

OLD DOMINION UNIVERSITY

How does short form content contribute to declining
attention spans ?

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Introduction

With the world being driven by a fast paced internet culture, short-form content such as social media posts, viral videos, and smartphone apps has become increasingly dominant. This condensed content is tanking our already divided attention. A growing concern is that the constant bombardment of bite-sized (I'm talking 15-20 second videos now) media may be damaging our ability to concentrate and understand complex ideas. This paper examines the issue through an interdisciplinary lens, drawing insights from psychology, neuroscience, education, and media studies.

Studies that are recent as of 2020 even show the addictive nature of short-form content, particularly on platforms like TikTok (though not the only platform). TikTok employs advanced algorithms designed to maximize user engagement by delivering personalized, rapidly changing content streams. Such design elements can lead to compulsive usage patterns, where users find themselves spending extended periods consuming content without conscious intent. This phantom issue is not merely a matter of individual willpower but is rooted in the platform's structural design, which leverages psychological principles to capture and retain user attention (Yao et al., 2022).

The implications of this shift are profound. As users become accustomed to the instant gratification provided by short-form content, there is a noticeable decline in their ability to engage with longer, more demanding tasks. This trend raises concerns about the broader impact on cognitive functions, such as sustained attention and deep processing. By searching in this

issue through various disciplinary perspectives, this paper aims to show the multifaceted effects of short-form content consumption on attention spans and cognitive health.

Defining the Problem

The central research question guiding this paper is: How does short-form, rapid-fire digital content contribute to declining attention spans? While technology offers many benefits, including quick access to information and entertainment, evidence show it also promotes distracted, superficial thinking as our brains get used to frequent context-switching and information overload, which is no good in the long term. This paper analyzes insights from multiple disciplines to comprehensively evaluate how and why short-form content negatively impacts attention spans.

Recent research indicates that the rapid consumption of short-form digital content, such as social media posts and short videos, can lead to decreased attention spans and cognitive overload. The constant switching between tasks and the overwhelming amount of information can impair the brain's ability to focus and process information deeply (Zhang et al., 2019). This phenomenon is particularly concerning as it affects not only individual cognitive functions but also broader societal aspects, including education, productivity and in worse cases social interactions with others.

To expand, the design of digital platforms often encourages continuous engagement, leading to habitual use and potential dependency, or in layman's terms it is meant to take your attention and hold it for as long as possible. Such design elements exploit psychological

principles to capture and retain user attention, making it increasingly difficult for individuals to stop and focus on more demanding responsibilities (Zhang et al., 2019). This cycle of constant engagement and shallow processing can have long term effects on attention spans and overall cognitive health.

Justification for an Interdisciplinary Approach

To fully understand the impact of short-form digital content on attention spans, an interdisciplinary approach is essential. Each discipline provides unique insights that together create a comprehensive understanding of the issue. Psychology offers theories on attention and cognition, helping explain how rapid information consumption can overwhelm the brain's capacity for focus and concentration. Neuroscience adds a biological perspective, showing how constant multitasking and switching between tasks can weaken neural pathways responsible for sustained attention.

In education, the impact of declining attention spans is evident, as students struggle to engage with complex material after frequent exposure to short-form content (I am sad to say I am a one of them). Media studies highlight how digital platforms are intentionally designed to maximize engagement, promoting quick, shallow interactions instead of deep, reflective thinking. By integrating these diverse perspectives, we gain a fuller understanding of how short-form content contributes to diminishing cognitive abilities, offering more nuanced solutions to address this growing issue.

Relevant Disciplines

The impact of short-form content on attention spans can be understood through several key disciplines: psychology, neuroscience, education, and media studies. Psychology helps explain how rapid, fragmented information disrupts cognitive processes, particularly attention. Psychologists study how constant digital stimuli affect our focus and how platforms use psychological triggers, like rewards, to keep us engaged. Neuroscience examines how digital media changes brain function, particularly how frequent task-switching and overstimulation weaken areas responsible for sustained attention and deep thinking.

Education looks at how short-form content affects learning, as students accustomed to fast-paced media often struggle to focus on longer, more complex tasks, leading to reduced academic performance. Media Studies go over how content is made to capture attention fast as possible to reel you in (no pun intended), promoting passive consumption over deep reflection, which further contributes to short attention spans. Together, these disciplines offer a comprehensive view of how short-form content influences cognitive abilities and behavior.

Literature Review

Heavy consumption of short-form digital content, exemplified by platforms like TikTok, has garnered significant attention due to its potential effects on attention spans. Research indicates that TikTok's fast-paced content delivery and infinite scrolling can lead to shortened

attention spans, reducing students' ability to sustain focus during tasks requiring prolonged concentration.

While excessive use of TikTok is linked to academic challenges such as decreased study time and impaired information retention (Opara et al., 2025), some studies suggest that TikTok can foster creativity and engagement in educational contexts when appropriately utilized. Further research is needed to explore the long-term effects of TikTok on attention, neuropsychological mechanisms, and potential interventions for mitigating negative outcomes.

Analysis of Key Insights

Each discipline helps show key factors contributing to this trend. Psychology emphasizes how condensed digital content overwhelms our limited cognitive resources. The human brain did not evolve to rapidly switch between endless streams of data. Neuroscience shows that habitual multitasking with digital media degrades brain structures essential for sustained focus, weakening the neural pathways needed for deep thinking. In education, students immersed in short-form online content struggle academically due to depleted attention skills; their brains are less prepared to engage with complex material. Media theories argue that the structure of short-form content promotes superficial scanning rather than reflective thought, conditioning users to maintain only fleeting attention.

Integrating Perspectives

Integrating perspectives from psychology, neuroscience, education, and media studies

provides a comprehensive understanding of how short-form digital content, such as TikTok, affects attention spans. Psychological research indicates that short-form video addiction is positively associated with academic procrastination, with attentional control serving as a mediating factor (Jin et al., 2023). Giving further insight that the rapid consumption of short-form videos can impair cognitive functions, leading to delays in academic tasks.

From a neuroscience standpoint, the constant switching between tasks and the overstimulation from short-form videos can weaken neural pathways responsible for sustained attention. This aligns with findings that excessive use of short-form videos can lead to cognitive overload and reduced attention span. In the field of education, the implications are significant, as students with impaired attentional control are more likely to engage in academic procrastination (Jin et al., 2023). This truly highlights the need for educational strategies that address the challenges posed by short-form video consumption.

Media studies contribute by analyzing how the design of short-form video platforms encourages continuous engagement, which can lead to habitual use and potential dependency. Understanding these design elements is crucial for developing interventions to mitigate their impact on attention and academic performance. By synthesizing insights from these disciplines, we can come to understand the multifaceted effects of short-form digital content on attention spans and develop more effective strategies to address the associated challenges.

Solutions and Conclusions

Addressing the issue will require action on multiple sides. On an individual level, consciously limiting exposure to distracting online media and regularly practicing focused thinking activities can help rebuild attention skills (like cutting screen time on apps with shorts on them). Educational institutions will need to adapt teaching strategies to better support students who struggle with sustained concentration, which could be achieved through interactive games to stimulate the brain in a good way. Content creators and social media companies must reconsider design decisions that prioritize condensed, attention-grabbing content over deeper engagement. Although the challenges are significant, understanding the interdisciplinary factors at play allows for the development of targeted solutions. Nothing comes easy with problems like this, however working to actually understand our problem with it can help us start changing. With continued research and awareness, society can work toward a healthier balance one that preserves both the conveniences of technology and the essential ability to think deeply.

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-Jessiah