrolling, youth mental health, smartphone dependency, digital exhaustion, trauma exposure and sleep-related challenges. Within this collection, studies were grouped conceptually into four overarching categories:

Doomscrolling and negative media consumption

Digital use, youth and mental health

Sleep disruption, trauma and fatigue

Digital detox, design and alternative media practices

Table 1 presents a summary of selected doomscrolling-focused studies within the corpus that contributed substantially to the analysis.

Table 1: Selected Studies on Doomscrolling and Mental Health

Author(s) & Year	Context & Sample	Focus	Key Findings Relevant to Doomscrolling
Nguyen & Lopez (2021)	General digital users	Awareness and practice of doomscrolling	Users recognize doomscrolling but normalize it as staying informed.
Yadav & Kumari (2021)	Urban youth	FOMO and doomscrolling	FOMO drives late-night doomscrolling and emotional exhaustion.
Price et al. (2022)	COVID-19 pandemic, general population	Media use and mental health symptoms	Higher daily media consumption predicts anxiety and trauma symptoms.
Sharma et al. (2022)	Social media users	Doomscrolling on newsfeeds	Doomscrolling linked to distress, helplessness and rumination.
Ytre-Arne & Moe (2021)	News use during lockdown	Monitoring, doomscrolling, avoidance	Users oscillate between intense monitoring and strategic avoidance.
Usman et al. (2025)	Media students in Karachi	Doomscrolling and mental well-being	Doomscrolling reduces mental well-being and productivity.
Shabahang et al. (2024)	Iran and USA	Doomscrolling and existential anxiety	Doomscrolling fosters existential anxiety and pessimism about human nature.
George et al. (2024)	Conceptual and empirical synthesis	Negative impacts of excessive doomscrolling	Highlights anxiety, trauma and need for mitigation strategies.

3.3 Analytical approach

The analysis proceeded through three structured stages:

Conceptual coding of late-night elements: Text segments referring to bedtime scrolling, insomnia, disrupted sleep, night-time usage or fatigue were extracted from the corpus (e.g., Ross, 2025; Sleep disrupted, 2024; Korolainen, 2024; Barnett, 2025; Kamraju, 2025). These excerpts were used to isolate features that uniquely characterize late-night doomscrolling.

Thematic synthesis of underlying mechanisms: Themes appearing across doomscrolling and mental-health research—such as emotional numbing, cynicism, helplessness, avoidance, desensitization and pessimistic beliefs about human nature—were identified and grouped as potential indicators of moral detachment (e.g., Shabahang et al., 2024; Thomas & Rajan, 2022; Williams & Carter, 2023; Vaterlaus et al., 2019; Center for Substance Abuse Treatment, 2014; Safe and Equal, 2023).

Model development and indicator formulation: Drawing on uses and gratifications theory, cognitive load theory and trauma-informed frameworks, the coded themes were combined into a conceptual model. Potential measurement dimensions for assessing moral detachment in digital spaces were outlined.

Because this study is a secondary, conceptual synthesis, no statistical analyses were conducted; instead, recurring patterns and complementary findings across the corpus were treated as “qualitative meta-data.”

4. RESULTS

4.1 Characterizing late-night doomscrolling

The secondary literature indicates that although doomscrolling can occur at any hour, night-time engagement is especially prominent among young adults and students. Research on youth digital behavior and short-form media shows a strong tendency to scroll “deep into the night,” driven by the desire to stay updated, maintain social visibility or decompress emotionally (Barnett, 2025; Ahmed, 2025; Kamraju, 2025; Zhou & Peng, 2022). Sleep research further notes that checking smartphones in bed has become a normalized routine, with adolescents regularly monitoring notifications and feeds both before sleep and during night-time awakenings (Ross, 2025; Sleep disrupted, 2024; Korolainen, 2024).

Across the reviewed corpus, late-night doomscrolling can be described through three defining characteristics:

Temporal proximity to sleep: The behavior typically occurs within the two hours before intended sleep or during nighttime awakenings, amplifying its effects on rest and recovery (Ross, 2025; Sleep disrupted, 2024).

Context of solitude and reduced external regulation: Unlike daytime scrolling, late-night engagement usually takes place alone, in private settings, without social oversight or external constraints (Barnett, 2025; Kamraju, 2025).

Heightened emotional and cognitive vulnerability: Users at night are often already fatigued, stressed or emotionally overloaded, making them more prone to negative content, rumination and compulsive refreshing cycles (Yadav & Kumari, 2021; Nguyen & Lopez, 2021; Keles et al., 2020).

Table 2 summarizes how different clusters of studies inform the late-night doomscrolling construct.

Table 2: Secondary Evidence Informing Late-Night Doomscrolling

Evidence Cluster	Key Sources	Contribution to Late-Night Doomscrolling Concept
Doomscrolling definitions & experiences	McGowan (2020); Nguyen & Lopez (2021); Cleveland Clinic (2024); Miller (2023); Kelly (2021); George et al. (2024)	Define doomscrolling as compulsive negative news/social media consumption, often at length and without clear stopping cues.
Youth & short-form media habits	Barnett (2025); Ahmed (2025); Kamraju (2025); JAIN & DANGI (2025); Zhou & Peng (2022); Stills (2024)	Show late-night engagement with feeds, reels and short-form content, linking to stress, burnout and digital overstimulation.
Sleep and night-time technology	Ross (2025); Sleep disrupted (2024); Korolainen (2024)	Demonstrate how night-time screen use disrupts circadian rhythms, sleep quality and next-day cognitive functioning.
Mental health and doomscrolling	Keles et al. (2020); Price et al. (2022); Sharma et al. (2022); Usman et al. (2025); Shabahang et al. (2024); Samvedna Care (2024)	Provide evidence that doomscrolling is associated with anxiety, depressive symptoms, existential anxiety and distress.

4.2 From doomscrolling to moral detachment: Core mechanisms

The synthesis suggests that late-night doomscrolling may contribute to moral detachment through three overlapping and mutually reinforcing mechanisms.

4.2.1 Emotional numbing and desensitization

Multiple studies show that repeated exposure to negative news, crisis updates and distressing content can generate feelings of overwhelm, helplessness and rising cynicism (Price et al., 2022; Thomas & Rajan, 2022; Williams & Carter, 2023; Shabahang et al., 2024). Young people frequently describe becoming “numb,” “checked out,” or

“burnt out” after continually encountering bad news on their feeds (Vaterlaus et al., 2019; Yadav & Kumari, 2021; Stills, 2024). Trauma-informed work further demonstrates that ongoing exposure to others’ suffering—even indirectly through digital media—can result in vicarious trauma and emotional withdrawal as self-protection (Center for Substance Abuse Treatment, 2014; Safe and Equal, 2023).

These reactions intensify at night, when users are already tired and typically alone. Instead of triggering empathy or motivating action, late-night doomscrolling can turn into an emotionally detached ritual. Individuals continue scrolling to “stay updated,” yet feel increasingly removed from the people and crises appearing on their screens (Nguyen & Lopez, 2021; Bauer & Singh, 2023). This reflects the essence of moral detachment: cognitively recognizing suffering but no longer responding to it emotionally or ethically.

4.2.2 Cognitive overload and reduced reflection

Multiple studies show that repeated exposure to negative news, crisis updates and distressing content can generate feelings of overwhelm, helplessness and rising cynicism (Price et al., 2022; Thomas & Rajan, 2022; Williams & Carter, 2023; Shabahang et al., 2024). Young people frequently describe becoming “numb,” “checked out,” or “burnt out” after continually encountering bad news on their feeds (Vaterlaus et al., 2019; Yadav & Kumari, 2021; Stills, 2024). Trauma-informed work further demonstrates that ongoing exposure to others’ suffering—even indirectly through digital media—can result in vicarious trauma and emotional withdrawal as self-protection (Center for Substance Abuse Treatment, 2014; Safe and Equal, 2023).

These reactions intensify at night, when users are already tired and typically alone. Instead of triggering empathy or motivating action, late-night doomscrolling can turn into an emotionally detached ritual. Individuals continue scrolling to “stay updated,” yet feel increasingly removed from the people and crises appearing on their screens (Nguyen & Lopez, 2021; Bauer & Singh, 2023). This reflects the essence of moral detachment: cognitively recognizing suffering but no longer responding to it emotionally or ethically.

4.2.3 Digital fatigue, burnout and retreat from engagement

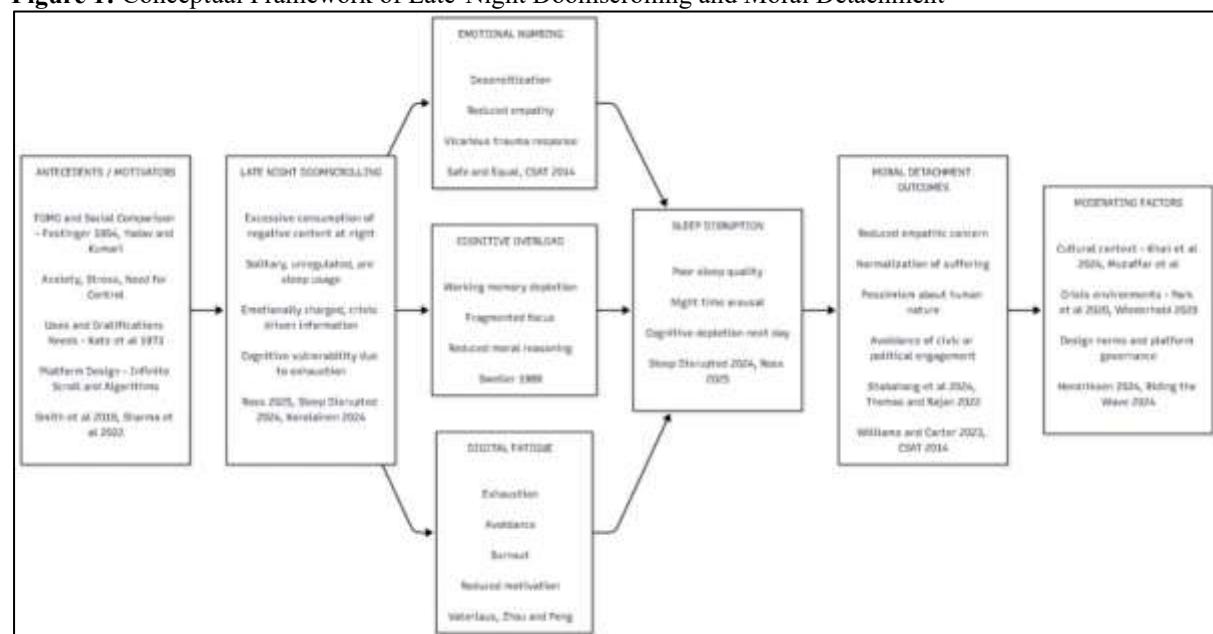
Studies with youth consistently identify digital fatigue—a sense of being mentally exhausted by continuous connectivity and endless content streams (Vaterlaus et al., 2019; Zhou & Peng, 2022; Korolainen, 2024; JAIN & DANGI, 2025; Kamraju, 2025). During crises, this fatigue exists alongside a competing desire to remain informed, creating a tension between engagement and self-preservation (Williams & Carter, 2023; Ytre-Arne & Moe, 2021). Over time, some users begin withdrawing from news and civic discussions to protect their mental health (Nguyen & Lopez, 2021; Thomas & Rajan, 2022).

In the context of late-night doomscrolling, such fatigue may appear as scrolling driven more by habit or avoidance than genuine information-seeking. This is often accompanied by a declining motivation to reflect, empathize or act. Users may adopt blanket attitudes such as “everything is terrible,” without exploring possibilities for response, connection or change (Shabahang et al., 2024; Usman et al., 2025). This shift toward resignation and disengagement is a key indicator of moral detachment.

4.3 A conceptual framework: Late-night doomscrolling and moral detachment

Figure 1 (described below) integrates the above mechanisms into a conceptual framework.

Figure 1: Conceptual Framework of Late-Night Doomscrolling and Moral Detachment



Moderating influences include cultural context (Khan et al., 2024; Muzaffar et al., 2019, 2020), pandemic-related and broader crisis environments (Park et al., 2020; Irby, 2024; Wiederhold, 2020), as well as institutional or design-level interventions (Hendriksen, 2024; Riding the wave, 2024; Overcoming the collective action problem, 2024).

4.4 Proposed indicators of moral detachment in digital contexts

To support future empirical research, Table 3 presents the conceptual dimensions and illustrative indicators of moral detachment derived from the secondary data synthesized in this study.

Table 3: Proposed Dimensions and Indicators of Moral Detachment in Digital Users

Dimension	Conceptual Basis	Illustrative Indicators (Self-Report / Behavioural)
Emotional numbing	Vicarious trauma, burnout, digital fatigue (Center for Substance Abuse Treatment, 2014; Safe and Equal, 2023; Korolainen, 2024)	“I feel nothing when I see distressing news now”; reduced emotional reactivity to crisis content.
Pessimism about human nature	Existential anxiety, cynicism (Shabahang et al., 2024; Williams & Carter, 2023)	Beliefs that “people are fundamentally selfish” after repeated doomscrolling; global hopelessness.
Normalization of suffering	Constant negative exposure (Price et al., 2022; Keles et al., 2020; Nguyen & Lopez, 2021)	Viewing severe events as “just another story”; lack of shock at violence, inequality or disasters.
Withdrawal from engagement	Media avoidance, digital fatigue (Ytre-Arne & Moe, 2021; Thomas & Rajan, 2022; Vaterlaus et al., 2019)	Ignoring petitions, news, or opportunities for solidarity due to exhaustion or perceived futility.
Instrumental information stance	Uses and gratifications (Katz et al., 1973; Yadav & Kumari, 2021)	Consuming crisis content mainly to stay updated or appear informed, with no intention to act.
Sleep-related disengagement	Sleep disruption, exhaustion (Ross, 2025; Sleep disrupted, 2024)	Using sleepiness as a reason not to process or act on distressing information consumed at night.

These dimensions can serve as foundational components for future scale development and mixed-methods research examining how late-night doomscrolling relates to moral detachment across different population groups.

5. DISCUSSION

5.1 Theoretical contributions

This secondary-data synthesis advances the field of doomscrolling research in three key ways. First, it brings explicit attention to the temporal aspect by distinguishing late-night doomscrolling from its general, time-unspecified form. Although earlier research has documented links between doomscrolling and outcomes such as anxiety, trauma-related distress and media fatigue (Price et al., 2022; Keles et al., 2020; Sharma et al., 2022; Usman et al., 2025), the specific influence of night-time conditions—including solitude, tiredness and weakened self-regulatory capacity—has largely been overlooked. Incorporating insights from sleep and technology research (Ross, 2025; Sleep disrupted, 2024; Korolainen, 2024) shows that late-night doomscrolling represents a qualitatively distinct pattern of digital behavior that aligns with circadian rhythms and cognitive depletion. Second, this paper introduces moral detachment as an original conceptual outcome linked to late-night doomscrolling. While prior studies identify themes such as existential fear, pessimism and digital exhaustion (Shabahang et al., 2024; Williams & Carter, 2023; Thomas & Rajan, 2022; JAIN & DANGI, 2025), these insights have not previously been connected to trauma-informed understandings of vicarious trauma and burnout (Center for Substance Abuse Treatment, 2014; Safe and Equal, 2023). The present analysis suggests that ongoing exposure to crisis-oriented content—especially during late-night hours—may gradually dull empathic responses and reduce motivation for prosocial action, shifting doomscrolling from a coping behavior to a phenomenon with moral implications.

Third, the framework developed in this study brings together uses and gratifications theory, cognitive load theory and trauma-informed perspectives. Uses and gratifications clarify why users turn to doomscrolling—to gather information, maintain social ties or regulate emotions (Katz et al., 1973; Yadav & Kumari, 2021; Nguyen & Lopez, 2021). Cognitive load theory explains how information saturation and multitasking impair reflective thinking (Sweller, 1988; Roth & Arnold, 2019; Smith et al., 2018). Trauma-informed approaches illuminate pathways toward emotional numbing and defensive disengagement (Center for Substance Abuse Treatment, 2014; Safe and Equal, 2023; Samvedna Care, 2024). By integrating these perspectives, the paper offers a more comprehensive explanation of how late-night doomscrolling evolves from crisis monitoring into a form of moral distancing.

5.2 Practical implications

The framework offers several meaningful implications for digital well-being efforts, platform design considerations and clinical practice. For individuals and mental health professionals, identifying late-night doomscrolling as a unique behavioral pattern can help shape more precise interventions. Current recommendations for reducing doomscrolling—such as establishing screen-time boundaries, using app blockers and adopting

healthier coping strategies (Cleveland Clinic, 2024; Miller, 2023; Kelly, 2021; Sweet, 2024; Shimmer ADHD Coaching, 2024; Samvedna Care, 2024)—should be tailored to emphasize nighttime routines, sleep-focused habits and calming offline wind-down activities. Young people dealing with ADHD or heightened anxiety may require structured supports to transition away from late-night doomscrolling toward activities that are less stimulating and easier to regulate (Shimmer ADHD Coaching, 2024; Ahmed, 2025; Barnett, 2025).

From a design standpoint, the growing interest in “dumb phones” and pared-down digital devices reflects a broader push toward intentional, less overwhelming technology use (Bastien, 2024a, 2024b; HMD Global, 2023; Opal, n.d.; JOMO, n.d.). Advocates of mindful design call for moving away from engagement-driven models toward interfaces that acknowledge cognitive and emotional limits (Hendriksen, 2024). Platforms could incorporate late-night “ethical friction” measures—such as reminders about rest, reduced algorithmic circulation of distressing content during night hours, or optional content streams that encourage compassion and emotional grounding.

At the community and policy level, framing moral detachment as a shared societal concern reinforces ongoing arguments for digital literacy initiatives and mental health programs that explicitly address doomscrolling behavior (George et al., 2024; JAIN & DANGI, 2025; Overcoming the collective action problem, 2024). Institutions and news media may also need to rethink the ethics surrounding push notifications, crisis alerts and sensational framing practices that fuel constant monitoring and emotional fatigue (Williams & Carter, 2023; Smith et al., 2018; Harnessing direct-to-mobile technology..., 2024).

5.3 Cultural and contextual considerations

The corpus also brings forward insights from South Asian and other non-Western settings, showing that doomscrolling—and its moral effects—are deeply influenced by cultural expectations, political climates and the broader digital infrastructure. In Pakistan and across South Asia, social media serves as a primary arena for political engagement, activism and awareness, but it is equally a source of information overload and heightened polarization (Muzaffar et al., 2019, 2020; Khan et al., 2024; Ahmed, 2025; Usman et al., 2025). For many young people in these contexts, late-night doomscrolling becomes an emotional mix of local political upheavals and global crises, creating layered and often compounded forms of distress, confusion and emotional distancing.

Media conditions shaped during and after the pandemic also play an influential role. The way institutions communicate risk, public health measures and collective responsibility shapes how users interpret online content and their own sense of duty or agency (Park et al., 2020; Irby, 2024; Wiederhold, 2020). When individuals repeatedly encounter narratives suggesting that large-scale events are uncontrollable or predetermined, they may more easily drift into moral disengagement and rely on private coping mechanisms instead of sustained engagement. Future empirical research should explore how cultural beliefs, religious frameworks and community norms influence the pathways between late-night doomscrolling and emerging forms of moral detachment.

5.4 Limitations

As a secondary-data-based conceptual study, this paper is constrained by the nature and extent of the existing scholarship. Much of the current doomscrolling literature focuses predominantly on young people and crisis-oriented periods such as the COVID-19 pandemic, with far less attention given to older adults or everyday non-crisis contexts (Keles et al., 2020; Price et al., 2022; Ytre-Arne & Moe, 2021). Only a small number of studies directly examine moral or ethical implications, making it necessary to infer these dimensions from related constructs such as existential anxiety, burnout, digital fatigue and tendencies toward media withdrawal (Shabahang et al., 2024; Safe and Equal, 2023; Thomas & Rajan, 2022).

In addition, the framework outlined in this paper identifies potential mechanisms but does not empirically validate them. Any causal claims regarding the relationship between late-night doomscrolling and moral detachment remain speculative until supported by longitudinal or experimental evidence. Still, the synthesis provides a structured conceptual base for future empirical inquiry.

6. CONCLUSION

This paper has argued that late-night doomscrolling deserves focused academic attention—not only for its demonstrated effects on mental health and sleep disruption but also for its potential role in fostering moral detachment among digital users. By integrating insights from doomscrolling research, youth mental health studies, digital fatigue scholarship, trauma-informed care perspectives and emerging work in sleep science, this study introduced a conceptual framework showing how late-night doomscrolling, when paired with cognitive overload and emotional exhaustion, can lead to emotional blunting, bleak interpretations of world events and gradual withdrawal from moral or civic engagement. The findings highlight the urgent need to explore how the timing of media exposure—especially pre-sleep engagement with crisis-saturated content—reshapes psychological and ethical processes.

Future research must expand this conceptual foundation through robust empirical work. One essential priority is the development of reliable and validated instruments that capture the distinctive frequency, context and emotional signature of late-night doomscrolling, alongside the multiple indicators of moral detachment articulated in this study. Mixed-methods designs combining self-report measures, digital trace data and in-depth qualitative interviews would offer a more comprehensive understanding. Longitudinal and experimental studies are equally important to determine whether increases in late-night doomscrolling correspond with observable changes in empathic concern, moral responsiveness, prosocial motivation and civic participation over time. Such research

could also evaluate whether interventions that reduce nighttime scrolling improve sleep, emotional well-being and ethical engagement.

Cross-cultural research is another critical avenue, as doomscrolling behaviors and moral reactions are shaped by cultural norms, political conditions and media ecosystems. Evidence from South Asia and comparable regions suggests that young people engage in doomscrolling amid complex socio-political pressures that may intensify or mitigate moral detachment. Comparative analyses across countries and media cultures would deepen understanding of how contextual factors shape these relationships. Additionally, design-based solutions hold significant promise. Partnerships with digital designers, platform engineers and behavioral scientists could support the creation and testing of “ethical friction” features—such as reflective prompts, late-night usage cues, minimal interface modes or targeted content filters—that slow compulsive scrolling and encourage more deliberate engagement.

Overall, as individuals navigate an increasingly chaotic and crisis-heavy information landscape, understanding how late-night doomscrolling affects not only emotional states but also moral perception is both timely and crucial. The secondary-data-based framework proposed in this paper provides a foundation for future empirical research, cross-disciplinary collaboration and platform-level innovations aimed at strengthening digital well-being while sustaining empathy, moral awareness and social responsibility in the digital era.

REFERENCES

1. Ahmed, M. (2025). Social Media, Reels, and the TikTok Generation: A Study on the Mental Health Crisis in Bangladesh.
2. Barnett, J. (2025). Living Between Screens: Rhodes College Students, Short-Form Media, and Mental Health in a Digital Age.
3. Bastien, B. (2024a, June 29). The rise of dumb phones: Back to basics in 2024. Bachir Bastien. <https://bachirbastien.com/2024/06/22/the-rise-of-dumb-phones-back-to-basics-in-2024/>
4. Bastien, B. (2024b, June 29). The rise of dumb phones: Back to basics in 2024. Bachir Bastien. <https://bachirbastien.com/2024/06/22/the-rise-of-dumb-phones-back-to-basics-in-2024/>
5. Bauer, B. (2024, August 13). Doomscrolling: The hidden toll of social media addiction. Stimm-Jewelry. <https://stimm.jewelry/blogs/resources/doomscrolling-toll-social-media-addiction>
6. Bauer, R., & Singh, D. (2023). Journalism students and the responsibility to scroll. *Journalism & Youth*, 5(3), 73–89.
7. Cassidy, C. (2022, September 5). Doomscrolling linked to poor physical and mental health, study finds. The Guardian. <https://www.theguardian.com/society/2022/sep/06/doomscrolling-linked-to-poor-physical-and-mental-health-study-finds>
8. Center for Substance Abuse Treatment. (2014). Understanding the impact of trauma. In Trauma-informed care in behavioral health services. NCBI Bookshelf. <https://www.ncbi.nlm.nih.gov/books/NBK207191/>
9. Cleveland Clinic. (2024, July 17). How to finally stop doomscrolling. <https://health.clevelandclinic.org/everything-you-need-to-know-about-doomscrolling-and-how-to-avoid-it>
10. Davis, L., Ahmed, R., & Zhou, Y. (2025). Twitter use and doomscrolling: Psychological impacts on university students. *Journal of Digital Psychology*, 3(1), 15–28.
11. Desai, R. (2023, January 2). Smartphone overuse. <https://drrajivdesaimd.com/2023/01/02/smartphone-overuse/>
12. Ellis, M. E. (2024, April 4). What is doomscrolling? Why it happens and how it affects your mental health. Constellation Behavioral Health. <https://www.constellationbehavioralhealth.com/blog/what-is-doomscrolling-why-it-happens-and-how-it-affects-your-mental-health/>
13. Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140.
14. Galip, I. (2023). Creative digital labour of meme making.
15. George, A. S., George, A. H., Baskar, T., & Karthikeyan, M. M. (2024). Reclaiming our minds: mitigating the negative impacts of excessive doomscrolling. *Partners Universal Multidisciplinary Research Journal*, 1(3), 17-39.
16. Harnessing direct-to-mobile technology for broadcasting in India: Potential benefits, challenges, and policy implications. (2024). Zenodo. <https://doi.org/10.5281/zenodo.10672002>
17. Hendriksen, D. R. (2024). Mindful Design for Adolescent Minds: Moving Away from Digital Hook Models to Mindful Innovation Models.
18. HMD Global. (2023, November 16). Tips for taking a digital detox with a dumb phone. https://www.hmd.com/en_int/blog/tips-for-digital-detox-with-a-dumb-phone
19. Irby, C. (2024). Pandemic Fantasies: Discourses of Escapism During COVID-19 (Doctoral dissertation, The University of Texas at Dallas).
20. JAIN, S., & DANGI, D. (2025). Youth, Social Media, And Digital Overstimulation: A Systematic Literature Review And Bibliometric Analysis Of Psychological And Behavioural Effects. TPM-Testing, Psychometrics, Methodology in Applied Psychology, 32(S7 (2025): Posted 10 October), 2206-2222.
21. JOMO. (n.d.). What's the best dumb phone without internet? <https://jomo.so/blog/best-dumb-phone-without-internet>

22. Kamraju, M. (2025). Wired but weary: Gen Z's complex relationship with online content, digital identity, and social media burnout. *Acta Informatica Malaysia*, 9(1), 13-21.

23. Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The Public Opinion Quarterly*, 37(4), 509-523.

24. Keles, B., McCrae, N., & Grealish, A. (2020). Systematic review: Social media use and adolescent mental health. *Journal of Adolescence*, 79, 1-17.

25. Kelly, J. (2021, April 14). What is "doomscrolling?" Why do we do it, and how can we stop? UVA Today. <https://news.virginia.edu/content/what-doomscrolling-why-do-we-do-it-and-how-can-we-stop>

26. Khan, S., Rizvi, A., & Jameel, F. (2024). Cultural aspects of doomscrolling among South Asian youth. *South Asia Communication Review*, 6(1), 50-66.

27. Korolainen, J. (2024). The effects of digital media consumption on perceived well-being.

28. Lee, K., & Choi, M. (2022). Staying updated vs. staying sane. *Journal of Youth Psychology*, 19(3), 200-214.

29. Leveraging big data and sentiment analysis for actionable insights: A review of data mining approaches for social media. (2024). Zenodo. <https://doi.org/10.5281/zenodo.13623777>

30. McGowan, H. (2020). Doomscrolling: The dark side of staying informed. *The Atlantic*. <https://www.theatlantic.com>

31. Miller, K. (2023, November 14). What is doomscrolling, and how do you stop? *Health*. <https://www.health.com/mind-body/what-is-doomscrolling>

32. Muzaffar, M., Chohdhry, S., & Afzal, N. (2019). Social media and political awareness in Pakistan: A case study of youth. *Pakistan Social Sciences Review*, 3(II), 1-13.

33. Muzaffar, M., Yaseen, Z., & Safdar, S. (2020). Role of social media in political campaigns in Pakistan: A case study of 2018 elections. *Journal of Political Studies*, 27(2), 141-151.

34. Nelson, T. (2025). Bad at Love: Treating Heartache Through Love Addiction Recovery (Doctoral dissertation, University of Minnesota).

35. Nguyen, A., & Lopez, J. (2021). Understanding doomscrolling awareness and practice. *Cyber Behavior Journal*, 4(3), 130-145.

36. Opal. (n.d.). Why use a dumb phone: Embracing simplicity in the smartphone era. <https://www.opal.so/blog/why-use-a-dumb-phone>

37. Overcoming the collective action problem: Enacting norms to address adolescent technology addiction. (2024). Zenodo. <https://doi.org/10.5281/zenodo.11800020>

38. P. M. J., P., Nimjames, F., Ryan, A. P., Shan, V., & G, L. B. L. (2024, May 17). [Title unavailable]. *Multiresearch Journal*. <https://www.multiresearchjournal.com/arclist/list-2024.4.3/id-2796>

39. Park, J., Kim, Y., & Lee, S. (2020). Institutional responses to pandemic-induced media behavior. *Education & Mental Health*, 12(4), 90-105.

40. Patel, R., & Amin, T. (2024). Emotion regulation and doomscrolling in post-pandemic students. *Asian Journal of Media Psychology*, 8(2), 89-103.

41. Price, M., Legrand, A. C., Brier, Z. M. F., Van Stolk-Cooke, K., Peck, K., Dodds, P. S., Danforth, C. M., & Adams, Z. W. (2022). Doomscrolling during COVID-19: The negative association between daily social and traditional media consumption and mental health symptoms during the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy*, 14(8), 1338-1346. <https://doi.org/10.1037/tra0001202>

42. Price, M., Legrand, A. C., Brier, Z. M., & Hébert-Dufresne, L. (2022). Doomscrolling during COVID-19: The negative psychological consequences of consuming negative news. *Health Communication*, 37(5), 651-660.

43. Quora. (n.d.). I have a troublesome habit of consistently looking at negative media... How can I stop doomscrolling obsessively? <https://www.quora.com/I-have-a-troublesome-habit-of-consistently-looking-at-negative-media-on-YouTube-and-Google>

44. Rebt, J. D. L. D. C. (2023, August 8). What is doom scrolling? *Gateway to Solutions*. <https://www.gatewaytosolutions.org/what-is-doom-scrolling/>

45. Riding the wave: How incumbents can surf disruption caused by emerging technologies. (2024). Zenodo. <https://doi.org/10.5281/zenodo.11783204>

46. Rosen, K. R. (2022, March 30). How to stop doomscrolling—with psychology. *WIRED*. <https://www.wired.com/story/how-to-stop-doomscrolling-psychology-social-media-fomo/>

47. Ross, I. E. S. (2025). Taking interest in versus disregarding sleep information: Qualitative study exploring the adolescent perspective: a thesis presented in partial fulfilment of the requirements for the degree of Master of Health Science in College of Health at Massey University, Wellington, New Zealand (Doctoral dissertation, Massey University).

48. Roth, A., & Arnold, M. (2019). Media multitasking and emotional recovery. *Journal of Cognitive Psychology*, 31(7), 730-742.

49. Safe and Equal. (2023, December 14). Vicarious trauma and burnout. <https://safeandequal.org.au/working-in-family-violence/wellbeing-self-care-sustainability/vicarious-trauma-burnout/>

50. Samvedna Care. (2024, January 22). Doomscrolling dilemma: How endless scrolling affects your mental health. <https://www.samvednacare.com/blog/doomscrolling-dilemma-how-endless-scrolling-affects-your-mental-health/>

51. SciSpace. (n.d.). How does doomscrolling affect social skills? 5 answers from research papers. <https://type.set.io/questions/how-does-doomscrolling-affect-social-skills-xrt5v0bqh>

52. Shabahang, R., Hwang, H., Thomas, E. F., Aruguete, M. S., McCutcheon, L. E., Orosz, G., Khanzadeh, A. A. H., Chirani, B. M., & Zsila, G. (2024). Doomscrolling evokes existential anxiety and fosters pessimism about human nature: Evidence from Iran and the United States. *Computers in Human Behavior Reports*, 15, 100438. <https://doi.org/10.1016/j.chbr.2024.100438>

53. Sharma, B., Lee, S. S., & Johnson, B. K. (2022). The dark at the end of the tunnel: Doomscrolling on social media newsfeeds. *Technology, Mind, and Behavior*, 3(1). <https://doi.org/10.1037/tmb0000059>

54. Shimmer ADHD Coaching. (2024, May 22). How to stop ADHD doomscrolling <https://www.shimmer.care/blog/how-to-stop-adhd-doomscrolling>

55. Sleep disrupted: The evolving challenge of technology on human sleep patterns over two centuries. (2024). Zenodo. <https://doi.org/10.5281/zenodo.11179796>

56. Smith, R., Jones, H., & Bailey, P. (2018). Algorithms and media consumption. *Digital Culture & Society*, 4(1), 88–104.

57. Stills, M. (2024, July 15). Study reveals increased social media use and doomscrolling could affect mental health and productivity in Gen-Z workers. GHP News. <https://www.ghp-news.com/study-reveals-increased-social-media-use-and-doomscrolling-could-affect-mental-health-and-productivity-in-gen-z-workers/>

58. Sweet, E. (2024, May 11). How to stop doom scrolling in 2024: Comprehensive guide. OC Revive. <https://ocrevive.com/how-to-stop-doom-scrolling-2024-comprehensive-guide/>

59. Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285.

60. The death of analog: Assessing the impacts of ubiquitous mobile technology. (2024). Zenodo. <https://doi.org/10.5281/zenodo.10115301>

61. Thomas, N., & Rajan, M. (2022). Loneliness and compulsive news consumption. *Psychology & Technology*, 9(1), 60–72.

62. Usman, S., Huma, T., & Akbar, M. R. (2025). Impact of Doom Scrolling on Mental Well-being among Media Students in Karachi. *Annals of Human and Social Sciences*, 6(2), 357-369.

63. Vaterlaus, J. M., Patten, E. V., Roche, C., & Young, J. A. (2019). Social media and credibility: Digital fatigue among youth. *Youth & Media Journal*, 13(2), 45–60.

64. Wiederhold, B. K. (2020). Social media use during pandemic lockdowns: Mental health implications. *Cyberpsychology, Behavior, and Social Networking*, 23(5), 277–278.

65. Williams, T., & Carter, J. (2023). News consumption during political crises: A media fatigue perspective. *Media & Society*, 17(4), 120–135.

66. Yadav, P., & Kumari, S. (2021). Urban youth, FOMO, and doomscrolling. *Urban Communication Review*, 7(2), 101–118.

67. Ytre-Arne, B., & Moe, H. (2021). Doomscrolling, monitoring and avoiding: News use in COVID-19 pandemic lockdown. *Journalism*. <https://doi.org/10.1080/1461670X.2021.1952475>

68. Zhou, L., & Peng, H. (2022). TikTok and digital fatigue among students. *Social Media Studies*, 11(2), 34–47.