

THE DEEP READING CRISIS IN THE DIGITAL AGE: THE ROLE OF LIBRARIES

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ABSTRACT:

In recent years, there are growing concerns over the decline of sustained and immersive reading practices as digitally mediated environments promote rapid, fragmented, and surface-level engagement with texts, a condition often described as the deep reading crisis. While existing studies have examined the cognitive consequences of digital reading, limited attention has been given to the institutional support that may reduce these effects. This study addresses this gap by exploring the relationship between digitally mediated reading environments, fragmented attention, and deep reading practices, while positioning libraries as institutional spaces capable of moderating this relationship.

Adopting a narrative review approach, the study synthesises literature from psychology, education, and library and information science to identify recurring patterns in digital reading behaviour and library-based interventions. The review indicates that screen-based reading is frequently associated with reduced attentional and lower cognitive engagement with complex texts especially in literary text. At the same time, the literature highlights the role of libraries in providing environmental, technological, and instructional conditions that support sustained and immersive reading within contemporary digital ecosystems.

KEYWORDS: Deep reading crisis, digital skimming, library role, reading practices

INTRODUCTION:

Reading has long been recognised as a cognitively demanding and reflective activity, particularly in the context of literary studies, where meaning emerges through sustained attention, inference, and interpretation. This mode of engagement, often described as deep reading, enables readers to analyse complex narratives, appreciate stylistic nuances, and develop critical and empathetic understanding (Wolf, 2007).

However, the growing dominance of digitally mediated reading environments has raised serious concerns about the decline of sustained attention, interpretive depth, and reflective engagement that are central to literary and academic reading. The rapid expansion of digital technologies and the growing reliance on scrolling, searching, and non-linear navigation have transformed reading environments in ways that prefer surface-level scanning over analytical engagement, thereby contributing to a decline in sustained and reflective reading practices. Scholars have conceptualised this shift as a “deep reading crisis,” characterised by fragmented modes of reading and declining engagement with complex texts (Liu, 2005; Udovychenko, 2025). Research on F-pattern behaviour further confirms that digital readers rarely read line by line; instead, their reading pattern is exhibited through scanning and skimming for keywords.

Empirical studies suggest that readers tend to process digital texts more superficially than print texts, often prioritising speed and information extraction over comprehension and critical reflection (Mangen, Walgermo, & Brønnick, 2013). Such shifts have serious implications for literary comprehension, particularly in academic and humanities contexts where close and reflective reading remains foundational.

While previous studies have identified the cognitive and behavioural consequences of digital reading, they have largely focused on individual reading practices and outcomes. Consequently, less attention has been paid to the institutional and environmental conditions that might reduce these challenges.

Within this context, libraries can play a significant role by designing distraction-free and cognitively rich digital infrastructures, literacy programmes, and mediated reading practices that encourage slow, focused, and reflective reading within the digital ecosystem (Wolf, 2018; Baron, 2021). This study adopts a narrative review of existing literature to examine how the deep reading crisis is conceptualised in existing literature, how digital skimming affects literary comprehension, and how libraries can function as institutional spaces that reduce the negative relationship between digital reading environments and deep reading practices.

OBJECTIVE OF THE STUDY:

This study aims to explore how digital reading practices affect deep and sustained engagement with literary texts. It also focuses on the important role libraries play in deep reading experiences in the contemporary digital environment. The study has following objectives and research questions:

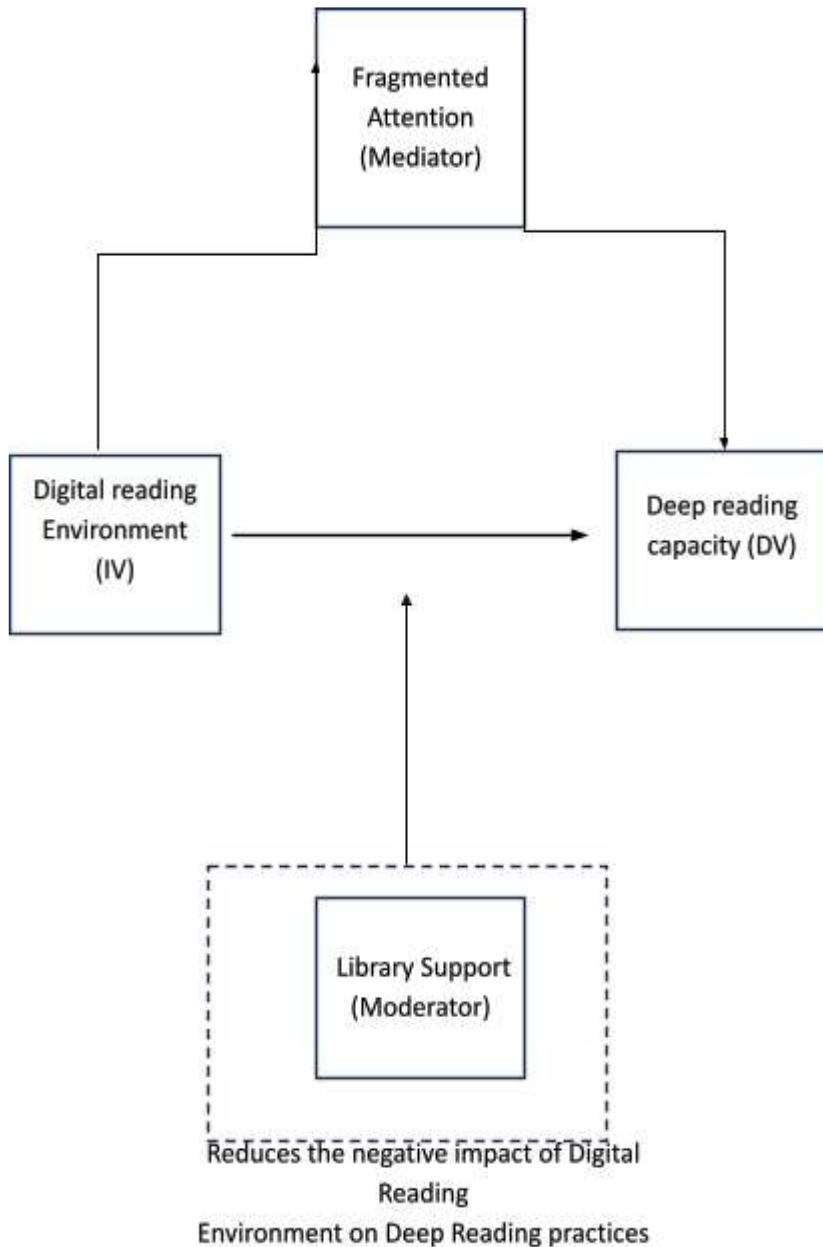
1. How is the deep reading crisis conceptualised in existing scholarly literature?
2. What cognitive and comprehension-related effects are associated with digital skimming and non-linear reading behaviours?
3. In what ways do libraries function as cognitive, cultural, and institutional environments and facilitate digital infrastructure that supports deep reading?

4. What conceptual insights emerge from the synthesis of the literature regarding the evolving role of libraries and librarians in sustaining deep reading in the digital age?

CONCEPTUAL FRAMEWORK AND BACKGROUND:

In this study, deep reading is understood as focused, reflective engagement with complex texts that enables critical thinking, interpretation, and sustained attention. It is not merely an individual skill, but a practice shaped by educational environments and institutional support. Deep reading depends on conditions that encourage concentration and uninterrupted engagement.

By contrast, digital reading environments often promote speed, multitasking, and fragmented attention through features such as hyperlinks, scrolling, and constant information flow. These conditions can reduce sustained cognitive engagement, contributing to what is described as a “deep reading crisis.” This crisis is therefore viewed as a structural and environmental issue rather than simply a decline in individual ability. Within this framework, libraries are conceptualised as institutional spaces that can support deep reading by providing curated resources, structured programs, and distraction-reduced environments. In this way, libraries may help to mitigate the negative impact on cognitive effects of digital reading and promote sustained reflective reading practices in the digital age.



(Where, IV=*Independent variable*, DV=*Dependent variable*)

Figure 1. Conceptual Framework of the Deep Reading Crisis in the Digital Age

METHODOLOGY:

This study adopts structured narrative review design. Literature was identified through targeted searches using Google Scholar and cross-referencing of key works across psychology, education, and library and information science.

Searches were conducted using combinations of keywords such as “deep reading,” “digital reading,” “screen-based reading,” “fragmented attention,” “reading comprehension,” “libraries,” “library spaces,” and “digital literacy,” within the time span 2000 and 2025. However, few earlier seminal works were also included where they provided important theoretical foundations relevant to the topic

A total of 67 studies were initially identified as relevant to the topic. After applying inclusion and exclusion criteria, 35 studies were selected for thematic synthesis. The analysis followed an inductive approach to identify recurring patterns and conceptual relationships within the literature.

INCLUSION AND EXCLUSION CRITERIA:

Studies were included if they explicitly addressed at least one of the following areas: deep reading or sustained reading practices, digital or screen-based reading behaviour, cognitive or comprehension-related aspects of reading, or the role of libraries and reading environments. Only English-language scholarly publications were considered. In addition, some scholarly books were also included where they provide theoretical or conceptual perspective relevant to the study. Studies that focused exclusively on technical usability or digital media consumption without explicit relevance to reading comprehension, deep reading, or reading environments were not prioritised for inclusion.

RESULT AND SYNTHESIS:

The reviewed literature reveals a relationship between digitally mediated reading environments, fragmented reading practices, and the decline of sustained and reflective engagement with complex texts. The synthesis is organised thematically to reflect this relationship and to situate libraries and librarians as institutional responses within this framework.

THE DEEP READING CRISIS IN DIGITALLY MEDIATED ENVIRONMENTS:

Previous studies show that contemporary reading practices are increasingly shaped by digital environments characterised by speed, multitasking, and non-linear navigation. Studies demonstrate a shift from immersive, linear reading to scanning and shallow engagement (Liu, 2005). Experimental evidence further suggests that comprehension levels are often lower in screen-based reading compared to print, particularly for complex texts (Mangen, Walgermo, & Brønnick, 2013; Ackerman & Goldsmith, 2011).

These studies highlight the “deep reading crisis” as a structural condition embedded within contemporary information environments rather than merely a matter of individual preference.

FRAGMENTED ATTENTION AND THE COGNITIVE DIMENSIONS OF DEEP READING:

Deep reading is widely described as a cognitively demanding process involving sustained attention, inference, integration of ideas, and critical evaluation (Wolf, 2007). Literacy and metacognitive research further emphasise that such practices must be cultivated through supportive environments and strategies (Mokhtari & Reichard, 2002).

However, shifts in reading habits, including reduced engagement with long-form texts and declining time spent on sustained reading

(Smith, 2011; Cull, 2011), indicate the need for the environmental conditions necessary to promote deep reading within the digital ecosystem. The literature therefore positions fragmented attention as a key mechanism linking digital environments to weakened deep reading practices.

LIBRARIES AS INSTITUTIONAL ENVIRONMENTS SUPPORTING DEEP READING:

Previous research highlights the importance of physical and social reading environments in shaping reading behaviour. Libraries have been conceptualised as “third places” that support concentration, reflection, and intellectual engagement (Oldenburg, 1999). Empirical studies demonstrate that supportive environments play a significant role in fostering sustained engagement with texts (Bus, 2001; Aabø & Audunson, 2012).

Viewed through this lens, libraries provide conditions such as reduced distraction, spatial arrangements conducive to focus, and access to varied formats that can counterbalance the attentional fragmentation associated with digital reading.

LIBRARY STRATEGIES IN THE DIGITAL READING LANDSCAPE:

Library and information science research further suggests that libraries actively shape reading practices through collection development, format mediation, and literacy instruction (Myrberg & Wiberg, 2015). Evidence indicates that interface design, annotation tools, and guided reading strategies influence comprehension and attentional engagement in digital contexts (Stoop, Kreutzer, & Kircz, 2013; Mangen & van der Weel, 2016).

Digital literacy initiatives and instructional interventions have been shown to foster metacognitive awareness and reflective reading strategies (Ackerman & Lauterman, 2012; Lauterman & Ackerman, 2014). Rather than merely adapting to prevailing digital habits, these

interventions demonstrate how institutional design and mediation can reduce the cognitive limitations associated with screen-based reading.

THE PROFESSIONAL ROLE OF LIBRARIANS:

The literature also underscores the mediating role of librarians in promoting critical and reflective engagement with texts. Frameworks of critical information literacy emphasise slow and reflective reading practices that encourage questioning of authority and contextual understanding (Elmborg, 2006). Through guided text selection, instructional support, and format mediation, librarians contribute to conditions that sustain deeper levels of comprehension and engagement, particularly in digital contexts prone to distraction (Liu & Huang, 2008).

Collectively, the reviewed studies position libraries and librarians not merely as repositories or service providers, but as institutional actors capable of moderating the negative relationship between digitally mediated reading environments and deep reading practices. By shaping environmental, cognitive, and instructional conditions, they provide alternative pathways for sustaining reflective engagement with complex texts.

LIMITATIONS OF THE STUDY:

The studies were identified through Google Scholar, without searches in major indexing databases such as Scopus or Web of Science. Consequently, it does not give exhaustive coverage of all relevant scholarships. In addition, the analysis is interpretive and conceptual in nature.

CONCLUSION AND FUTURE RESEARCH:

Digital reading has undoubtedly transformed the cognitive patterns of readers in recent times. Screen-based reading and digital skimming that have disrupted critical engagement with complex

literary structures, weaken interpretive depth. This poses a broader challenge to deep reading. However, the deep reading crisis is not an irreversible outcome of digital technologies. Libraries, historically known as repositories of information, can serve as an alternative pathway by reimagining themselves as cognitive and cultural reading spaces, incorporating distraction-reduced digital environments, guided reading interventions and active mediation of librarians, can preserve and promote deep reading practices. Future research should empirically examine the proposed relationship between digitally mediated reading environments, fragmented attention, and deep reading outcomes. Particular attention should be given to testing the moderating role of libraries and librarians through quantitative, experimental, or mixed-method designs. Longitudinal and context-based studies within academic settings may further clarify how institutional interventions influence sustained and reflective reading practices over time.

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