



Reels to Retention: How is Digital Media affecting our attention

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Abstract

With the rise of TikToks, Instagram Reels, and YouTube Shorts, concerns have grown about how short-form media may affect focus compared to long-form content like podcasts and documentaries. This review explores current research on how short form and long-form digital media influence attention, memory, and emotional regulation in young adults.

Results show that short-form media reduces attention span, increases distractibility, and contributes to mood fluctuations and addictive behaviors. In contrast, long-form content supports deeper thinking, stronger memory retention, and greater emotional stability, though extended use without breaks can still cause fatigue. Overall, balanced use offers the greatest benefits; short-form for quick stimulation resulting in feelings of satisfaction and long-form for sustained comprehension and focus.

These findings suggest that while short-form content entertains, long-form content sustains cognitive health. Developing mindful media habits is essential to prevent negative impacts on learning and attention. Future studies should examine long-term effects on self-esteem, resilience, and academic success in an increasingly digital society.

Keywords:

Cognitive, focus, social media, short form, long form, young adults, memory

Introduction

Interestingly perspectives on media and attention have shifted over time. Attention span is the length of time an individual can concentrate on a task or stimulus without being distracted. Around 2008-2010, Youtube's 5-15 minute videos were criticized for shortening spans and distracting students reading or studying. At the time these clips were considered "short" because they competed with books, lectures, and television shows that demanded sustained engagement. However, in today's digital environment dominated by TikTok and Reels under one minute, those same Youtube videos are now categorized as long-form. This shift highlights how the definition of "short" and "long" is relative to technological context and user expectations of an era.

Short-form and long-form content are phrases that describe types of media, typically videos that display content to reach and engage an audience. Short-form content is quick, bite-sized information that's easy to consume, such as TikTok videos, tweets, or memes. This form of content is beneficial for fast entertainment or quick updates. Short-form content includes



short videos that are under one minute and often include fast paced and engaging content with eye catching visuals. In contrast, long form content includes media that has an increased duration of time (ex: 10+ minutes) and can include a variety of content such as podcasts, documentaries, in depth Youtube videos, webinars, and blog posts. Long-form content can include a variety of information such as educational deep-dives, interviews, storytelling, detailed tutorials, and analytical discussions. This format allows for richer detail, deeper engagement, and more complex narratives.

Short-form content in 2025 includes multiple media platforms such as TikToks, YouTube shorts, and Instagram Reels. They offer quick entertainment. Short Form content first exploded in popularity around 2016-2018, but its roots go further back. Vine, a short form video hosting service was the pioneer with its 6 second clips with highly amusing content. Short form content became more mainstream when TikTok was published in 2016.

Engagement in this kind of content varies significantly across generations. For example, this content is particularly popular amongst Gen Z (those born in 1997-2012) individuals. Specifically, Gen Z dominates short-form content platforms like Tik Tok and Instagram Reels, which provide new trends and fast entertainment (Pew research center, 2024). The youngest cohort, generation Alpha (born 2013-present), is increasingly engaging with age-gated platforms and curated short-form content designed for early childhood (AECF report). Millennials (those born between 1981-1996) engage with short form content too but mix entertaining with educational insight (Emarketer, Guide: Marketing to Millenials). Gen X (those born between 1965-1980) individuals were challenged by the analog to digital transition and therefore prefer quick news or nostalgia based content (Pew Research Center, 2024). The Baby Boomer generation (born 1946-1964) are also slowly engaging in short-form content, mostly through Facebook Reels to engage with family or identify recipe clips (Pew Research,2024). Studies suggest that women engage slightly more than men and that younger users spend hours daily scrolling through content, while older groups scroll more casually.

Short-form content has beneficial and harmful consequences on their users. Short-form content reduces attention span by training the brain to expect constant novelty through rapid dopamine hits. Each swipe delivers a new thrill, making focus feel unrewarding. It encourages shallow thinking by prioritizing quick, emotional reactions over deep analysis, as complex ideas get distilled into viral snippets. While this form of content enhances pattern recognition, it weakens retention because the brain doesn't engage in the deeper processing for long-term memory.

Long-form content (such as podcasts and documentaries) promote deep thinking, better memory, and improved cognitive endurance by engaging in critical analysis. Long-form content boosts deep thinking by requiring sustained focus, helping the brain analyze and connect complex ideas. This sustained engagement improves memory by providing rich context and emotional engagement, making information stick better. Unlike short clips, long-form content trains cognitive endurance, teaching your brain to stay focused. Essentially, long-form exercises your mind like a workout, while short form is just like mental snacking.

Long form content has been around for a long period of time compared to short-form content. Dating back to the 1990s, blogs, eBooks, and guides. In 2005, Youtube was launched leading to a new era of long-form content generation. However, it was not until 2010 when podcasts became viral and streaming services, like Netflix and Ted Talks, became more mainstream thus, making documentaries and lectures became globally accessible, enabling a new form of thriving education, trust-building, and complex story telling.

Similar to short-form content, different generations engage in this content in various ways. Millennials are the core audience for long-form content, such as podcasts and in depth-articles (Jacobs Media Tech survey). Gen X engages the most with long TV shows, audiobooks, and detailed news analysis (Ipsos Generation). Boomers favor traditional long form such as newspapers, books, and documentary films (GCC). Gen Z consumes long-form on youtube but prefers bite-sized recaps (Emarketer and Ipsos). Men dominate technical and long-form, while women engage more with storytelling formats (WomenTech network). Similarly, generation Alpha most often consumes long-form content in the form of extended children's programming and educational videos on platforms like Youtube kids (giraffe insights/precise TV).

While short-form boosts quick exposure, long-form strengthens individuals' comprehension skills and abilities. Balancing both is key: short-form for inspiration and variety, long-form for depth and mastery, fostering a well-rounded cognitive experience. Despite the known effects of short-form content, such as rapid dopamine hits and loss of focus, what remains unknown is what kinds of habits develop from this kind of content consumption in young adults. For example, it is unknown if high short-form content consumption leads to habits such as anxiety induced fidgeting, picking, staring into space, little interest in everyday tasks, and lack of engagement in school. How this kind of content affects individuals' mood your self esteem remains not yet fully explored. Here in this literature review, we explore the current knowledge surrounding theWhile short-form content may enhance visual processing speed, this literature review contends that its overall net effect on young adults is a degradation of sustained attention and working memory, negatively impacting academic and deep-reading capabilities that are better nurtured by long-form media.

Results

Attention Span

Short-form content is linked to reduced attention spans due to its rapid dopamine-driven format, which trains the brain to expect constant novelty. One study investigated objective short-term social media use and its relationship with attentional control and psychological distress. They found that frequent social media users showed lower control over their attention, correlating with higher distractibility. This means that algorithmic short-form content may change sustained focus by reinforcing a rapid case of task switching (Jones, 2022). Short-form content consumption may neurologically impair attention regulation. Scientists reviewed fMRI studies on cognitive control in adolescents with high levels of internet or smartphone use, often described as an "addiction," but measured this use through standardized behavioral scales rather than a formal clinical diagnosis. They found that heavy users showed reduced activity in brain regions linked to focus and impulse control. (Mendez, 2023). These findings suggest that short-form contents' addictive design may neurologically impair attention regulation. Further studies found that frequent users of short-form content struggle with sustained focus, showing increased distractibility during tasks that require deep concentration (Wang, 2023). In contrast, long-form content such as documentaries and podcasts strengthen cognitive endurance, as it requires extended engagement and deeper processing (Emara 2021). Overall short-form weakens focus, while long-form strengthens sustained attention.

Academic Performance

Excessive short-form consumption correlates with poor academic outcomes, such as fragmented attention which disrupts knowledge retention (Albery, 2022). In this study, Albery examined metacognitions and identity in problematic instagram users. Metacognitions are beliefs about one's own thinking processes, while identity refers to how strongly individuals connect their sense to social media use. They found that using Instagram compulsively was linked to withdrawal feelings and trouble thinking clearly. This means that short form content lowers the academic performance because of the inability to think clearly and reduced motivation to study. Thus, students who engage more with long-form content demonstrate better comprehension and critical thinking, leading to a better academic performance.

In another study, Emara et al identified three distinct groups of students characterized by their in-person or virtual education during the COVID-19 lockdown. They found that students who engaged in deep and sustained tasks demonstrated better attention regulation. This means that longer content helps people focus better by training them to pay attention for longer.

Students who engage more with long-form content demonstrate better comprehension and critical thinking, likely due to sustained cognitive engagement (Emara, 2021). However, moderate short-form use may provide quick informational bursts without significant harm (Zhang, 2023).

Emotional Regulation and Changes in Mood

Short-form content can lead to mood fluctuations, with users experiencing temporary pleasure followed by an increased anxiety or dissatisfaction (Jones 2022). This problematic use of social media is tied to fear of missing out (FOMO) and emotional distress (Wang, 2023). In this study, Wang tested attentional bias in the problematic social media users with FOMO, or the fear of missing out. They found that FOMO amplified their emotional distress. The fear of missing out made people more upset and more likely to overuse the platform. This implies that it means that the way short-form content gives rewards at random times can make emotions less stable.

In contrast, long-form content, particularly educational or narrative-driven media, promotes calmer, more reflective emotional distress (Zhang, 2023). In this study Zhang et al. developed a social media fatigue scale measuring cognitive and emotional exhaustion. They found that fatigue was lower in users who consumed purposeful, long-form content. People felt less tired when they watched meaningful long-form content. This means that in-depth media might help reduce the emotional strain of being online.

Ability to Focus

Short-form content weakens attention, increases distractibility, and may harm academic performance, while long-form content enhances focus, comprehension, and emotional stability. However, balanced usage, combining short-form content for quick engagement and long-form for depth may mitigate negative effects while preserving cognitive benefits. Short-form content weakens sustained attention by encouraging rapid task switching and constant gratification-seeking, thus increasing distractibility and undermining academic performance (Jones, 2022; Mendez, 2023). Users who frequently engage with algorithm-driven platforms often experience impaired focus and difficulty maintaining concentration on demanding tasks

(Wang, 2023). In contrast, long-form content such as documentaries, podcasts, or extended readings promote deeper cognitive engagement by requiring a sustained focus and a continuous processing of information, which strengthens comprehension skills and cognitive endurance (Emara, 2021). In addition, long-form formats often provide richer context and emotional depth, which improves retention and supports a more stable mental mind. However, balance remains crucial. Excessive loads of short-form content may disrupt attentional control, while excessive long-form consumption without any breaks can lead to cognitive fatigue (Emara, 2021). A hybrid and balanced approach, using short-form media for quick exposure and long form content for attentional depth, appears to be the most effective in preserving attention while keeping cognitive benefits.

Smart Phone Addiction

Short-form platforms are highly addictive, as they are algorithm-driven, provide rapid rewards, and trigger compulsive checking behaviors (Alberry 2022; Mendez 2023). In one study, Alberry linked desire thinking to Instagram compulsion. In other words, he studied how wanting to use Instagram is connected to the compulsive use of the app. He found that people who hold a strong identity as an Instagram user and had negative metacognitive thoughts (negative thoughts about their own thinking) had the most problematic Instagram use. These people felt very connected to the platform and had more withdrawal symptoms, indicating that the short form apps use mental tricks similar to those in substance addiction.

Short-form media content users often report higher social media fatigue and difficulty disengaging (Zhang, 2023). Social media fatigue refers to an individual's tendency to withdraw from social media due to being overwhelmed. In this study, Zhang et al. confirmed that social media fatigue affects thinking, behavior, and emotions. They found that problematic users tended to have low motivation for engaging with social media and exited the content session feeling more anxious and irritated when they started. Interestingly, the authors found that these individuals often forgot what they browsed on social media. These individuals experiencing cognitive overload use more mental energy to process information than they do to retrieve that information resulting in temporary amnesia and poor prospective memory. This means that short-form contents' endless newness keeps addiction cycles going because there is always going to be something trending and engaging the viewer that they may ultimately forget and find new again.

Long form content is less habit-forming, but can still contribute to cognitive fatigue if consumed excessively without breaks (Emara, 2021). Emara studies regulatory strategies in digital learning. In their observational study of 312 university students during distance learning, she identified that participants who engaged in unbroken 90+ minute sessions of educational content such as lectures and academic readings reported 23% higher fatigue scores than those using structured interval learning, suggesting duration and breaks to fight against cognitive exhaustion. They learned that unstructured long engagement with no breaks led to mental exhaustion. These findings indicate that balance between short-form and long-form content is key.

Discussion

Here in this literature review we have learned that short-form content, like TikTok and Instagram Reels is great for quick entertainment but comes with hidden costs. It comes with shorter attention spans, worse focus, and even mood swings after binge watching. On the other hand, long form content, like podcasts, documentaries, and Youtube videos helps individuals think deeper, remember more, and stay emotionally balanced. The problem? People with access to technology are getting hooked on flashy stuff, making it harder to sit through anything longer than 30 seconds.

Heavy short-form content use shows overlap with symptoms of attention-deficit disorders (distractibility, impulsivity) even if it is not the same as a clinical diagnosis. The dopamine-driven reward loops in short-form apps resemble mechanisms seen in substance addictions, where unpredictable rewards reinforce compulsive behaviors. Although there is no way to get rid of the creation of short form content, young adults should try balancing their screen time, maybe swap some mindless scrolling for a good podcast or documentary. Setting limits on short-form apps could also help. Furthermore, additional activities such as, reading a book or watching a documentary, can help improve focus and retention. Additional focus exercises like listening to a podcast or even watching a movie without checking your phone can also help improve focus. Given this generational change in attention spans, schools and workspaces might need to adapt as well since attention spans are shrinking. As society moves toward even quicker content, we could see bigger struggles with focus, patience, and critical thinking. Unless we make conscious changes now. The key? Enjoy the fun stuff, but don't let it rewire your brain for the worse.

There is a clear establishment that short form content isn't going anywhere anytime soon, so the best thing one can do is to maintain balance. It is not harmful to scroll through a cellular device for a few minutes, but to spend countless hours just scrolling can negatively affect the brain. Something for individuals to consider is how they prioritize their valuable time given that it adds up. If one spends 8 hours a day on their phone daily, how many hours do they spend on their phone every year? What else could this time be spent doing?

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