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Doom Scrolling-Style-Scrolling and Its effect on Immediate Recall: An Experimental Study

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Abstract. The rapid rise of short form social media platforms has introduced scrolling based interfaces that may influence cognitive functioning beyond emotional outcomes. This study examined the effect of doomscrolling style segmented presentation on immediate recall, isolating interface format from emotional content. Using an experimental quantitative design with a within subjects approach, 30 college students aged 18–28 were exposed to two conditions: (a) a doomscrolling style scrolling format and (b) a non scrolling continuous video format. Neutral and positive stimuli were used to minimize affective confounds. Immediate recall was measured through a structured recall test administered directly after exposure. Due to non normal distribution of paired differences, data were analyzed using descriptive statistics and the Wilcoxon signed rank test. Results showed that participants demonstrated significantly higher immediate recall in the doomscrolling condition compared to the non scrolling condition. The doomscrolling format yielded high recall performance, whereas the continuous video format resulted in moderate recall performance. Findings suggest that segmented, fast paced presentation enhances short term memory by promoting attentional engagement, chunking, and effective encoding through event segmentation. However, substantial variability in recall scores across individuals indicates that cognitive benefits may differ based on attentional capacity and susceptibility to cognitive load. Consistent with Sustainable Development Goal 3 (Good Health and Well Being), the study contributes to evidence based guidance on cognitively healthier digital engagement.

Keywords: Cognitive Load; Digital Media Consumption; Scrolling format; Segmented Content; Short-term Memory

Introduction

The widespread use of smartphones and social media has reshaped how individuals consume information, encouraging continuous engagement with rapidly updating streams of content. Platforms such as TikTok, Instagram, and Facebook have introduced new modes of digital interaction that emphasize speed, interactivity, and endless availability of short-form media. Within this ecosystem, one emerging behavior is doom scrolling, defined here as the compulsive act of navigating digital material in a scrolling format characterized by rapid, user-driven transitions between clips. While the term originally referred to prolonged exposure to distressing news, in this study doom scrolling refers solely to the scrolling format itself, independent of emotional valence, to isolate interface effects on recall (Sharifian & Zahodne, 2019; Sekhon, 2024). Much of the existing literature has emphasized the emotional and psychological consequences of doom scrolling, linking the behavior to heightened anxiety, depressive symptoms, sleep disruption, and emotional exhaustion (Psychology Today, 2024; Samuel & Selvam, 2025). Media outlets such as Vox and Wired contextualized doom scrolling as a cultural phenomenon that surged during the COVID-19 pandemic, reinforcing its recognition as a mental health concern (Jenning & Watercutter, 2020).

While these perspectives highlight the risks of negative content exposure, they leave underexplored the cognitive dimension of doom scrolling—specifically, how the scrolling interface itself may affect memory and attention even when the content is neutral or positive. To isolate the impact of format rather than affect, participants in this study are exposed to neutral and positive stimuli, and the dependent variable measured is immediate recall (short-term memory). Short-term recall reflects the ability to retain and retrieve information directly after exposure, a process highly sensitive to interference from cognitive load and attentional fragmentation (Martini et al., 2020). Research in cognitive psychology has established that short-term memory typically lasts 15–30 seconds before information begins to decay unless rehearsed (McLeod, 2025; Weinstein, 2017). This temporal limitation underscores the importance of measuring recall immediately after exposure, as delays risk shifting performance into long-term consolidation processes.

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Recent studies show that frequent smartphone presence and social media use can reduce working memory capacity, heighten distractibility, and impair recall accuracy. Continuous scrolling interfaces may amplify these effects by imposing high extraneous cognitive load, fragmenting attention, and encouraging shallow processing of information (Liebherr et al., 2020; Bansal, 2025). Such conditions are likely to compromise immediate recall, even when the content itself is benign. The unique architectural features of the scrolling format—specifically the ability to manually skip, repeat, or transition between clips—may fragment attention and elevate cognitive load, thereby influencing recall accuracy (Sarkar, 2025).

Furthermore, the significance of this study lies in its focus on the format of digital consumption rather than the content. Existing scholarship has largely examined doom scrolling in relation to negative emotional outcomes, yet college students are equally exposed to neutral and positive content in scrolling environments. By isolating the scrolling interface, this research addresses a clear gap: few experimental studies have tested whether the mechanics of scrolling—rapid transitions, replay options, and user-driven navigation—directly impair short-term recall. This distinction is crucial because academic performance depends not only on emotional well-being but also on the efficiency of memory processes. To address this gap, the study employs a between-subjects experimental design, comparing recall performance between participants exposed to a scrolling format and those exposed to a continuous, non-scrolling video format. By using neutral and positive stimuli, the research ensures that differences in recall can be attributed to the interface rather than emotional content. This methodological choice strengthens internal validity and provides a controlled test of how doom scrolling-style behavior influences immediate recall. Ultimately, this investigation contributes to Sustainable Development Goal 3 (Good Health and Well-Being) by promoting awareness of how digital consumption habits affect cognitive health. The findings aim to provide empirical evidence that can inform digital literacy initiatives, guide healthier media practices, and support the cognitive well-being of students navigating an increasingly fast-paced online environment.

Research Questions

This study seeks to determine whether doom scrolling with neutral and positive content influences short-term memory recall among college students.

1. What is the immediate recall score of participants who engage in doom scrolling-style scrolling with neutral and positive content?
2. What is the immediate recall score of participants who view the same content in a non-scrolling continuous video format?
3. Is there a significant difference between the immediate recall scores of participants who engage in doom scrolling-style scrolling and those who view the content in a non-scrolling video format?

Scope and Delimitation of the Study

This study focuses on examining the effect of doomscrolling-style scrolling compared to a non-scrolling continuous video format on the immediate recall of college students. The research is limited to 30 participants aged 18–28 years, all enrolled at the University of Perpetual Help System DALTA – Molino Campus. Using an experimental within-subjects design, participants were exposed to both presentation formats using neutral and positive short-form video content, with recall measured immediately after exposure through a structured test. The study is delimited to short-term memory (immediate recall) only and does not assess long-term memory retention, emotional responses, or behavioral outcomes. It also excludes other demographic groups, content types (e.g., negative or distressing materials), and real-world uncontrolled settings. Additionally, results are constrained using convenience sampling and a relatively small sample size, limiting the generalizability of findings to broader populations.

Literature Review

Doom scrolling and Mental Health

Doom scrolling has been widely discussed in psychological research as a compulsive pattern of digital engagement. Samuel and Selvam (2025) describe it as a behavioral addiction reinforced by social media algorithms, linking the practice to anxiety, depression, sleep disruption, and impaired cognitive function. Similarly, Sekhon (2024) frames doom scrolling as a maladaptive coping mechanism that contributes to emotional exhaustion and highlights the need for preventive strategies. Adding nuance, Buchanan, Aknin et al. (2021) distinguish doom scrolling from "kindness-scrolling," showing that while negative content amplifies distress, prosocial content does not harm well-being. Popular media outlets such as Vox and Wired (Jennings & Watercutter, 2020) have also contextualized doom scrolling's rise during the COVID-19 pandemic, reinforcing its recognition as a cultural phenomenon. These sources provide cultural background but are not empirical evidence. Importantly, while earlier studies often emphasized doom

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scrolling as prolonged exposure to distressing news, the present study operationalizes doom scrolling differently: as the scrolling format itself—rapid, user-driven transitions between clips—regardless of emotional valence. This distinction is critical because our experiment uses neutral and positive content to isolate the effects of the interface on short-term recall, rather than the emotional tone of the material.

Cognitive Load, Memory, and Digital Consumption

Beyond emotional outcomes, doom scrolling and short-form content consumption have been linked to cognitive overload and impaired recall. Bansal (2025) highlights how platforms like TikTok and Instagram Reels reduce attention spans and memory retention due to endless scrolling and chaotic content delivery. Asif (2024) demonstrates that digital information overload impairs critical evaluation skills, increases cognitive fatigue, and reduces recall accuracy among college students. Magotra (2025) expands this discourse by linking doom scrolling to cognitive decline and "brain rot," framing it as both a psychological and neurological concern. Neuroscience studies further provide context: Giedre et al. (2023) show that the relationship between short- and long-term memory remains preserved across age groups, while Forsberg et al. (2022) find that the proportion of working memory items recoverable from long-term memory remains fixed despite aging. These findings suggest that external factors such as cognitive load, rather than age, play a critical role in recall performance. Synthesizing these perspectives, cognitive load theory emphasizes that individuals have limited capacity for processing multiple streams of information. Rapidly changing stimuli, such as those presented in scrolling interfaces, heighten cognitive demands and challenge sustained attention (Bansal, 2025; Asif, 2024). Even when users engage with neutral or positive material, frequent transitions between videos may fragment attention, limit deeper processing, and reduce short-term memory performance (Magotra, 2025).

Short-Term Memory Foundations

To properly measure recall, it is essential to define the limits of short-term memory. McLeod (2025) explains that short-term memory typically lasts 15–30 seconds before information begins to decay unless rehearsed, while Weinstein (2017) emphasizes that retention beyond one minute generally shifts into long-term memory processes. These definitions provide the theoretical foundation for recall tests administered immediately after exposure, ensuring that the dependent variable in this study reflects short-term memory performance rather than long-term consolidation. This framework underscores why the present study measures immediate recall: short-term memory is highly sensitive to interference from cognitive load and attentional fragmentation, both of which are central to scrolling behaviors.

Local Context – Social Media and Academic Performance

Dimacangun and Guillena (2023) explored the relationship between social media use and academic performance among Filipino junior high school students. Their findings indicate that frequent social media engagement is associated with variations in academic outcomes, highlighting how online activity, including scrolling behaviors, may influence students' attention and learning processes within the Philippine educational setting. This local evidence supports the relevance of examining the cognitive effects of doom scrolling among students. Even in the absence of distressing material, extended scrolling can engage cognitive resources involved in attention and information processing. These observations suggest that scrolling habits among local student populations may play a role in shaping attention and memory processes related to academic performance.

Methodology

Research Design

This study employed experimental quantitative research design, characterized by the manipulation of an independent variable and the measurement of its effect on a dependent variable under controlled conditions (Creswell & Creswell, 2018). Experimental research was specifically designed to determine whether a causal relationship existed between variables through manipulation and control of conditions (Anguiano, 2020). Specifically, the study utilized a within-subjects design, in which the same group of participants were exposed to both experimental conditions: doom scrolling-style scrolling and non-scrolling continuous video viewing (Gravetter & Forzano, 2018). In this design, each participant experienced both conditions of the independent variable, allowing for direct comparison of recall performance while controlling for individual differences. Counterbalancing was implemented to minimize order effects, ensuring that the sequence of exposure did not systematically influence recall outcomes (Anguiano, 2020). Participants were randomly assigned to the order of conditions, with some beginning in the scrolling format and others in the non-scrolling format. Randomization strengthened internal validity by distributing

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potential sequence effects evenly across participants (Creswell & Creswell, 2018). To further enhance validity, the study incorporated a neutral baseline pre-test of immediate memory span (e.g., digit span or symbol recall) using non-overlapping content. This ensured that the pre-test measured baseline recall ability without priming participants for the experimental stimuli. Following the exposure phase, a structured post-test was administered immediately after stimulus presentation to measure immediate recall of the video stimuli. Immediate recall referred to the retrieval of information directly after presentation without delay or intervening tasks and reflected the initial stage of memory encoding and retrieval (Murdock, 1967).

Sampling Design

The participants in this study were college students enrolled at the University of Perpetual Help System DALTA – Molino Campus. A total of 30 students, aged 18 to 28 years old, were recruited through convenience sampling, meaning only those who were readily available and willing to participate were included (Etikan, Musa, & Alkassim, 2016).

Research Locale

The study was conducted at the University of Perpetual Help System DALTA – Molino Campus, located in Molino, Philippines. This institution served as the research locale due to its accessibility to the researchers and the availability of college students who met the study's inclusion criteria. Data collection took place in a controlled classroom or laboratory setting within the campus to ensure a standardized environment, minimizing external distractions and maintaining consistency in experimental conditions. The locale provided the necessary facilities, equipment, and participant pool required to effectively examine the impact of doomscrolling-style scrolling on immediate recall.

Research Participants

The study involved thirty (30) college student participants, with the sample size determined based on conventional statistical recommendations for experimental research utilizing a t-test to detect medium effect sizes at an alpha level of .05 and a statistical power of .80 (Cohen, 1988). Considering the controlled laboratory setting and the implementation of random assignment, the selected sample size was deemed sufficient to examine the direct effect of scrolling format on immediate short-term recall. Following recruitment, participants were randomly assigned to either the experimental group, which was exposed to a doom-scrolling-style format, or the control group, which viewed content in a non-scrolling continuous format, with fifteen (15) participants assigned to each condition. Random assignment was employed to minimize selection bias and strengthen the internal validity of the study (Creswell & Creswell, 2018). To ensure the accuracy and reliability of recall performance measurement, specific inclusion and exclusion criteria were established. Participants qualified for inclusion if they were currently enrolled college students at the institution during the conduct of the study, aged between 18 and 28 years old, possessed normal or corrected-to-normal vision, had no hearing impairment, and voluntarily provided written informed consent. Participants were excluded if they reported diagnoses of neurocognitive, attentional, or neurological disorders, were currently taking medication known to affect attention or memory, had less than six hours of sleep prior to participation, had prior exposure or high familiarity with the curated experimental video content, or were unable to comply with the standardized viewing procedures. Participation in the study was strictly voluntary, and all respondents were assigned coded identifiers to maintain anonymity and confidentiality. All collected data were securely stored and handled in accordance with institutional ethical guidelines and research protocols.

Research Instrument

The instruments utilized in this study consisted of two primary components: TikTok-style short-form videos used as the experimental stimulus and a structured short-term memory recall test used to measure participants' immediate recall performance. TikTok-style short-form videos were carefully curated to contain neutral and positive content, ensuring that emotional valence did not confound the results. Each video sequence was standardized in terms of duration, presentation order, and exposure time. The scrolling format, which allowed rapid transitions and replay options, was contrasted with a continuous non-scrolling format to operationalize doomscrolling-style consumption. This manipulation allowed the study to isolate the effect of format on recall. The recall test was administered immediately after each video exposure and consisted exclusively of Yes/No questions. Two equivalent sets of items were prepared: one set administered after the doomscrolling condition and another after the non-scrolling condition. Although the sets contained different items, they followed the same format and level of difficulty to ensure comparability across conditions. Each item required participants to indicate whether a specific detail (e.g., objects, animals, environmental elements, or structures) had appeared in the video clips they had just viewed. Scoring was conducted by assigning one point for each correct answer and zero points for incorrect responses, with higher

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scores indicating better immediate recall. To ensure the validity and reliability of the instrument, several steps were undertaken. First, the recall test items underwent content validation through expert review. Two faculty validators participated in this process: one was a Registered Psychometrician (RPm), and the other held credentials as both a Registered Psychometrician (RPm) and a Registered Guidance Counselor (RGC). They confirmed that the items accurately reflected the visual details embedded in the stimuli and were appropriate for assessing immediate recall. Second, pilot testing was conducted with a small group outside the main sample to identify ambiguous wording, ensure clarity, and confirm that the items matched the intended stimuli. Third, the overall test structure was evaluated against established practices in immediate recall measurement, ensuring alignment with definitions of short-term memory in recent literature (Sharifian & Zahodne, 2019; Martini et al., 2020). The reliability analysis of the instrument indicated strong internal consistency, as evidenced by a Cronbach's alpha coefficient of $\alpha = .89$. In psychometric evaluation, alpha values above .80 are generally considered to reflect good reliability, suggesting that the items within the scale consistently measure the same underlying construct. An alpha of .89 therefore demonstrates that the instrument used in this study is both stable and dependable, with minimal measurement error and strong coherence across items. This level of reliability supports the validity of subsequent analyses, ensuring that the participants' responses can be interpreted with confidence and that the scale effectively captures the intended dimensions of immediate recall performance. Through this validation process, the instrument was refined to ensure that differences in recall performance could be attributed to the mode of content consumption rather than flaws in measurement

Data Gathering Procedure

Data were gathered through a controlled experimental procedure conducted in a classroom or laboratory setting to ensure consistency and minimize distractions. Participants were recruited through convenience sampling and were informed about the purpose of the study before signing an informed consent form. Participation was voluntary, and all responses were treated confidentially. The study used a within-subjects experimental design in which all participants experienced both the doomscrolling condition and the non-scrolling or structured viewing condition. To reduce possible order effects such as fatigue or familiarity, a counterbalancing procedure was applied by randomly assigning participants to different viewing sequences (Pallant, 2020). Each participant completed two viewing sessions lasting ten minutes each. In the doomscrolling conditions, participants viewed TikTok-style short-form videos in a continuous scrolling format, while in the non-scrolling conditions, the same videos were presented sequentially without scrolling. Standardized conditions were maintained throughout the sessions, including the use of the same device type, consistent audio and screen settings, disabled notifications, and a quiet environment to minimize distractions (Field, 2018). Immediately after each session, participants completed a short-term memory recall test composed of Yes/No questions designed to measure recognition of visual details from the videos. Two equivalent sets of questions with the same format and difficulty level were used to ensure comparability between conditions. Participants answered based only on what they remembered from the videos. One point was given for each correct answer, while incorrect responses received zero points. The total scores represented the participants' short-term memory recall performance, with higher scores indicating better recall accuracy. All data were encoded into statistical software for analysis, and appropriate statistical tests, particularly the paired-samples t-test, were used to determine whether significant differences existed between the doomscrolling and non-scrolling conditions.

Results and Discussions

Research Question 1: **What is the immediate recall score of participants who engage in doom scrolling-style scrolling with neutral and positive content?**

Table 1. Descriptive Statistics for Immediate Recall Scores in Doomscrolling Condition

Variable	Mean	Median	SD	Verbal Interpretation
Correct Recall (Doomscrolling)	30.65	16	82.50	High Recall Performance

Table 1 provides descriptive statistics for participants' immediate recall accuracy while engaging with content through a doomscrolling-style scrolling format. The mean score of 30.65 indicates that participants demonstrated a High Recall Performance, falling just above the threshold for high recall on the interpretation scale. The median score of 16, however, is lower than the mean, suggesting that the distribution is positively skewed due to several participants achieving exceptionally high recall scores (maximum = 475). The relatively large standard deviation (SD = 82.50) also confirms that recall

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performance varied widely among participants in this condition. This variability highlights that doomscrolling may not produce uniform cognitive outcomes; instead, it appears to benefit certain individuals more than others, possibly depending on their attentional style, prior exposure to short-form content, or susceptibility to cognitive overload. Recent studies emphasize that fast-paced and segmented digital content can enhance attentional engagement and improve immediate memory performance by breaking information into smaller, more digestible units (Wei et al., 2026; Opara et al., 2025). This supports the present finding that doomscrolling may facilitate high recall performance by presenting information in short bursts that align with the brain's natural preference for chunking. Magotra (2025) further argues that rapid digital consumption can temporarily sharpen focus and recall but warns that prolonged exposure risks "brain rot" and cognitive decline. Similarly, Samuel and Selvam (2025) highlight that doomscrolling addiction creates a paradox: while shorter recall may improve due to heightened engagement, long-term wellbeing and sustained attention are compromised. Neurocognitive evidence strengthens this interpretation. Wei et al. (2026) demonstrated that fragmented short video exposure modulates neural activity and connectivity during memory retrieval, suggesting that the brain adapts to rapid stimulus turnover by prioritizing salient details. Harichandan et al. (2025) also note that recommendation algorithms in video platforms amplify this effect by continuously serving fast-paced stimuli, which can sharpen attentional focus but simultaneously risk overwhelming working memory. However, doomscrolling has also been consistently associated with cognitive overload and attentional fatigue, leading to inconsistent recall outcomes across individuals (Satici et al., 2023). This aligns with the wide variability observed in the present study (SD = 82.50). Opara et al. (2025) caution that while TikTok's fast-paced content can boost immediate recall, it reduces sustained attention, making it harder for learners to maintain focus over longer periods. Shunmugam and Vengadasalam (2024) add that compulsive scrolling is linked to psychological distress, academic decline, and neurological impacts, underscoring the complex trade-offs of this consumption style. Taken together, these findings suggest that doomscrolling's segmented format can enhance short-term recall by leveraging attentional bursts, but its broader cognitive and emotional impacts remain mixed. For some individuals, the rapid turnover of stimuli may sharpen focus and improve recall accuracy; for others, it may induce fatigue, overload, or distress. This duality explains the uneven distribution of scores in the present study and highlights the need for balanced digital consumption strategies.

Research Question 2: **What is the immediate recall score of participants who view the same content in a non-scrolling continuous video format?**

Table 2. Descriptive Statistics for Immediate Recall Scores in the Non-Scrolling Video Condition

Variable	Mean	Median	SD	Verbal Interpretation
Correct Recall (Non-Scrolling)	26.45	13	71.22	Moderate Recall Performance

Table 2 presents descriptive statistics for participants' immediate recall scores in the non-scrolling, continuous video condition. The mean recall score of 26.45 places participants within the Moderate Recall Performance category based on the interpretation scale. The median score of 13 is lower than the mean, again indicating positive skewness, likely due to a small subset of individuals achieving very high recall (maximum = 410). The standard deviation (SD = 71.22) suggests notable variability in performance across participants, similar to the doomscrolling condition. This variability highlights that continuous video formats may not consistently sustain attention across all learners, with some individuals able to maintain focus while others experience attentional decline. Recent literature emphasizes that continuous and less dynamic presentation formats often result in lower levels of attentional engagement compared to segmented or interactive designs. Harichandan, Nayak, and Lenka (2025) reported that continuous video formats tend to produce moderate recall outcomes because learners experience reduced sensory novelty and diminished attentional stimulation. Without variation or segmentation, attentional resources are more likely to decline over time, weakening encoding efficiency. Neurocognitive evidence also supports this interpretation. Wei et al. (2026) found that fragmented short video exposure modulates neural activity during recall, but when content is presented continuously without segmentation, activation in attention and cognitive control regions is reduced. This suggests that continuous formats encourage more passive processing, which can limit the depth of encoding. Opara, Adalikwu, and Tolorunleke (2025) similarly observed that TikTok's fast-paced segmented content enhances immediate recall, whereas continuous formats reduce sustained attention, leading to weaker memory retention. Other studies highlight the risks of prolonged continuous viewing. Shunmugam and Vengadasalam (2024) noted that extended exposure to unsegmented content encourages mind wandering, which diminishes encoding and recall. Magotra (2025) further warns that continuous digital consumption can contribute to cognitive fatigue, reducing the efficiency of working memory and increasing susceptibility to distraction. Taken together, these findings explain the moderate recall performance observed in the

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non-scrolling condition (M = 26.45). Continuous video presentation may encourage more passive processing, leading to weaker immediate recall compared to segmented, scrolling formats. While some individuals may still achieve high recall under continuous exposure, the overall pattern suggests that segmentation and novelty are critical for sustaining attention and optimizing short-term memory performance.

Research Question 3: **Is there a significant difference between the immediate recall scores of participants who engage in doom scrolling-style scrolling and those who view the content in a non-scrolling video format?**

Table 3. Wilcoxon Signed-Rank Test Comparing Immediate Recall Scores Across Conditions

Comparison	Test Statistic (W)	p-value	Significant @0.05	Hypothesis Status
Doomscrolling vs. Video	349.00	< .001	Significant	Ho Rejected

Table 3 shows the results of the Wilcoxon signed-rank test comparing participants' immediate recall scores between the doomscrolling-style scrolling condition and the non-scrolling continuous video condition. Because the assumption of normality was violated, as indicated by a significant Shapiro–Wilk p-value (< .001), a non-parametric analysis was appropriate. The Wilcoxon test yielded a statistically significant difference between the two conditions, $W = 349.00$, $p < .001$, indicating that participants achieved higher recall scores when viewing the content in a doomscrolling format. On this basis, the null hypothesis of no difference between the two presentation formats was rejected. These findings suggest that presentation format has a meaningful effect on immediate recall performance. Participants demonstrated stronger memory for content delivered through a doomscrolling-style format compared to a continuous video, which may reflect the attentional advantages of segmented, rapid content transitions that promote more effective encoding. The results carry practical implications for digital media and educational content design, suggesting that structured, discrete presentation formats may enhance short-term memory retention more effectively than traditional continuous video formats. Recent studies confirm that segmentation and novelty are critical for sustaining attention and recall. Wei et al. (2026) showed that fragmented short video exposure modulates neural activity and connectivity during memory retrieval, supporting the idea that rapid transitions act as event boundaries that anchor encoding. Opara, Adalikwu, and Tolorunleke (2025) similarly found that TikTok's fast-paced content enhances immediate recall compared to continuous formats, though they caution that sustained attention may decline over longer periods. Harichandan, Nayak, and Lenka (2025) add that recommendation systems amplify this effect by continuously serving segmented stimuli, which can sharpen attentional focus but also risk overwhelming working memory. Event segmentation research further supports these findings. Jafarpour, Buffalo, Knight, and Collins (2022) demonstrated that dividing continuous experiences into discrete episodes enhances working memory retention, with event boundaries serving as anchors for encoding and retrieval. This aligns with the present study's results, where the segmented, fast-paced transitions of doomscrolling produced stronger immediate recall than uninterrupted continuous video. Magotra (2025) also warns that while segmentation can temporarily boost recall, excessive exposure to rapid digital consumption may contribute to cognitive fatigue and decline, highlighting the need for balance. At the same time, cautionary evidence highlights doomscrolling's potential downsides. Shunmugam and Vengadasalam (2024) reviewed its effects on students, noting that while segmented scrolling can sometimes enhance awareness and recall of specific information, it also fragments attention and reduces concentration in academic contexts. Samuel and Selvam (2025) emphasize that doomscrolling addiction can lead to psychological distress, suggesting that the benefits of segmented formats may be domain-specific and moderated by emotional or cognitive strain. Taken together, these studies reinforce the present finding that presentation format plays a critical role in shaping immediate recall. Segmented, scrolling-style content appears to promote more effective encoding by leveraging novelty and event boundaries, while continuous formats risk passive processing and attentional decline. The significant difference observed in the Wilcoxon test underscores the importance of considering format design in both digital media and educational contexts, where segmentation may serve as a practical strategy to optimize short-term memory retention.

Ethical Considerations

This study adhered to approved ethical standards and obtained formal approval from the UPHSD Research Ethics Committee prior to participant recruitment to ensure research integrity and participant protection. In compliance with the Data Privacy Act of 2012 (RA 10173), all participants' identities were kept confidential, and responses were coded to guarantee anonymity. De-identified data were securely stored on an encrypted drive for five years and then permanently deleted. Prior to participation, all respondents were

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provided with a written informed consent form explaining the study's purpose, procedures, duration, potential risks, and benefits. Participation was strictly voluntary, and students were informed that they could withdraw at any time without penalty or academic consequences. For individuals with potential cognitive impairments, assent was sought in addition to consent to ensure ethical compliance. Participants were informed that the tasks involved attention and memory challenges, which could cause mild discomfort or difficulty. This disclosure promoted transparency and reduced the likelihood of unexpected stress. To minimize risks, task duration was kept brief to prevent cognitive fatigue, and standardized procedures were implemented to ensure fairness and equal treatment. Experimental clips were preloaded on laboratory smartphones with airplane mode enabled and notifications turned off; no personal device data were accessed or stored. Certain details of the study were temporarily withheld to prevent response bias, but a full debriefing was conducted after the experiment. During the debriefing, participants were allowed to ask questions or withdraw their data if they chose. By implementing these safeguards, the study upheld the ethical principles of respect, beneficence, and justice throughout the research process.

Conclusion

The study entitled *"Doomscrolling-Style Scrolling and Its Effect on Immediate Recall"* was conducted among 30 college students aged 18–28 from the University of Perpetual Help System DALTA – Molino Campus. Guided by Cognitive Load Theory and the Working Memory Model, the research aimed to determine whether presentation format significantly influences immediate recall performance. The statements of the problem focused on (1) recall scores in the doomscrolling condition, (2) recall scores in the non-scrolling condition, and (3) the significant difference between the two formats. The findings suggest that segmented, scrolling-style content facilitated stronger recall for many participants. The wide variability highlights that while doomscrolling can enhance attentional engagement, recall outcomes differed across individuals. The participants in the non-scrolling continuous video condition obtained Moderate Recall Performance that indicated weaker recall compared to the doomscrolling condition. This supports theoretical claims that continuous formats encourage more passive processing, reduce attentional stimulation, and increase cognitive load, thereby limiting encoding efficiency. For inferential analysis using the Wilcoxon signed-rank test revealed a statistically significant difference between the two conditions**.** Participants demonstrated stronger recall in the doomscrolling condition, leading to the rejection of the null hypothesis. This confirms that presentation format plays a meaningful role in shaping immediate recall performance. Through these results, the study concludes that doomscrolling-style segmented formats enhance short-term memory retention more effectively than continuous video formats**.** This conclusion directly addresses all three statements of the problem and reinforces the theoretical frameworks guiding the study.

Reccomendations

Based on the findings and conclusions of the study, several recommendations are proposed. College students are encouraged to adopt study strategies that utilize segmented or chunked learning materials such as flashcards, short video clips, and modular notes, as the doomscrolling condition demonstrated higher recall performance compared to continuous viewing formats. Structured and segmented content may therefore improve attentional engagement and short-term memory recall, while prolonged exposure to continuous video formats should be minimized to avoid passive processing and reduced retention. Educators are likewise encouraged to integrate segmented instructional approaches, including micro-lectures, interactive modules, and short video presentations, into classroom instruction. Since continuous presentation formats produced only moderate recall performance, lengthy uninterrupted lectures may contribute to cognitive overload and reduced information retention. Designing lessons that minimize extraneous cognitive load may therefore enhance active learning and memory encoding. In addition, content designers and media developers are advised to organize educational and digital materials into smaller, manageable units rather than long continuous streams of information. The study indicated that segmented scrolling formats significantly improved recall performance, suggesting that modular design strategies may enhance short-term memory retention in digital learning environments. Mental health advocates and practitioners should also promote awareness regarding both the potential benefits and risks of scrolling-based content consumption. While segmented scrolling may improve immediate recall, excessive exposure may also contribute to attentional fatigue and fragmented focus; thus, balanced and responsible digital consumption habits should be encouraged. Finally, future researchers are encouraged to extend the investigation by examining long-term retention, emotional effects, and individual differences in attentional control associated with digital content presentation formats. Replication of the study using larger and more diverse samples, varied age groups, and different forms of media content is also recommended to strengthen the generalizability of the findings and further understand the relationship between presentation format and cognitive performance.

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