

Educational Doomscrolling and Academic Productivity Decline: An Educational Management Perspective in the Era of Digital Information Overload

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Abstrak

Fenomena ghost attendance, atau kehadiran semu, dalam pembelajaran digital merupakan masalah serius. Perkembangan pesat media digital dan platform sosial telah melahirkan fenomena yang disebut educational doomscrolling, kebiasaan kompulsif mengonsumsi konten digital yang sebagian besar bersifat negatif selama jam akademik. Tinjauan pustaka sistematis ini mengkaji hubungan antara educational doomscrolling dan penurunan produktivitas akademik dalam kerangka manajemen pendidikan di era kelebihan informasi digital. Berdasarkan 20 sumber terpeer-review yang dipublikasikan antara 2022 dan 2025, studi ini mensintesis bukti empiris tentang bagaimana paparan berkelanjutan terhadap konten digital negatif mengganggu beban kognitif, mengurangi konsentrasi, merusak manajemen waktu belajar, dan pada akhirnya melemahkan pencapaian akademik. Temuan menunjukkan bahwa mahasiswa yang terlibat dalam doomscrolling berkepanjangan mengalami penurunan signifikan dalam tingkat penyelesaian tugas, prestasi IPK, dan perilaku pembelajaran yang diatur sendiri. Dari perspektif manajemen pendidikan, respons kelembagaan masih belum memadai, karena sebagian besar universitas belum memiliki kebijakan kesejahteraan digital formal atau intervensi terstruktur. Tinjauan ini mengusulkan Kerangka Kesejahteraan Akademik Digital (Digital Academic Wellness Framework, DAWF) yang terdiri dari empat komponen strategis: perumusan kebijakan, adaptasi pedagogis, pengembangan literasi digital mahasiswa, dan integrasi kesehatan mental. Implikasi bagi administrator pendidikan, dosen, dan pembuat kebijakan dibahas, disertai rekomendasi praktik berbasis bukti untuk mengurangi dampak negatif kelebihan informasi terhadap produktivitas akademik. **Kata Kunci:** Produktivitas akademik; kelebihan informasi digital; doomscrolling; manajemen pendidikan; media sosial.

Abstract

The phenomenon of ghost attendance, or pseudo-attendance, in digital learning is a serious and The proliferation of digital media and social platforms has given rise to a phenomenon known as educational doomscrolling, the habitual, compulsive consumption of predominantly negative digital content during academic hours. This systematic literature review investigates the relationship between educational doomscrolling and academic productivity decline within the framework of educational management in the digital information overload era. Drawing on 20 peer-reviewed sources published between 2022 and 2025, this study synthesizes empirical evidence on how continuous exposure to negative digital content disrupts cognitive load, reduces concentration, impairs study time management, and ultimately undermines academic achievement. Findings reveal that students who engage in prolonged doomscrolling exhibit significant decreases in assignment completion rates, GPA performance, and self-regulated learning behaviors. From an educational management perspective, institutional responses remain inadequate, with most universities lacking formal digital wellness policies or structured interventions. This review proposes a Digital Academic Wellness Framework (DAWF) comprising four strategic components: policy formulation, pedagogical adaptation, student digital literacy development, and mental health integration. The implications for educational administrators, faculty, and policymakers are discussed, with recommendations for evidence-based practices to mitigate the adverse effects of information overload on academic productivity.

Keywords: *academic productivity; digital information overload; doomscrolling; educational management; social media.*

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Introduction

The rapid expansion of digital technology has fundamentally reshaped educational environments around the globe. Today's students and educators operate within an unprecedented ecosystem of digital information, social media streams, news aggregators, academic databases, messaging platforms, and multimedia resources, that together create conditions scholars describe as "information overload" (Akour & Alenezi, 2022). Within this saturated landscape a distinct behavioral pattern has emerged: doomscrolling, the compulsive and sustained consumption of predominantly negative or distressing online content. In academic settings, doomscrolling can intrude on study time, fragment attention, and amplify stress, turning routine exposure to news and social feeds into a recurring distraction that competes with cognitive resources needed for learning. As a result, information overload and doomscrolling form a dual challenge for contemporary education: they not only increase the quantity of stimuli students must manage but also skew that input toward emotionally taxing material, which can undermine concentration, motivation, and overall academic performance.

Educational doomscrolling is a focused form of information overload that occurs when students and academic staff repeatedly consume distressing digital content during study time, class hours, or in place of academic tasks. Unlike routine social-media browsing, doomscrolling is defined by a negative emotional valence, news, alarming posts, or catastrophic narratives, and by a self-reinforcing, hard-to-interrupt cycle that sustains attention on harmful material rather than on learning (Pérez-Juárez et al., 2023). The COVID-19 pandemic intensified this behavior: as instruction shifted online, students faced not only new digital learning demands but also a continuous stream of pandemic-related updates, uncertainty, and misinformation that made disengagement and emotional rumination more likely (Conrad et al., 2022). In practice, educational doomscrolling undermines study routines by fragmenting concentration, displacing deliberate practice and revision, and elevating stress and anxiety, factors that together reduce the efficacy of time spent on academic work and erode long-term learning outcomes.

From an educational-management perspective, educational doomscrolling poses a complex, multi-layered challenge that reaches beyond individual student behavior. Academic leaders and administrators must consider how institutional structures, curriculum design, classroom practices, and digital-use policies interact to either mitigate or exacerbate the cognitive and psychological burdens of information overload. In particular, managerial choices about learning schedules, assessment formats, availability of digital resources, and campus-wide communication norms can either create environments that reduce compulsive, emotionally charged media use during study time or inadvertently encourage it.

Empirical evidence shows that students who habitually engage in doomscrolling suffer measurable cognitive and affective harms, shortened attention spans, increased anxiety, reduced working memory capacity, and lower academic self-efficacy, which together translate into poorer time management, lower assignment completion rates, and weaker academic outcomes (Ross et al., 2023). Consequently, institutional responses must be systemic: they should combine pedagogical adaptations (for example, designing lessons that account for fragmented attention), proactive digital-wellness policies, targeted student supports for stress and attention management, and faculty development so instructors can recognize and respond to signs of information-induced impairment. Only by aligning policy, pedagogy, and student services can educational managers hope to protect learning quality and student wellbeing in an era of pervasive digital distraction.

The growing integration of artificial intelligence (AI) tools and digital platforms into education adds layers of complexity to the problem of information overload and doomscrolling. On one hand, AI-driven systems, adaptive tutors, personalized recommendation engines, and automated feedback tools, promise clear pedagogical benefits by tailoring content to individual learning needs and improving efficiency of instruction (Strielkowski et al., 2024; Murtaza et al., 2022). On the other hand, these same systems increase the scale and intensity of digital stimuli that students must process: recommendation algorithms surface more content, notification systems prompt continual re-engagement, and multiple interoperating platforms fragment attention across channels.

Because AI both personalizes learning and multiplies touchpoints, the managerial challenge extends well beyond selecting the “right” technology. Educational leaders must design organizational policies, workflow architectures, and human supports that shape how AI is integrated so it reduces, not compounds, attentional burdens. This requires coordination across instructional design, IT governance, student services, and faculty development to set limits on notifications, streamline platform ecosystems, embed attention-preserving pedagogies, and monitor student wellbeing. In short, solving the attention problem in the AI-rich campus is as much an organizational and human-factors task as it is a technical one.

Despite an expanding literature on digital distraction and academic outcomes, a clear gap persists: few studies treat educational doomscrolling as a distinct, tractable phenomenon rather than subsuming it under general social-media use. Prior research often mixes broad measures of online activity, time spent on platforms, frequency of visits, with the specific, repetitive pattern of seeking negative content that defines doomscrolling. This conflation obscures important psychological mechanisms that make doomscrolling especially harmful for students, such as anxiety amplification, negativity bias, prolonged rumination, and reduced capacity for cognitive recovery between tasks. Those mechanisms intensify emotional arousal and fragment working memory in ways that ordinary browsing does not, producing a larger and more persistent drag on study effectiveness and self-regulated learning.

By isolating educational doomscrolling as a distinct behavior, this systematic review fills that gap with a management-oriented synthesis that foregrounds actionable implications for institutions. The review examines evidence on how doomscrolling uniquely undermines concentration, time management, and motivation, and it translates those findings into a practical framework, spanning policy, pedagogy, student supports, and digital-wellness interventions, that administrators and educators can adopt to prevent, detect, and remediate the academic harms associated with compulsive negative-content consumption.

This study is driven by three interrelated objectives that together aim to clarify and respond to educational doomscrolling. First, it seeks to define and map the conceptual dimensions of educational doomscrolling and to situate this behavior within the broader phenomenon of digital information overload, identifying its psychological drivers (for example, negativity bias and anxiety amplification) and behavioral signatures (compulsive, hard-to-interrupt consumption during study periods). Second, the study synthesizes empirical evidence on how doomscrolling affects academic productivity, examining outcomes such as task completion rates, GPA, time-on-task quality, attention metrics, and self-regulated learning behaviors to quantify both short-term disruptions and longer-term performance declines. Third, building on this conceptual and empirical foundation, the research proposes an evidence-based educational-management framework that institutions can adopt to prevent, detect, and mitigate doomscrolling—combining policy measures, pedagogical adaptations, student supports, and monitoring tools designed to protect cognitive resources and sustain academic engagement at scale.

Methodology

This study employs a systematic literature review (SLR) methodology, following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. The SLR approach was selected because it enables a rigorous, transparent, and reproducible synthesis of existing research relevant to educational doomscrolling and academic productivity decline, viewed through the lens of educational management.

The literature search was conducted across multiple academic databases including Scopus, Web of Science, ERIC, Google Scholar, and IEEE Xplore. Search terms were constructed using Boolean operators and included combinations of: "doomscrolling," "information overload," "academic productivity," "digital distraction," "educational management," "social media academic performance," "digital wellness," and "cognitive load digital." The search was limited to peer-reviewed articles published between 2022 and 2025 to ensure contemporaneous relevance to the post-pandemic digital educational landscape.

Inclusion criteria required that studies: (a) were published in English in peer-reviewed journals; (b) directly examined digital media use, distraction, or information overload in educational contexts; (c) addressed outcomes related to student or faculty academic productivity, wellbeing, or learning performance; and (d) offered implications for educational policy or management. Studies focused exclusively on clinical populations or non-educational settings were excluded. A total of 20 studies met the inclusion criteria and form the empirical basis of this review.

Data extraction involved systematic coding of each study's research design, population, key variables, major findings, and management-relevant implications. Thematic synthesis was employed to organize findings into overarching conceptual categories. Figure 1 presents the conceptual framework developed from this synthesis, illustrating the relational pathways between digital information overload, educational doomscrolling, psychological mediators, and academic productivity outcomes., with themes identified through iterative coding of extracted data from the selected studies.

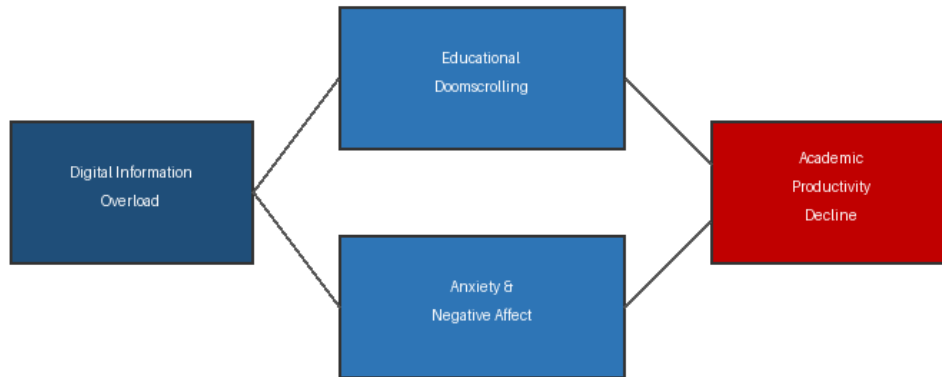


Figure 1. Conceptual Framework: Educational Doomscrolling and Academic Productivity Decline

Results and Discussion

This section presents the empirical findings and thematic synthesis derived from the systematic review, critically examining the complex intersection of digital education, student behavior, and institutional management. The compiled evidence underscores that technological integration cannot be detached from its psychological impacts, beginning with the conceptual boundary of modern digital distractions.

A. *Defining Educational Doomscrolling in the Digital Age*

The reviewed literature points to a consistent pattern: digital transformation in higher education, while unlocking new pedagogical possibilities, has also created structural vulnerabilities that make compulsive consumption of negative content more likely. Akour and Alenezi (2022) contend that many institutions accelerated digital infrastructure and platform adoption without matching investments in digital-wellness policies, educator training, or student supports, leaving campuses ill-prepared to manage the behavioral byproducts of constant online exposure. Complementing this argument, Gkrimpizi et al. (2023) identify student behavioral adaptation as a neglected element of digital change management: their systematic review shows that institutional efforts frequently emphasize technical rollout and pedagogical affordances but underinvest in strategies to help learners develop healthy digital habits and to redesign workflows that reduce opportunities for doomscrolling.

Together, these studies imply that the risks associated with educational doomscrolling are not solely individual failings but systemically produced effects of organizational choices, choices about platform ecosystems, notification norms, assessment timing, and the availability of on-campus digital-health resources. Addressing those risks therefore requires institutions to pair technological innovation with governance measures: explicit digital-wellness policies, curriculum and timetable design that protect deep study periods, staff development on recognizing and mitigating information-driven distress, and proactive student services focused on attention management and mental health. Only by integrating behavioral considerations into digital transformation planning can higher education institutions reduce the structural conditions that enable doomscrolling and protect both learning quality and student wellbeing.

Educational doomscrolling differs from ordinary social-media use in three crucial ways that make it especially harmful for academic functioning. First, its motivational substrate is primarily anxiety and negativity bias rather than social connection, curiosity, or entertainment: users seek out threatening or alarming content, which amplifies negative affect instead of providing neutral distraction or social reward. Second, doomscrolling tends to occur in close temporal proximity to academic tasks, immediately before, during, or right after study sessions,

thereby interrupting preparatory focus, degrading the quality of sustained attention during tasks, and impeding cognitive re-engagement when students return to work. Third, the behavior is self-reinforcing: exposure to negative material increases anxiety and rumination, which in turn fuels further compulsive content seeking as a maladaptive coping strategy, producing prolonged attentional capture and cognitive fatigue (Ross et al., 2023). Together, these features distinguish educational doomscrolling from routine platform use and explain why it poses a distinct management problem for educators: it both reduces the available cognitive bandwidth for learning and creates affective barriers to motivation and self-regulated study.

B. *Impact on Academic Productivity: Empirical Evidence*

The empirical evidence regarding doomscrolling's impact on academic productivity is substantial and multidimensional. Conrad et al. (2022) found that during pandemic-related online learning transitions, students who reported high levels of negative news consumption also reported significantly lower satisfaction with their academic performance and greater difficulty maintaining study routines. This relationship was mediated by perceived learning difficulty and emotional exhaustion, both hallmarks of doomscrolling-induced cognitive overload.

Pérez-Juárez et al. (2023) provide perhaps the most directly relevant empirical data, documenting that higher education students identify digital distractions, including compulsive news and social media checking, as the primary self-reported obstacle to academic concentration. Their findings indicate that students average over 90 minutes per academic day engaged in unplanned digital distraction, with a significant proportion of this time characterized by negative content consumption. The cumulative effect represents a substantial reduction in effective study time and cognitive bandwidth available for complex academic tasks.

Figure 2 below presents a synthesized quantitative summary of the academic productivity indicators most frequently reported as negatively impacted by doomscrolling behaviors across the reviewed studies, expressed as percentage of student respondents reporting significant decline.

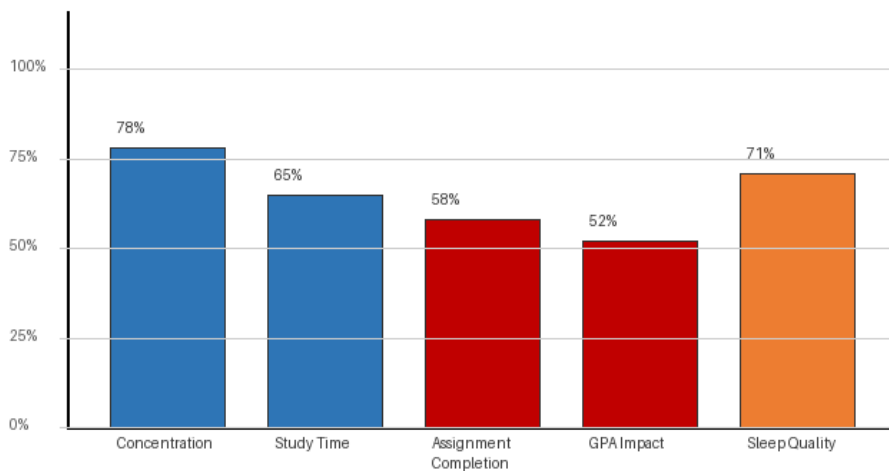


Figure 2. Percentage of Students Reporting Significant Decline in Academic Performance Indicators Due to Doomscrolling (Synthesized from reviewed literature)

C. *Institutional and Management Responses: A Critical Assessment*

The literature reveals a significant gap between the scale of the educational doomscrolling problem and institutional capacity to respond. While universities have invested substantially in digital infrastructure and AI-enhanced learning tools (Kamalov et al., 2023; Holmes & Tuomi, 2022), systematic institutional attention to digital wellness as a management priority remains underdeveloped. Basilotta-Gómez-Pablos et al. (2022) note that faculty digital competency frameworks rarely include dimensions related to modeling healthy digital consumption habits or structuring learning environments to minimize information overload.

Chan’s (2023) comprehensive AI policy framework for university teaching and learning, although centered on academic integrity, also signals the need for wider digital governance mechanisms; this implicit recognition should be made explicit to cover problems such as educational doomscrolling and information overload. Crawford et al. (2023) likewise contend that ethical leadership during AI adoption in education must extend beyond technical and pedagogical concerns to include student wellbeing outcomes, particularly those that arise from excessive digital consumption. The comparison with medical education makes this point tangible: Lucas et al. (2024) and Janumpally et al. (2025) show that professional training programs are only beginning to confront how increased reliance on digital tools and AI contributes to trainee stress, attentional deficits, and performance variability. Taken together, these works imply that AI governance in universities cannot remain narrowly procedural; it must incorporate policies, monitoring, and supports that prevent and mitigate digital overconsumption, integrate wellbeing metrics into AI deployment decisions, and equip staff and students with practices that preserve cognitive capacity and learning resilience.

Table 1. Comparative Analysis of Institutional Responses to Digital Information Overload in Higher Education

Response Category	Examples from Literature	Implementation Level	Effectiveness Rating
Digital Literacy Programs	Alias & Razak (2024); Abu-Salih & Alotaibi (2024)	Moderate	Moderate
AI Policy Frameworks	Chan (2023); Crawford et al. (2023)	Low-Moderate	Moderate-High
Wellbeing Support Services	Ross et al. (2023)	Low	Low-Moderate
Pedagogical Redesign	Watermeyer et al. (2023); Farrokhnia et al. (2023)	Low	Potentially High
Technology Use Policies	Adeshola & Adepoju (2023)	Variable	Mixed
Adaptive Learning Systems	Strielkowski et al. (2024); Murtaza et al. (2022)	Low-Moderate	Moderate

D. The Digital Academic Wellness Framework (DAWF): A Proposed Management Model

Synthesizing the reviewed literature, this study introduces the Digital Academic Wellness Framework (DAWF) as a comprehensive, institution-level response to educational doomscrolling. The DAWF is conceived as an integrated model that brings together policy, pedagogy, support services, and monitoring so institutions can address both the behavioral drivers and systemic enablers of compulsive negative content consumption. It consists of four interdependent strategic components, each grounded in the empirical and policy literature reviewed here.

The first component, Policy Formulation, urges universities and colleges to create explicit digital-wellness policies that sit alongside existing digital transformation and AI governance efforts (Chan, 2023; Alenezi et al., 2023). These policies should clearly articulate institutional expectations for digital media use during learning activities, set boundaries for platform and notification practices within courses and assessment schedules, and define

escalation pathways and support options for students who show signs of problematic digital consumption. In addition, Policy Formulation should require the inclusion of digital-wellness indicators within institutional quality assurance and governance processes so that the management of information overload and doomscrolling becomes a visible, auditable part of organizational performance rather than an informal or ad hoc concern.

The second component, Pedagogical Adaptation, calls for faculty and instructional designers to deliberately reshape learning activities so they reduce exposure to information-overload triggers while fostering deeper, purposeful engagement (Watermeyer et al., 2023; Farrokhnia et al., 2023). Practical measures include applying microlearning techniques to break complex content into short, focused modules (Alias & Razak, 2024); scheduling and normalizing technology-free study intervals within course timetables to protect concentrated work periods; and offering faculty professional development that emphasizes digital pedagogy, attention management, and assessment timing choices that do not encourage last-minute online cramming. By redesigning tasks, deadlines, and interaction patterns, Pedagogical Adaptation aims to reduce both the opportunities and incentives for doomscrolling during critical learning windows.

The third component, Student Digital Literacy Development, foregrounds the need to teach students higher-order self-regulation skills so they can monitor, evaluate, and control their own digital behaviors (Pérez-Juárez et al., 2023; Basilotta-Gómez-Pablos et al., 2022). Beyond conventional information-evaluation modules, curricula should incorporate emotional regulation techniques (for coping with anxiety provoked by negative content), algorithmic literacy (to understand how feeds amplify certain material), and intentional media consumption practices (such as planning, time-boxing, and purposeful followership). Embedding these competencies across the curriculum and in co-curricular programming helps students develop durable habits that reduce susceptibility to compulsive doomscrolling.

The fourth component, Mental Health Integration, links digital-wellness initiatives directly with student mental health services in recognition of the documented associations between doomscrolling, anxiety, and academic stress (Ross et al., 2023; Conrad et al., 2022). Educational management should ensure counselling and wellbeing resources are resourced for digital-era demands, accessible through online and hybrid channels, and explicitly coordinated with digital wellness programming (for example, referral pathways from faculty and peer mentors). Treating mental health as an integral part of academic infrastructure ensures that interventions address both the behavioral symptoms and underlying affective drivers of doomscrolling, thereby supporting sustained academic functioning.

Table 2. Digital Academic Wellness Framework (DAWF): Components, Strategies, and Key References

DAWF Component	Key Strategies	Supporting References
Policy Formulation	Digital wellness policies; AI governance integration; institutional standards	Chan (2023); Alenezi et al. (2023); Crawford et al. (2023)
Pedagogical Adaptation	Microlearning design; technology-free intervals; attention-aware pedagogy	Watermeyer et al. (2023); Alias & Razak (2024); Farrokhnia et al. (2023)
Digital Literacy Development	Media metacognition; algorithmic awareness; intentional consumption habits	Pérez-Juárez et al. (2023); Basilotta-Gómez-Pablos et al. (2022); Adeshola & Adepoju (2023)

DAWF Component	Key Strategies	Supporting References
Mental Health Integration	Accessible counseling; stress-digital link awareness; wellness-academic alignment	Ross et al. (2023); Conrad et al. (2022); Holmes & Tuomi (2022)

Conclusion

This systematic review has established that educational doomscrolling constitutes a meaningful and manageable threat to academic productivity in the era of digital information overload. The evidence synthesized from 20 peer-reviewed studies demonstrates consistent negative impacts on student concentration, study time management, assignment completion, and overall academic performance. From an educational management perspective, the current institutional response is inadequate, with most universities lacking the policy infrastructure, pedagogical adaptations, and mental health integrations necessary to address this challenge systematically.

The proposed Digital Academic Wellness Framework (DAWF) offers educational administrators, faculty, and policymakers a structured, evidence-based roadmap for institutional response. By addressing educational doomscrolling across policy, pedagogy, digital literacy, and mental health dimensions simultaneously, institutions can create learning environments that are genuinely protective of academic productivity and student wellbeing in an age of ubiquitous digital information. Future empirical research should focus on testing and refining the DAWF components in diverse institutional contexts, with particular attention to culturally sensitive implementation and equity considerations.

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