

From Mindless to Mindful Scrolling: How Emotion Can Twist Online Engagement

Riya Ahmed¹, Bijoy Krishna Panda²

¹PhD. Student, Department of Education, Faculty of Arts, Jadavpur University, Kolkata, India

²Assistant Professor, Department of Education, Faculty of Arts, Jadavpur University, Kolkata, India

Abstract

Mindless scrolling has emerged as a pervasive yet understudied phenomenon in the digital age, often used as a means to cope with boredom, anxiety, and emotional discomfort. Characterized by passive and purposeless social media consumption, it is typically accompanied by reduced awareness of time and content. This review article aimed to explore the concept of mindless scrolling, factors that contribute to this behavior, and its influence on users' well-being across psychological, neurological, and physical domains. It also explored the transition from mindless to mindful scrolling, emphasizing intentional and conscious engagement with digital content. After reviewing existing literature, including scholarly articles, media sources, and relevant websites, this study identified persuasive platform design, emotional avoidance and other factors contributing to the habit of mindless scrolling. The findings highlighted the negative influence of mindless scrolling on mental health and cognitive functioning, while also outlining practical strategies to promote mindful social media use. These include awareness-based practices, introduction of design friction through reaction-based interfaces and mindful scrolling feedback nudges, and the use of various digital well-being tools. The findings offer valuable insights for researchers, educators, and policymakers to better understand mindless scrolling and implement practical strategies that foster mindful technology use.

Keywords: Mindless Scrolling, Doomscrolling, Mindful Scrolling, Short-Video Addiction, Mindful Technology Use, Digital Well-Being

1. INTRODUCTION

Scientific and technological advancements have led to the rapid proliferation of smartphones and social media platforms, transforming how individuals access and engage with information in their daily lives. Although these technologies offer countless opportunities for communication, entertainment, and knowledge sharing, they have also introduced new patterns of digital use that raise concerns about users' attention, well-being, and autonomy. One such problematic pattern is "mindless scrolling," which has gained increasing attention in recent years as a pervasive yet understudied phenomenon. People often begin scrolling to relieve boredom or anxiety, using it as a form of escape from reality, a coping mechanism for discomfort and a substitute for genuine human connection (Hanley, 2024). Individuals often continue scrolling well beyond their intention to stop, watching time slip away as they stare at their phones; this reflects an experience that is not merely casual but compulsive. (Hartoonian, 2025).

The term "Mindless scrolling" came into use around 2015, in response to rising concerns regarding social media users rapidly consuming content with low levels of engagement (de Segovia Vicente et al., 2024).

Users describe mindless scrolling as a “dissociative experience” that completely immerses them in the moment (Baughan et al., 2022), yet it is often followed by regret, as they feel disappointed and frustrated for having “wasted time” and allowed themselves to be pulled “down the rabbit hole” (Baym et al., 2020; Lee et al., 2021). Building on the normative dissociation framework, Ruiz et al. (2024) defined mindless scrolling as a state of “absorption and a diminished self-awareness, often accompanied by a reduced sense of time, control and a gap in one’s memory” (Baughan et al., 2022). Ali et al. (2026) defined “mindless smartphone usage” as prolonged, habitual, automatic interaction with digital content that occurs without conscious thought or clear purpose, often influenced by persuasive platform design like infinite scrolling and autoplay. Mindless scrolling is described by users as a passive form of social media consumption, carried out without any clear goal or purpose and often accompanied by a diminished awareness of both time spent and the content viewed (Baym et al., 2020). In contrast, “mindful” social media use involves intentional engagement and present awareness (Bauer et al., 2017). de Segovia Vicente et al.(2024) described mindless scrolling as the rapid, continuous consumption of algorithmically curated social media content without purpose and with reduced awareness. A study conducted by de Segovia Vicente et al.(2024) goes beyond the traditional active versus passive social media use distinction by focusing on the individual experience of mindless scrolling, which involves both behavioral and subjective elements. Mindless scrolling, doomscrolling, and infinite scrolling are often used interchangeably, but they describe different facets of modern digital consumption. Doomscrolling is a specific form of mindless scrolling characterized by the “compulsive and consecutive consumption of negative news and content on social media, often driven by intensive external comparisons”(Körün & Satici, 2025; Mannell & Meese, 2022). Doomscrolling exploits the brain’s negativity bias, a survival mechanism that processes distressing headlines, such as political crises or natural disasters, similarly to physical threats. This triggers the amygdala (the brain's alarm system) to release cortisol, the stress hormone (Nakhawa, 2025). The term “doomscrolling” was popularized by journalist Karen Ho in 2020 during the COVID-19 pandemic, when many individuals developed a tendency to compulsively consume negative news in order to track casualties and continuously seek updates amid the global crisis. (Panda, 2025; Wright, 2025). Existing literature on doomscrolling indicates that it is linked with intolerance of uncertainty, anxiety, psychological distress, depression, and negatively impacts overall psychological well-being (See Figure 1).

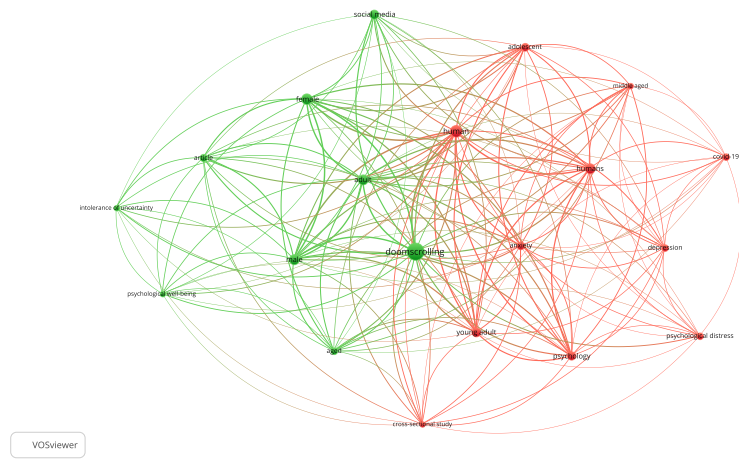


Figure 1: Bibliometric map on keywords (All keywords) co-occurrence network of doomscrolling related publications from period 2021-2026 [Scopus query strings: TITLE-ABS-KEY("Doomscrolling") AND (

LIMIT-TO (DOCTYPE,"ar") OR LIMIT-TO (DOCTYPE,"re")) AND (LIMIT-TO (LANGUAGE,"English"))]

On the other hand Infinite scroll is a social media design feature that continuously loads new content as users move down their feed, creating an uninterrupted stream of information (Rixen et al., 2023; Ruiz et al., 2024). Inspired by the “bottomless bowl” experiment, it encourages prolonged engagement by ensuring there is always more content to consume, leading to continuous, often endless and mindless scrolling (Köse, 2025). Consequently, people remain glued to their screens for extended periods, often without being aware of how much time they have spent. Recent statistics indicate a steady rise in global social media usage over the years, with internet users spending an average of 141 minutes per day on social media as of February 2025 (Thuy, 2025).

Statistics from various sources suggest that screen and internet addiction have become significant public health concerns in recent years, with particularly high prevalence among youth in India. A national survey reported that 60% of Indian children aged 9 to 17 spend over three hours daily on social media or gaming, and adolescents are more likely to use their phones for social media (76%) than for educational purposes (57%) (Jain, 2025). Furthermore, multiple Indian studies report that nearly 25% of adolescents exhibit signs of internet addiction (Express News Service, 2026; PTI, 2026). Joseph et al. (2022) conducted a meta-analysis of 15 Indian studies on problematic internet use and found that 21.5% of school-going adolescents in India exhibited moderate levels of excessive technology use, while 2.6% were classified as severe cases (Tadpatrikar et al., 2025). At a global level, trends also point to rising digital engagement, with a 2024 report highlighting a 52% increase in children’s screen time since 2020 (Jain, 2025).

Prolonged screen exposure resulting from both mindless scrolling and doomscrolling significantly impacts well-being across psychological, neurological, and physical dimensions. Recent studies report that doomscrolling impairs emotional regulation abilities and contributes to higher levels of anxiety, burnout, and overall psychological distress (Satici et al., 2023; Kartol et al., 2023). Existing literature associates doomscrolling with anxiety, depression, post-traumatic stress, difficulties in social cognition, decline in academic performance, sleep disturbances, and increased uncertainty about the future (Price et al., 2022; Rajeshwari & Meenakshi, 2023; Syunyakov et al., 2023). Furthermore, evidence suggests that prolonged doomscrolling diminishes self-awareness capacity, mindfulness and increases secondary traumatic stress reactions (Taskin et al., 2024).

In this context, where mindless scrolling adversely affects individuals’ psychological well-being, researchers have begun exploring alternative technologies and interventions to promote digital well-being and restore intention and awareness in users’ consumption of digital content. The goal is to foster more meaningful online engagement, enabling individuals to disengage from the “autopilot” mode associated with mindless scrolling and regain control over their choices. Consequently, a growing body of research is now focusing on mindful scrolling, or mindful social media use, which is characterized by intentional and conscious engagement with digital content, accompanied by a high level of present-moment awareness and purpose (Bauer et al., 2017; de Segovia Vicente et al., 2024; Köse, 2025).

This review article aimed to explore the concept of mindless scrolling and the factors that contribute to this behavior. It also aimed to examine its influence on users’ well-being across psychological, neurological, and physical dimensions, and to identify practical strategies to promote more mindful and intentional social media use, thereby restoring users’ digital well-being. For this purpose, the researcher reviewed scholarly articles related to keywords such as mindless scrolling, doomscrolling, infinite

scrolling, and short-video addiction. Relevant newspaper articles, websites, and YouTube videos addressing these topics were also studied. After reviewing the existing literature, key themes were identified, including factors contributing to mindless scrolling, its influence on mental health, and strategies to cope with such behavioral patterns.

2. CONTRIBUTING FACTORS OF MINDLESS SCROLLING

2.1 Lack of Boredom Tolerance

Boredom serves as a primary psychological trigger for mindless scrolling, often evolving from a simple desire for distraction into an automatic behavioral loop. Boredom is described as an aversive state in which individuals desire but struggle to engage in meaningful or satisfying activities, often accompanied by feelings of emptiness and dissatisfaction (Giri, 2025). To avoid this discomfort, people frequently turn to scrolling as an escape from reality or a way to ease unpleasant internal states (Hanley, 2024). In this way, the smartphone acts as a gateway to avoidance, allowing users to distance themselves from their inner uncomfortable experiences rather than seek information (Hartoonian, 2025). When individuals feel bored, they begin scrolling for relief; however, this is an ineffective coping strategy, as mindless scrolling often intensifies boredom rather than alleviating it. Dr Alok Kanojia describes terminal boredom as a condition arising from end-stage screen addiction, in which activities without screens feel highly unpleasant. This occurs because the brain develops tolerance through the downregulation of dopamine receptors to protect itself from constant overstimulation by games and social media. Consequently, normal activities like reading or walking no longer provide enough signal to be enjoyable, leading to physiological restlessness and an inability to focus on non-digital tasks (HealthyGamerGG, 2024). Mindless scrolling reduces the brain's ability to tolerate boredom, as found by Giri (2025).

2.2 Algorithmic and Persuasive Design

Social media design features, such as infinite scroll and algorithmically curated reels, act as primary drivers that condition users to enter a mindless, dissociative state (de Segovia Vicente et al., 2024). Mindless scrolling is often reinforced by AI-driven algorithms that use autoplay, frequent notifications, and sensationalized content to trigger dopamine-driven interactions and reduce user autonomy (Neuro Publishing Team, 2025). Digital platforms use invisible computational logics and algorithms to personalize content based on users' previous scrolling behavior (Panda, 2025), which can trap individuals in echo chambers (Ali et al., 2026). These environments often promote emotionally polarized content and dichotomous thinking, thereby limiting opportunities for critical and reflective thinking (Ramaswamy et al., 2025).

2.3 The Variable Reinforcement Loop

Mindless scrolling operates on a variable ratio reinforcement schedule, the strongest reinforcement schedule in behavioral psychology and the same mechanism used in casino slot machines, where each swipe triggers anticipation dopamine because the user does not know what will appear next (e.g., novelty, shock, or relief) (Hartoonian, 2025; Nakhawa, 2025). This uncertainty keeps users in a continuous loop of anticipation, a state of perpetual seeking that drives scrolling not for satisfaction but for the expectation of potential reward. Infinite scroll lacks natural stopping points, unlike books or TV shows. Therefore, it denies the brain a sense of completion and makes it difficult to disengage. Behavioral engineers have developed a "no exit" open-ended design through infinite scrolling that intentionally encourages prolonged screen use (Hartoonian, 2025). Over time, extended periods of mindless scrolling can deplete

dopamine levels, creating a deficit that leaves users feeling mentally drained, unmotivated, and more susceptible to decision fatigue or choice paralysis after disengaging from their phones (Nakhawa, 2025).

2.4 Illusion of Control and Emotional Avoidance

Mindless scrolling acts as an emotional shield against uncomfortable real-life feelings and negative emotions. Digital platforms often create a false sense of control over life, allowing individuals to avoid people they dislike (e.g., by blocking them) and fostering an illusion of mastery through gamified features that promote addictive, reward-driven behavior. In reality, however, individuals need to tolerate uncertainty, negativity, and situations that do not align with their expectations. This intolerance toward uncertainty, boredom and negativity encourages further mindless scrolling, as users seek a false sense of control over their lives. Moreover, excessive reliance on social media and technology depletes our motivation to fix real-world problems (HealthyGamerGG, 2024). Scrolling through social media creates a sense of parasocial proximity, offering a form of borrowed intimacy in which users feel socially connected without the vulnerability or effort required for real-world participation and interaction (Hartoonian, 2025). While these platforms may create an illusion of connection, they can paradoxically intensify feelings of loneliness, which people may attempt to ignore or escape. While mindless scrolling may begin as a search for reward, it often evolves into a form of emotional buffering or sedation. Scrolling acts as a soft barrier between the user and uncomfortable feelings such as loneliness, boredom, anxiety, or intolerance of an uncertain future. Over time, it becomes a coping mechanism in which individuals scroll not for information, but to create distance from their emotions (Hartoonian, 2025). Like other intoxicants, mindless scrolling offers temporary relief from persistent real-life challenges. As a result, psychological needs are less fulfilled in the real world, while the virtual environment provides a false sense of achievement, satisfaction, and success. Over time, this reduces intrinsic motivation to act in real life, leading individuals to become increasingly dependent on screens to meet their psychological needs (HealthyGamerGG, 2024).

2.5 Externality of Happiness and Schadenfreude

Joshanloo (2017) described the externality of happiness as the tendency to view happiness as dependent on external factors such as luck, other people, or the environment rather than internal resources. Schadenfreude refers to the pleasure an individual experiences in response to others' misfortunes (Wang et al., 2019). It is prevalent on digital platforms, where people may exhibit overt or covert pleasure in others' failures, scandals, or mistakes, often beginning from childhood (Bacile et al., 2025; Z.-J. Wang et al., 2024). Brubaker et al. (2021) found that individuals who exhibit higher levels of schadenfreude are more likely to engage in online trolling activities and criticising others. Individuals who compulsively consume negative news through doomscrolling may experience reduced empathy and increased schadenfreude, which can negatively affect their overall well-being (Körün & Satici, 2025). In a cross-sectional study involving 811 participants in Türkiye, Körün & Satici (2025) examined whether externality of happiness predicts mental well-being through the sequential mediating roles of doomscrolling, schadenfreude, and family functioning. Their findings indicated that these factors act as serial mediators in the relationship between externality of happiness and mental well-being. It was found that individuals who attribute happiness to external factors are more likely to engage in doomscrolling behaviour. Doomscrolling was found to be positively linked to schadenfreude, indicating that increased exposure to negative online content may foster satisfaction in others' misfortunes (Körün & Satici, 2025).

3. INFLUENCE OF MINDLESS SCROLLING ON MENTAL HEALTH

Recent studies report that doomscrolling impairs emotional regulation abilities and contributes to higher levels of anxiety, burnout, and overall psychological distress (Satici et al., 2023; Kartol et al., 2023). Existing literature associates doomscrolling with anxiety, depression, post-traumatic stress, difficulties in social cognition, decline in academic performance, sleep disturbances, and increased uncertainty about the future. (Price et al., 2022; Rajeshwari & Meenakshi, 2023; Syunyakov et al., 2023). Other areas of mental health are also influenced by mindless scrolling, as discussed below.

3.1 Guilt, Goal Conflict and Well-Being

de Segovia Vicente et al. (2024) conducted a two-week study with 1,315 adults and found that increased mindless scrolling is associated with higher levels of guilt about smartphone use and reduced well-being. This relationship is partly explained by goal conflict, as individuals feel they could have spent that time on more meaningful activities. Frequent and intense guilt can lead to negative self-evaluations, where individuals perceive themselves as lacking self-control, ultimately hampering their well-being (Kim et al., 2011). Those with lower self-control are particularly more vulnerable, experiencing greater goal conflict after mindless scrolling. Overall, the findings suggest that mindless scrolling, though a seemingly harmless activity, can have both immediate and long-term negative effects on well-being (de Segovia Vicente et al., 2024).

3.2 Cognitive Load and Decision Fatigue

A single scrolling session exposes the brain to a tsunami of information, forcing constant micro-decisions (e.g., "Should I share this?" or "Is this important?"). This rapidly depletes finite mental energy, pushing the brain to seek the path of least resistance. Consequently, this cognitive overload leads to decision fatigue. As a result, after scrolling, the exhausted brain defaults to easy, passive choices rather than deliberate actions (e.g., watching a movie instead of taking a walk), leaving individuals feeling less in control of their own behaviour (Nakhawa, 2025).

3.3 Emotional Suppression

Excessive screen use due to mindless scrolling leads to emotional suppression. Prolonged digital engagement suppresses the amygdala and limbic system, resulting in reduced awareness of emotions such as shame, sadness, or anxiety. Although often perceived as negative, these emotions serve as the primary motivational drive for corrective actions. When they are suppressed through extended screen use, emotional awareness declines, leading to a loss of internal drive and a corresponding drop in motivation, leaving individuals feeling directionless (HealthyGamerGG, 2024).

3.4 Learned Helplessness

In the context of doomscrolling, repeated exposure to negative content, such as global crises, natural disasters, and social comparisons that the brain cannot control or escape, can lead to a state of learned helplessness, where giving up becomes a learned response. As individuals continuously encounter distressing information they cannot influence, the brain forms a "see threat → feel powerless" loop, gradually eroding motivation, agency, and belief in one's ability to effect change (Nakhawa, 2025). This process is further intensified by dopamine depletion caused by excessive screen use, leaving little motivational energy for real-world tasks, which then feel overwhelming and difficult to initiate. Over time, this leads to lethargy, reduced motivation, and existential doubt, causing individuals to disengage from meaningful activities and reinforcing a passive, helpless state (HealthyGamerGG, 2024; Nakhawa, 2025).

3.5 Impact on Cognitive Functions

Short video content (e.g., YouTube Shorts and Instagram reels) represents a highly engaging feature used

by social media platforms to promote mindless scrolling. A systematic review conducted by Mona et al. (2026) identifies attention and self-control as the two cognitive domains significantly affected by Short Video Addiction (SVA). SVA is consistently linked to reduced attentional control, shorter attention spans, and difficulty sustaining focus on a single task (Pranathi & Jacob, 2025; Singh & Prusty, 2025; Xie et al., 2023; Ye et al., 2025; Zhou et al., 2024). Frequent exposure to short-form video content is associated with decreased attentional stability, impaired inhibitory control, and increased cognitive fragmentation (Chen et al., 2022; Jiang et al., 2024; Pan et al., 2025). Self-control serves as a key protective factor; with individuals possessing higher self-control being significantly less likely to develop SVA (Mona et al., 2026). Conversely, SVA is negatively associated with self-control, as measured by dimensions such as inhibitory control, proactive regulation, and impulse control. Individuals with lower self-control were more prone to compulsive use, impulsivity, and distraction. SVA is associated with working memory deficits, diminished verbal recall, and disruptions in how the brain encodes continuous information (Al-Leimon et al., 2025; Li et al., 2025; Rahayu et al., 2025). Emerging research also highlights its impact on decision-making, linking SVA to altered reward-based judgments. Individuals show increased risk-taking tendencies, increased sensitivity to immediate rewards (Zhang & Li, 2025), and reduced loss aversion (Liu et al., 2025). Collectively, these cognitive impairments contribute to declines in academic performance, largely due to reduced attention span and sustained focus.

3.6 Neurological Consequences

Excessive use of digital platforms through mindless scrolling contributes to executive dysfunction by reducing engagement of the frontal lobe, which is responsible for planning and impulse control. Features such as autoplay and seamless content delivery reduce the need for effort, leading to a decline in planning ability and goal-directed behavior. At the same time, these platforms are designed to stimulate impulses through infinite scrolling and attention-grabbing content rather than encourage restraint, thereby weakening impulse control and self-regulation. Short-form content further reinforces immediate gratification, leaving little room for boredom or delayed rewards. Over time, prolonged exposure to platforms like YouTube, TikTok, and Instagram is associated with diminished executive functioning and increased difficulty in managing tasks and resisting compulsive use (HealthyGamerGG, 2024). Neuroscientific evidence shows that short-video addiction is linked to reduced activity in the prefrontal cortex, impairing executive control. At the same time, preferred short videos activate the amygdala, creating a pattern of limbic dominance, particularly in individuals with lower self-control. This imbalance weakens top-down self-control mechanisms while strengthening bottom-up emotional and reward responses, making short videos highly engaging and difficult to disengage from (Mona et al., 2026; Su et al., 2023).

3.7 Social Comparison and Identity Crisis

Theodore Roosevelt once said, "Comparison is the thief of joy". Social media typically presents a "highlight reel" of curated, idealized moments. Comparing one's own life to these unrealistic standards often results in lower self-esteem, feelings of inadequacy, dissatisfaction, and even depression (Hanley, 2024). Social media platforms are designed to provide instant rewards through likes, shares, and comments, which strongly appeal to adolescents' need for social validation (Nadkarni & Hofmann, 2012), especially during critical stages of identity formation. This can lead to social comparison cycles, fear of missing out, and a constant desire for immediate gratification, all of which may increase anxiety and emotional dysregulation (Ali et al., 2026). At the same time, heavy exposure to online environments through mindless scrolling can interfere with healthy identity development, as young people may begin

shaping themselves based on social media trends, peer validation, or extreme online subcultures (e.g., “manosphere” and “incel” groups) rather than authentic personal growth (Ramaswamy et al., 2025).

4. MINDFUL SCROLLING: A STEP FORWARD

4.1 Design Friction

Ruiz et al. (2024) demonstrated that introducing design friction, such as a reaction-based interface that requires users to interact with posts before viewing more content, can reduce mindless scrolling on social media. Their findings showed that this approach increased users’ self-reported attention and ability to remember content compared to an infinite-scroll interface. The study also suggests that educational apps could use reaction-based interfaces to enhance user focus and engagement (Ruiz et al.,2024). Purohit & Holzer (2021) explored how a user-friendly, privacy- sensitive, and ethical digital nudging intervention could encourage more mindful social media use and reduce time spent on platforms. They developed MISFEED (Mindful Scrolling Feedback Nudge), a feedback notification shown while users browse their social media feeds. The findings indicated that such soft and transparent digital nudges can effectively limit digital consumption. Participants reported increased awareness of their social media usage, and overall weekly digital consumption decreased by more than 20.58%. Additionally, the intervention maintained good usability, indicating that promoting mindfulness did not introduce excessive friction that might encourage users to abandon the nudge(Purohit & Holzer, 2021).

4.2 Shifting from Compulsive Use to Intentional Use

Users can regain control over mindless scrolling by setting clear limits, such as physical timers or app restrictions. Planning a specific future activity before opening an app reactivates the prefrontal cortex and provides the brain with a necessary completion cue. These strategies help restore intentional use by providing a clear stopping point and preventing compulsive scrolling (Nakhawa, 2025). Restrictive practices such as digital detoxes may not be effective in the long term for reducing mindless scrolling. Breaking this cycle begins with awareness, rather than restriction. Reclaiming agency starts when users identify why they are scrolling (e.g., to avoid a specific emotion). Once this purpose becomes conscious, the behaviour loses its automaticity. The goal is to help the nervous system develop alternative ways to find safety and relief, so it no longer relies exclusively on screen use. Individuals should be encouraged to cultivate a sense of safety from within, rather than depending on mindless scrolling, which often creates a false sense of security in the virtual world. Building awareness introduces a pause between impulse and action, enabling more intentional device use and fostering a healthier sense of agency (Hartoonian, 2025).

4.3 Proactive Selfcare

To reduce mindless scrolling, users can enable greyscale mode to make apps less visually stimulating and set dedicated time blocks for scrolling. These strategies help limit screen time and prevent social media use from interfering with more productive activities (Gogia, 2023). Useful practices to reduce mindless scrolling include physical exercise, mindfulness, and practicing delayed gratification. Exercise improves self-control and emotional regulation, mindfulness strengthens executive functioning and reduces addictive behaviors, and focusing on long-term goals helps individuals resist immediate gratification(Mona et al., 2026).

4.4 Conscious Content Consumption

Users are encouraged to be intentional with their attention by avoiding clickbait and toxic content. Strategies include filtering out polarizing media content, seeking diverse perspectives to escape echo chambers, fostering intellectual humility, and supporting local journalism to stay informed without being

exploited by attention economy-driven platforms (Control Your Tech Use, n.d.).

4.5 Helpful Digital Tools

Various specialized digital tools can help reduce digital distractions by introducing design friction and promoting mindful technology use. These include content eradicators that remove addictive feeds (e.g., Distraction-Free YouTube or Facebook Newsfeed Eradicator), apps with mindfulness nudges (e.g., One Sec) that help users to pause and take a deep breath before opening social media, and features such as NightShift or apps like Flux that reduce blue light exposure to protect sleep. Individuals should be encouraged to create device free zone and maintain tech-free mealtimes at home (Control Your Tech Use, n.d.).

4.6. Multi-Stakeholder Approach to Digital Well-Being

Well-being in the digital age is shaped by broader social systems, not just individual factors. Interventions should extend beyond individual therapy to include family-based approaches and digital literacy. Developing self-awareness and empathy is essential to counter the negative effects of doomscrolling (Körün & Satıcı, 2025). Ali et al. (2026) recommend a multi-stakeholder approach to promote digital well-being. This includes clinicians incorporating digital well-being into psychoeducation and addressing screen use during patient interviews, schools integrating media literacy into their curricula, parents being encouraged to practice co-viewing and open discussion rather than relying solely on surveillance or restrictive measures, and governments taking regulatory actions against persuasive design features rather than focusing only on content moderation to reduce harmful digital engagement (Ali et al., 2026).

5. CONCLUSION:

Individuals living in the 21st century have witnessed many unprecedented situations, such as pandemics, climate change, frequent natural disasters, wars, and political conflicts. With the advent of artificial intelligence and rapid scientific innovation, information has become abundant. In this era of information overload, individuals face complex challenges, and they feel a strong urge to stay informed, connected and up to date all the times, yet their limited cognitive capacity prevents them from processing all the information they encounter. As a result, there is constant confusion about what information is true and what is fake or manipulated, often by large technology companies that capture attention and consume productive time without users' awareness. What may begin as a simple act of relaxation, entertainment, or relief from boredom can easily turn into prolonged sessions of mindless scrolling. Thus, in the present context, where humanity faces unprecedented challenges and increasing intolerance toward uncertainty, people continue scrolling in an attempt to stay informed. Mindless scrolling has become a silent behavioral issue that gradually diminishes cognitive processing abilities and, over time, negatively affects overall well-being.

This article identified several factors that contribute to such behavior, including lack of boredom tolerance, algorithmic and persuasive platform design, the variable reinforcement loop, emotional avoidance, the externalization of happiness and schadenfreude. It also explored the influences of mindless scrolling on well-being across psychological, neurological, and physical dimensions. These include guilt, goal conflict, cognitive load, decision fatigue, emotional suppression, learned helplessness, and mental health issues such as anxiety, burnout, and overall psychological distress. Additionally, it affects cognitive functioning such as attention, self-control, and working memory. Neurologically, it is associated with prefrontal cortex suppression, limbic dominance, and executive dysfunction due to reduced engagement of the frontal lobe.

Social comparison and identity crises are also notable consequences, particularly among adolescents. The shift from mindless to mindful scrolling is not about eliminating technology use but about transforming how individuals engage with it. The article highlighted several strategies for mindful technology use identified in the existing literature. These include introducing design friction (e.g., reaction-based interfaces and mindful scrolling feedback nudges), setting clear limits such as physical timers or app restrictions, and emphasising awareness rather than restriction. Additional approaches include adopting healthy habits such as enabling greyscale mode, setting dedicated scrolling blocks, engaging in physical exercise, and practicing conscious content consumption, as well as using helpful digital tools. Furthermore, digital well-being requires a broader, multi-stakeholder approach involving families, educators, clinicians, and policymakers to promote healthier and more intentional technology use. Promoting digital well-being requires a balanced, holistic approach that prioritizes autonomy, awareness, and intentionality. By creating space between impulse and action, individuals can reclaim agency over their attention, allowing technology to serve as a tool for enrichment rather than a source of compulsion.

REFERENCES

1. Ali, A., Singh, A., Sharma, P., & Paul, F. A. (2026). Lost in the Scroll: Investigating Mindless Smartphone Usage Among Adolescents. *Journal of Indian Association for Child and Adolescent Mental Health*, 22(1), 33–35. <https://doi.org/10.1177/09731342251380968>
2. Al-Leimon, O., Pan, W., Jaber, A.-R., Al-Leimon, A., Jaber, A. R., Aljahalin, M., & Dardas, L. A. (2025). Reels to Remembrance: Attention Partially Mediates the Relationship Between Short-Form Video Addiction and Memory Function Among Youth. *Healthcare*, 13(3), 252. <https://doi.org/10.3390/healthcare13030252>
3. Bacile, T., Elmadağ, A., Okan, M., Dineva, D., & Rynarzewska, A. (2025). Schadenfreude and Sympathy: Observer Reactions to Malicious Joy During Social Media Service Recovery. *Journal of Interactive Marketing*, 60, 44–64. <https://doi.org/10.1177/10949968241246252>
4. Bauer, A. A., Loy, L. S., Masur, P. K., & Schneider, F. M. (2017). Mindful instant messaging: Mindfulness and autonomous motivation as predictors of well-being in smartphone communication. *Journal of Media Psychology: Theories, Methods, and Applications*, 29(3), 159–165. <https://doi.org/10.1027/1864-1105/a000225>
5. Baughan, A., Zhang, M. R., Rao, R., Lukoff, K., Schaadhardt, A., Butler, L. D., & Hiniker, A. (2022). “I Don’t Even Remember What I Read”: How Design Influences Dissociation on Social Media. *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems, CHI ’22*, 1–13. <https://doi.org/10.1145/3491102.3501899>
6. Baym, N. K., Wagman, K. B., & Persaud, C. J. (2020). Mindfully Scrolling: Rethinking Facebook After Time Deactivated. *Social Media + Society*, 6(2), 2056305120919105. <https://doi.org/10.1177/2056305120919105>
7. Brubaker, P., Montez, D., & Church, S. (2021). The Power of Schadenfreude: Predicting Behaviors and Perceptions of Trolling Among Reddit Users. *Social Media + Society*, 7, 205630512110213. <https://doi.org/10.1177/20563051211021382>
8. Chen, Y., Li, M., Guo, F., & Wang, X. (2022). The effect of short-form video addiction on users’ attention. *Behaviour and Information Technology*. <https://doi.org/10.1080/0144929X.2022.2151512>

9. Control Your Tech Use. (n.d.). Center for Humane Technology. Retrieved March 28, 2026, from <https://www.humanetech.com/take-control>
10. de Segovia Vicente, D., Van Gaeveren, K., Murphy, S. L., & Vanden Abeele, M. M. P. (2024). Does mindless scrolling hamper well-being? Combining ESM and log-data to examine the link between mindless scrolling, goal conflict, guilt, and daily well-being. *Journal of Computer-Mediated Communication*, 29(1), 1–14. <https://doi.org/10.1093/jcmc/zmad056>
11. Express News Service. (2026, March 24). Data cut after 7 pm, Digital Wellness committee at schools, Aadhaar-enabled login: Karnataka issues draft social media ban policy for children. <https://indianexpress.com/article/cities/bangalore/data-cut-digital-wellness-committee-schools-aadhaar-enabled-login-karnataka-issues-draft-social-media-ban-policy-children-10598023/>
12. Giri, K. (2025). Boredom, Doomscrolling, and the rise of Short Video Dependence among Young Adults and Adolescents. *International Journal of Interdisciplinary Approaches in Psychology*, 3(10), 50:58-50:58. <https://doi.org/10.61113/ijiap.v3i10.1174>
13. Gogia, M. (2023, October 21). Mindless to Mindful Scrolling. Medium. <https://medium.com/@mayankgogia1001/mindless-to-mindful-scrolling-b73b0ed4604e>
14. Hanley, R. (2024, September 20). Shifting From Mindless Scrolling to Mindful Engagement | Psychology Today. Psychology Today. Psychology Today. <https://www.psychologytoday.com/us/blog/everyday-resilience/202409/shifting-from-mindless-scrolling-to-mindful-engagement>
15. Hartoonian, N. (2025, December 2). The Psychology of Doom Scrolling: Why Your Brain Keeps Reaching For “Just One More Swipe” [Blog]. Rowan Center for Behavioral Medicine. <https://rowancenterla.com/psychology-of-doom-scrolling-explained/>
16. HealthyGamerGG. (2024, November 3). Why You Can’t Stop Scrolling (End-Stage Screen Addiction) [Video recording]. <https://www.youtube.com/watch?v=OwlXbUYDf0w>
17. Jain, D. (2025, May 12). Why Indian Schools Need A Robust Digital Wellbeing Policy. Youth Ki Awaaz. <https://www.youthkiawaaz.com/2025/05/why-do-indian-schools-need-a-robust-digital-wellbeing-policy/>
18. Jiang, T., Ou, S., Cao, Y., Li, J., & Ma, N. (2024). The Imbalance Between Goal-Directed and Habitual Systems in Problematic Short-Form Video Users. *International Journal of Mental Health and Addiction*, 23, 4716–4744. <https://doi.org/10.1007/s11469-024-01377-y>
19. Joseph, J., Varghese, A., Vijay, V. R., Dhandapani, M., Grover, S., Sharma, S. K., Singh, M., Mann, S., & Varkey, B. P. (2022). Problematic Internet Use Among School-Going Adolescents in India: A Systematic Review and Meta-Analysis. *Indian Journal of Community Medicine: Official Publication of Indian Association of Preventive & Social Medicine*, 47(3), 321–327. https://doi.org/10.4103/ijcm.ijcm_1129_21
20. Joshanloo, M. (2017). Mediators of the relationship between externality of happiness and subjective well-being. *Personality and Individual Differences*, 119, 147–151. <https://doi.org/10.1016/j.paid.2017.07.017>
21. Kartol, A., Üztemur, S., & Yaşar, P. (2023). “I cannot see ahead”: Psychological distress, doomscrolling and dark future among adult survivors following Mw 7.7. and 7.6 earthquakes in Türkiye. *BMC Public Health*, 23(1), 2513. <https://doi.org/10.1186/s12889-023-17460-3>
22. Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin*, 137(1), 68–96. <https://doi.org/10.1037/a0021466>

23. Körün, A. B., & Satici, S. A. (2025). Believing Happiness Lies Outside in the Digital Age: A Systemic Model of Externality of Happiness, Doomscrolling, Schadenfreude, Family Functioning, and Mental Well-Being. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-025-01580-5>
24. Köse, D. B. (2025). Scrolling social media with the third eye: Mindful technology use as a disconnection strategy. *New Media & Society*, 14614448251391358. <https://doi.org/10.1177/14614448251391358>
25. Lee, A., Katz, R., & Hancock, J. (2021). The Role of Subjective Construals on Reporting and Reasoning about Social Media Use. *Social Media + Society*, 7, 205630512110353. <https://doi.org/10.1177/20563051211035350>
26. Li, H., Li, J., Hao, X., & Liu, W. (2025). Behavioral and eye-tracking investigation of event segmentation following short video watching. *NPJ Science of Learning*, 10(1), 86. <https://doi.org/10.1038/s41539-025-00378-3>
27. Liu, C., Wang, J., Li, H., Shangguan, Q., Jin, W., Zhu, W., Wang, P., Chen, X., & Wang, Q. (2025). Loss aversion and evidence accumulation in short-video addiction: A behavioral and neuroimaging investigation. *NeuroImage*, 313, 121250. <https://doi.org/10.1016/j.neuroimage.2025.121250>
28. Mannell, K., & Meese, J. (2022). From Doom-Scrolling to News Avoidance: Limiting News as a Wellbeing Strategy During COVID Lockdown. *Journalism Studies*, 23(3), 302–319. <https://doi.org/10.1080/1461670X.2021.2021105>
29. Mona, A. E., Roshith, V., Peter, R., Roy, P., Hassan, A., Devika, M., & Trishala, M. (2026). Short video addiction and its impact on cognitive functioning in adolescents and youth: A systematic review. *International Journal of Adolescence and Youth*, 31(1), 2623337. <https://doi.org/10.1080/02673843.2026.2623337>
30. Nadkarni, A., & Hofmann, S. (2012). Why Do People Use Facebook? Personality and Individual Differences, 52, 243–249. <https://doi.org/10.1016/j.paid.2011.11.007>
31. Nakhawa, Y. (2025, December 22). How Doomscrolling Silently Hijacks Your Brain and Erodes Your Ability to Choose. *Medium*. <https://yugantnakhawa.medium.com/how-doomscrolling-silently-hijacks-your-brain-and-erodes-your-ability-to-choose-b49ee0eb08b5>
32. Neuro Publishing Team. (2025, March 22). Purpose-Driven Technology: How to Shift From Mindless Scrolling to Meaningful Use—Neuro. *Neuro.Now*. https://neuro.now/lived_experience/purpose-driven-technology/
33. Pan, M., Mao, Q., He, L., Dong, X., Wang, T., Jiang, Q., Li, Z., Wang, L., Wang, F., Wang, C., & Huang, W. (2025). The relationship between adolescents' short video use and core self-evaluation: The chain mediating effect of information overload and online maladaptive cognitions. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, 44(7), 5884–5896. <https://doi.org/10.1007/s12144-025-07622-4>
34. Panda, D. (Ms) S. (2025). Impact of Doomscrolling on Wellbeing. *International Journal of Indian Psychology*, 13(4). <https://doi.org/10.25215/1304.272>
35. Pranathi, J. S. R., & Jacob, A. M. (2025). Impact Of Short Form Videos on Attention Span Mediated by Sleep Quality and Stress. *International Journal of Interdisciplinary Approaches in Psychology*, 3(4), 11:31-11:31. <https://psychopediajournals.com/index.php/ijiap/article/view/711>
36. 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>
37. PTI. (2026, March 23). Karnataka govt releases draft policy on responsible digital use among students. ThePrint. <https://theprint.in/india/karnataka-govt-releases-draft-policy-on-responsible-digital-use-among-students/2886839/>
38. Purohit, A. K., & Holzer, A. (2021, August 9). Unhooked by Design: Scrolling Mindfully on Social Media by Automating Digital Nudges.
39. Rahayu, F., Wulandari, K., Christianto, S., Marcelino, A., & Haryanto, I. (2025). Does Short Video Lead to Decreased Attention Span and Memory Impairment? A Study on the Impact of Excessive Use of It on Well-Being (p. 678). <https://doi.org/10.1109/ISITIA66279.2025.11137476>
40. Rajeshwari, S., & Meenakshi, S. (2023). The age of doom scrolling—Social media’s attractive addiction. *Journal of Education and Health Promotion*, 12, 21. https://doi.org/10.4103/jehp.jehp_838_22
41. Ramaswamy, S., Ashok, S. S., & Seshadri, S. (2025). Toxic echo chambers-A perspective on the “manosphere” and youth violence in Adolescence. *Asian Journal of Psychiatry*, 108, 104486. <https://doi.org/10.1016/j.ajp.2025.104486>
42. Rixen, J., Meinhardt, L., Glöckler, M., Ziegenbein, M.-L., Schlothauer, A., Colley, M., Rukzio, E., & Gugenheimer, J. (2023). The Loop and Reasons to Break It: Investigating Infinite Scrolling Behaviour in Social Media Applications and Reasons to Stop. *Proceedings of the ACM on Human-Computer Interaction*, 7, 1–22. <https://doi.org/10.1145/3604275>
43. Ruiz, N., Molina León, G., & Heuer, H. (2024). Design Frictions on Social Media: Balancing Reduced Mindless Scrolling and User Satisfaction. *Proceedings of Mensch Und Computer 2024, MuC '24*, 442–447. <https://doi.org/10.1145/3670653.3677495>
44. Satici, S. A., Gocet Tekin, E., Deniz, M. E., & Satici, B. (2023). Doomscrolling Scale: Its Association with Personality Traits, Psychological Distress, Social Media Use, and Wellbeing. *Applied Research in Quality of Life*, 18(2), 833–847. <https://doi.org/10.1007/s11482-022-10110-7>
45. Singh, N., & Prusty, D. B. (2025). The Impact of Problematic Short-Form Media Usage on Attention Control and Delayed Gratification in Young Adults. *International Journal of Interdisciplinary Approaches in Psychology*, 3(5), 1248:1256-1248:1256. <https://psychopediajournals.com/index.php/ijiap/article/view/921>
46. Su, C., Teng, B., Zhou, H., Geng, F., & Hu, Y. (2023). Prefrontal suppression in short-video viewing: Unraveling the neural correlates of self-control (p. 2023.10.30.23296738). medRxiv. <https://doi.org/10.1101/2023.10.30.23296738>
47. Syunyakov, T. S., Zakharov, A. V., Gayduk, A. J., Ignatenko, J. S., Kuvshinova, N. Y., Pavlichenko, A. V., Spikina, A. A., Fedotov, I. A., Yashikhina, A. A., Gonda, X., Desousa, A., Fountoulakis, K. N., & Smirnova, D. A. (2023). [Changes in sleep patterns and the doom-scrolling (doom-surfing) phenomenon as modifiable risk factors for anxiety due to continuous stress of the COVID-19 pandemic]. *Zhurnal Nevrologii I Psikhiiatrii Imeni S.S. Korsakova*, 123(10), 88–96. <https://doi.org/10.17116/jnevro202312310188>
48. Tadpatrikar, A., Sharma, M. K., & Murthy, P. (2025). Policies and public health initiatives to mitigate the mental health impact of internet use among children and adolescents. *Indian Journal of Psychiatry*, 67(12), 1180–1186. https://doi.org/10.4103/indianjpsychiatry_409_25

49. Taskin, S., Yildirim Kurtulus, H., Satici, S. A., & Deniz, M. E. (2024). Doomscrolling and mental well-being in social media users: A serial mediation through mindfulness and secondary traumatic stress. *Journal of Community Psychology*, 52(3), 512–524. <https://doi.org/10.1002/jcop.23111>
50. Thuy, D. (2025, November 19). Global daily social media usage 2025. Statista. https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/?srsltid=AfmBOoqlK7M_8v-0cM2W20z-Bd4Du8EqnaZfqQ6R6JLIH2oluYQiARE7
51. Wang, S., Lilienfeld, S. O., & Rochat, P. (2019). Schadenfreude deconstructed and reconstructed: A tripartite motivational model. *New Ideas in Psychology*, 52, 1–11. <https://doi.org/10.1016/j.newideapsych.2018.09.002>
52. Wang, Z.-J., Wang, Y.-M., Wei, Y., Zhang, T.-T., Wang, F., & Chan, K. Q. (2024). Social class, schadenfreude, and children's prosocial behavior in moral contexts. *Emotion*, 24(6), 1417–1427. <https://doi.org/10.1037/emo0001363>
53. Wright, A. (2025, October 30). A Brief History of Doomscrolling. <https://hiddenfrequencies.alexwright.com/p/a-prehistory-of-doomscrolling>
54. Xie, J., Xu, X., Zhang, Y., Tan, Y., Wu, D., Shi, M., & Huang, H. (2023). The effect of short-form video addiction on undergraduates' academic procrastination: A moderated mediation model. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1298361>
55. Ye, J.-H., Zheng, J., Nong, W., & Yang, X. (2025). Potential Effect of Short Video Usage Intensity on Short Video Addiction, Perceived Mood Enhancement ('TikTok Brain'), and Attention Control among Chinese Adolescents. *International Journal of Mental Health Promotion*, 27(3), 271–286. <https://doi.org/10.32604/ijmh.2025.059929>
56. Zhang, S., & Li, S. (2025). How short video addiction affects risk decision-making behavior in college students based on fNIRS technology. *Frontiers in Human Neuroscience*, 19. <https://doi.org/10.3389/fnhum.2025.1542271>
57. Zhou, L., Lv, X., Zhou, Y., Li, J., Yu, Z., & Gao, X. (2024). A network analysis perspective on the relationship between boredom, attention control, and problematic short video use among a sample of chinese young adults. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-024-01392-z>