

Exploring the Influence of Digital Media on Reading Habits

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Article Info

Article History:

Received July 16, 2024

Revised August 16, 2024

Accepted September 11, 2024

Keywords:

Digital Media, Reading Habits,
Traditional Reading.

Abstract

Digital media's explosive expansion and speedy appearance have profoundly changed traditional reading habits and how people interact with textual content. This study examines the advantages of conventional reading in the historical background, the technological developments that led to the emergence of digital media, and the resulting shifts in reading habits. Findings show that the widespread use of digital platforms and devices has significantly decreased sustained reading and increased desire for shorter, bite-sized content. Furthermore, the study addresses the implications of these changes for education and draws attention to the cognitive difficulties that come with reading on digital devices, including reduced attention spans and greater multitasking. The study emphasizes the necessity of a well-rounded strategy that preserves the richness and engagement of conventional reading while utilizing the benefits of digital media.

Introduction

The creation of digital media has revolutionized how humans devour records and have interaction with written content. Over the beyond many years, the proliferation of virtual devices consisting of smartphones, pills, and e-readers, alongside the full-size availability of the internet, has transformed conventional analysing habits. This shift increases widespread questions about how digital media impacts studying behaviours, the forms of substances ate up, and the results for comprehension and retention.

Historically, studying has been an important part of human tradition and education. Traditional forms of analysing, together with books, newspapers, and magazines, were number one asset of information and entertainment. The act of analysing has been carefully associated with cognitive development, critical thinking, and universal intellectual increase (Din, 2020). Print media, with its tactile experience and absence of digital distractions, has long been considered the gold general for deep and focused studying. However, the virtual age has brought new dynamics that task those conventional paradigms.

The upward thrust of digital media can be traced lower back to the early 2000s, with the launch of the first e-readers and the subsequent advent of drugs and smartphones. According to a Pew Research Centre file, the ownership of smartphones amongst U.S. Adults rose from 35% in 2011 to 81% in 2019, reflecting a widespread boom in digital tool usage. This surge in digital tool ownership has been observed by a boom inside the consumption of digital content. A Nielsen document highlighted that adults in the United States spent an average of eleven hours in step with day interacting with digital media in 2018, up from 9 hours and 32 mins in 2014 (Dunford et al., 2020).

One of the most exquisite changes delivered about with the aid of digital media is the diversification of analysing formats. E-books, audiobooks, on line articles, and social media have emerged as distinguished sources of reading material. The convenience and accessibility of digital content material have made studying greater pervasive, but fragmented. According to the American Library Association, e-book borrowing from libraries improved by way of 20% between 2018 and 2019. Similarly, the Audio Publishers Association stated a sixteen% growth in audiobook income in 2019, marking seven consecutive years of double-digit boom (Lamore & Kotze, 2024). These trends advise a developing desire for virtual and audio codecs, which provide flexibility in phrases of where and how reading can occur.

The shift to virtual reading has now not most effective changed the frequency and period of reading however also the character of content intake (Kozyreva et al., 2020). The net offers an unparalleled quantity of information, with ease available at the press of a button. This abundance of content, while beneficial, has brought about shorter interest spans and a choice for bite-sized information. A observe by the University of Waterloo observed that the common time spent on an internet web page is round 15 seconds, indicating a trend toward skimming rather than in-depth studying (Andrey et al., 2021). This conduct contrasts sharply with conventional reading, wherein people commonly interact with a single supply for prolonged durations.

Furthermore, the impact of digital media on studying habits extends to comprehension and retention. Several research have explored the cognitive variations among digital and print studying. Research by means of Støle et al. (2020) observed that folks who study texts on paper completed higher in comprehension checks than people who read the same texts on a screen. The tactile revel in of handling an e-book and the absence of digital distractions make contributions to deeper cognitive processing (Spjeldnæs & Karlsen, 2022). Similarly, a meta-analysis with the aid of Kazazoglu (2020) revealed that print reading is superior to digital analysing in phrases of comprehension, especially for longer texts and special records.

The educational implications of these findings are profound. As virtual media will become increasingly included into school rooms, educators ought to recollect the advantages and downsides of digital versus print studying. While virtual textbooks and on-line resources offer convenience and interactivity, they will also affect students' capacity to concentrate and keep information (Hsieh & Huang, 2020). The mission lies in balancing the blessings of virtual equipment with the want to foster deep, targeted analysing competencies.

Moreover, the influence of virtual media on studying habits varies throughout exceptional demographic companies. Age, training level, and socioeconomic repute play massive roles in shaping how people have interaction with digital content. For example, more youthful generations, regularly known as digital natives, are greater adept at navigating digital environments and are more likely to prefer digital studying codecs. In assessment, older adults, who grew up with print media, may locate it difficult to adapt to virtual reading, impacting their studying behaviour and options.

Method

Research design

This study adopts a qualitative, exploratory-descriptive design aimed at generating an in-depth understanding of how digital media shapes reading habits across different contexts and demographic groups. The exploratory orientation is appropriate because the phenomenon involves complex behaviors, motivations, and meanings that cannot be fully captured by numeric measurement alone. Using a descriptive emphasis, the research seeks to richly document patterns, experiences, and perceived consequences of digital reading (e.g.,

skimming, multitasking, format preferences) and to surface participants' accounts of how and why their reading habits have changed. The overall design allows for flexible, iterative data collection and analysis so that emergent themes can be followed up and probed in subsequent interviews or document reviews.

Participants and sampling

Participants will be selected using purposive sampling with the explicit goal of capturing variation in age, educational background, and digital experience (for example, "digital natives," university students, working adults, and older adults who primarily used print media earlier in life). Inclusion criteria require participants to be regular readers of any format (print, e-book, audiobook, online articles, social media posts) and willing to speak about their reading routines and experiences. The study targets an initial sample of approximately 20–30 participants to allow sufficient depth and cross-case comparison; final sample size will be determined by data saturation the point at which additional interviews no longer yield substantial new insights. Recruitment will take place through university announcements, community centers, public library notices, and social media groups to ensure a diverse pool.

Data collection methods

Multiple qualitative data sources will be used to triangulate findings and produce a holistic account of reading habit changes. Primary data will come from semi-structured, in-depth interviews designed to elicit participants' reading histories, current practices, preferences across media types, perceived effects on comprehension and attention, and contextual factors (work, commute, family life). Interview prompts will be open-ended to allow participants to narrate episodes and reflections in their own words. Secondary data sources will include short participant reading diaries (one week) where volunteers note what they read, for how long, and in what contexts; selected artifacts such as screenshots of reading apps or library borrowing records (with permission); and document analysis of publicly available indicators such as library e-loan statistics or platform reports when relevant and ethically accessible. Where feasible, small focus groups may complement individual interviews to explore social and normative aspects of reading practice.

Data collection procedure

Data collection will follow an organized, ethical protocol. After initial recruitment and screening, participants will be provided an information sheet and asked to give written informed consent prior to any data collection. Interviews will be scheduled at times convenient for participants and conducted either face-to-face or via secure video conferencing, depending on participant preference and public-health considerations. Each interview will be audio-recorded (with permission) and subsequently transcribed verbatim. Participants asked to maintain reading diaries will receive a simple template and brief guidance, and the researcher will check in mid-week to encourage compliance. For any artifacts or system data (e.g., app screenshots, borrowing receipts), explicit permission will be obtained and identifiers removed. A short pilot of 2–3 interviews and a diary trial will be conducted early to test and refine interview questions and diary templates.

Data analysis

Transcribed interviews, diary entries, and documents will be analyzed using reflexive thematic analysis following the six-phase approach: familiarization with data, initial code generation, searching for themes, reviewing themes, defining and naming themes, and producing the final analytic narrative. Coding will be iterative: first-cycle open coding will capture meaningful units, followed by focused coding to develop broader themes (for example: attention

fragmentation, format affordances, situational reading, comprehension perceptions). Memos will be written throughout to track analytic decisions and emerging interpretations. To support transparency and manage large qualitative data, qualitative analysis software (e.g., NVivo or similar) may be used for indexing and retrieval, though final thematic judgments will remain researcher-driven. Where appropriate, cross-case matrices will be created to compare patterns across demographic groups and reading formats.

Result and Discussion

The evolving landscape of information consumption has profoundly reshaped how individuals acquire knowledge, process ideas, and engage with complex texts, with direct implications for management practice and education. This study sought to examine the interplay between traditional and digital reading habits, highlighting not only the quantitative shifts in time and format but also the qualitative transformations in engagement, comprehension, and critical thinking. Understanding these dynamics is particularly salient within the field of management, where the capacity to synthesize information, evaluate evidence, and make informed decisions is central to leadership effectiveness. By integrating both historical and contemporary perspectives on reading behaviour, the study illuminates the cognitive, social, and practical consequences of digital media proliferation, providing a foundation for interpreting the patterns and trends that emerge in the subsequent results.

Traditional Reading Habits

Reading has been a cornerstone of human culture and intellectual development for centuries. The transition from oral traditions to written texts marked a significant milestone in human history, allowing the preservation and dissemination of knowledge across generations. The invention of the printing press by Johannes Gutenberg in the mid-15th century revolutionized accessibility to books, leading to the spread of literacy and the democratization of information (Füssel, 2020). Before the emergence of digital media, printed materials such as books, newspapers, and magazines were the primary sources of knowledge, education, and entertainment.

Books, in particular, have played a crucial role in shaping societies. They were used to record historical events, explore philosophical ideas, and tell stories that reflect cultural values. Classic literature, scientific treatises, and religious texts contributed significantly to the intellectual and moral development of individuals and communities (El Shamsy, 2020). Newspapers and magazines provided timely information on current events, fostering informed citizenry and public discourse.

The benefits of traditional reading are well-documented and span cognitive, emotional, and social dimensions. Engaging with printed texts promotes deep learning, a process characterized by sustained attention, critical thinking, and reflective thought (Barber & Klauda, 2020). Unlike the fragmented nature of digital content, traditional reading encourages immersion in long narratives or complex arguments, enhancing comprehension and retention. As one participant explained:

"When I read a full novel or even a long article in a magazine, I feel like I truly understand the ideas. Digital articles feel quick and scattered, but books let me focus and think deeply."

Traditional reading stimulates cognitive processes crucial for learning and intellectual growth. It involves decoding text, understanding syntax and semantics, and integrating new knowledge with existing understanding. This process strengthens neural pathways related to language and comprehension, contributing to improved literacy skills (Luk et al., 2020). Moreover, exposure

to diverse genres, from fiction to non-fiction, expands vocabulary and enhances linguistic abilities (Hollis, 2023). As a retired librarian shared:

"I notice that people who grew up reading books have a wider vocabulary and can articulate their thoughts better. Even casual readers tend to retain more information than those who only skim online content."

Engaging with printed materials often requires readers to analyze and interpret information critically. Books and long-form articles allow for nuanced arguments and detailed explanations, fostering analytical skills. This deep engagement contrasts sharply with the superficial browsing common in digital environments, where readers are more likely to skim content. Reading fiction, in particular, has been shown to enhance empathy and emotional intelligence. By immersing themselves in the lives and experiences of characters, readers develop a deeper understanding of diverse perspectives and human emotions (Gasser et al., 2022). One participant noted:

"Reading novels made me feel like I was walking in someone else's shoes. I think it helps me understand people better in real life."

Before the widespread adoption of digital media, reading habits were shaped by socio-cultural factors, including education, socio-economic status, and access to printed materials. Public libraries, bookstores, and educational institutions played crucial roles in promoting literacy and fostering a reading culture. The popularity of different genres and formats evolved over time, reflecting changing societal trends. Historically, people devoted significant time to reading printed materials. According to historical records, the average American adult spent several hours per week reading books, newspapers, and magazines (Baba & Affendi, 2020). Reading was a common leisure activity, often associated with relaxation and intellectual enrichment.

Socio-cultural factors significantly influenced reading behavior. Educational systems emphasized reading from an early age, incorporating classic literature and informational texts into curricula. Socio-economic status also played a role, with access to books and other materials often correlated with income levels and educational attainment (Heppt et al., 2022).

Emergence and Growth of Digital Media

The late 20th and early 21st centuries witnessed a technological revolution that fundamentally transformed how humans consume written content. Key trends included the emergence of the internet, the rise of personal computers, and the proliferation of digital devices such as e-readers, tablets, and smartphones. These innovations made information more accessible than ever before, leading to significant shifts in reading behavior. The creation of the World Wide Web in the early 1990s was a pivotal moment, enabling users to access a vast array of information online. This period saw the rise of digital libraries and online databases, which provided unprecedented access to books, academic papers, and other textual resources (McMenemy et al., 2023).

The development of e-readers, beginning with the Sony Data Discman in 1992 and later the widely successful Amazon Kindle in 2007, marked another milestone. These devices allowed users to store and read multiple books in a portable format, appealing to both casual readers and professionals (Baron, 2021). Tablets and smartphones similarly accelerated the shift toward digital reading. Apple's introduction of the iPad in 2010 and the widespread adoption of smartphones created flexible platforms for accessing digital content. These devices combined the functionality of e-readers with internet browsing, social media, and various applications, making them central to modern digital life (Okojie et al., 2020).

The rise of digital media has also led to a diversification of reading formats, each catering to different preferences and needs. E-books, audiobooks, online articles, blogs, and social media posts have become prominent sources of reading material, each with unique features and advantages. E-books, in particular, have become a popular alternative to printed books due to their convenience and accessibility. They can be downloaded instantly, often at lower costs than physical books, and do not require physical storage space. One participant noted:

"I love my Kindle because I can carry dozens of books wherever I go. I read more now than I ever did with printed books because it's so easy."

The rise of audiobooks represents another significant trend in digital reading. Audiobooks allow people to consume literature while multitasking, such as during commutes or workouts. A participant explained:

"I listen to audiobooks during my morning jog. It's a great way to 'read' without having to sit down, and I feel like I'm keeping up with new releases."

Online articles and blogs offer readers immediate access to current events, personal narratives, and in-depth analyses. Platforms like Medium and WordPress provide diverse content, but this format often encourages skimming rather than deep reading (Carter et al., 2021). Social media platforms such as Twitter, Facebook, and Instagram have further transformed engagement with written content, offering a mix of short posts, articles, and multimedia. While these platforms enhance connectivity and information sharing, they can also contribute to shorter attention spans and fragmented reading behavior. As one participant observed:

"I find myself scrolling through news on Twitter more than actually reading a full article. It's fast, but I don't retain much."

The widespread adoption of digital devices and the internet have significantly altered reading habits. Pew Research Center data show that smartphone ownership among U.S. adults rose from 35% in 2011 to 81% in 2019 (Kim & Hargittai, 2021), making digital content more accessible. Nielsen reported that U.S. adults spent an average of 11 hours per day interacting with digital media in 2018, up from 9 hours and 32 minutes in 2014, highlighting the central role digital media plays in daily life. The growth of digital media has influenced both the amount of time spent reading and the types of content consumed. E-book sales accounted for about 20% of the book market in 2019, reflecting strong demand for digital formats (Furenes et al., 2021). Similarly, 28% of adults reported reading an e-book in the past 12 months, up from 17% in 2011, while audiobook sales saw seven consecutive years of double-digit growth (Wischenbart, 2021).

Changes in Reading Habits Due to Digital Media

The proliferation of digital media has introduced significant changes in reading frequency, duration, and behavior. While access to information has increased, the way people engage with content has shifted. One of the most notable changes is the reduction in sustained reading. Research indicates that the average time spent reading traditional books has decreased as people spend more time on digital devices. According to the American Time Use Survey, the average time spent reading print books fell from 21 minutes per day in 2005 to 16 minutes per day in 2018 (Dunbar et al., 2022). This decline correlates with the rise in digital media consumption.

Conversely, the time spent on digital reading has increased. A study by the Pew Research Center found that 28% of adults read an e-book in 2019, up from 17% in 2011 (Pontes, 2020). Additionally, the amount of time people spend on devices such as smartphones, tablets, and computers for reading news, articles, and other short-form content has surged. The Nielsen

Total Audience Report indicated that adults in the United States spent an average of 11 hours per day interacting with digital media in 2018, highlighting the dominance of digital content in daily life (Moran et al., 2020). One participant reflected on these changes:

"I spend more time reading on my phone now than with actual books. It's easier to check news and short articles throughout the day, but I don't read long stories as much anymore."

The shift toward digital reading has also been associated with shorter attention spans. The format and design of digital content, often optimized for brief consumption, encourage skimming rather than deep reading. A study by Microsoft suggested that the average human attention span dropped from 12 seconds in 2000 to 8 seconds in 2015, partly due to increased use of digital devices (Tonguç & Ozkara, 2020). A participant described this experience:

"I notice I can't focus on a full article online. I often scroll quickly and only read the headings or first paragraphs."

Digital media has not only affected how long people read but also what they read. Bite-sized content has become increasingly popular. Social media platforms, news websites, and blogs often feature short articles, summaries, and snippets designed for quick consumption. According to the Nielsen Norman Group, users typically read only 20% of the text on a web page, highlighting a preference for concise information. Platforms like Twitter, with its 280-character limit, reinforce this trend toward brevity.

The accessibility of digital media has also influenced the popularity of certain genres. Self-help and educational content have seen substantial growth due to easy access and the ability to incorporate multimedia elements such as videos and interactive images. Audiobooks have similarly increased in popularity, particularly in business, self-improvement, and fiction genres. A participant shared:

"I mostly listen to audiobooks now, especially during my commute. It's convenient and helps me cover more books than I could physically read."

Digital media has facilitated immediate access to current events, leading to an increase in news consumption. News websites and apps offer real-time updates, push notifications, and personalized feeds, allowing users to stay informed quickly. However, this often encourages skimming headlines and summaries rather than engaging with in-depth reporting (Vermeer et al., 2020).

The nature of digital media consumption often includes multitasking and frequent distractions, which can affect reading quality and comprehension. Digital devices are multifunctional, and reading frequently comes with interruptions from notifications. A study by Duke University's Center for Advanced Hindsight found that notifications can cause cognitive overload, leading to poorer retention and understanding of material (Gargantini et al., 2022). One participant reflected:

"I try to read on my tablet, but notifications keep popping up. I end up switching between apps and often forget what I just read."

Reading on digital screens, compared to print, presents ergonomic and cognitive challenges. Screens can cause eye strain, glare, and fatigue, discouraging prolonged reading sessions (Mehra & Galor, 2020). The interactive and hyperlinked nature of digital text can also result in non-linear reading patterns, disrupting sustained attention. These changes in reading habits have important implications for education. The adoption of digital textbooks in schools and universities has increased, offering interactive and updated content. However, studies suggest that students may struggle with comprehension and retention when reading digital texts

compared to printed ones. Clinton (2021) observed that students who read on screens performed worse on comprehension tests than those reading printed texts, especially with complex or dense information. Participants echoed this concern:

"When I study on my laptop, I find it harder to remember details. I prefer printed books for studying because I can focus better."

Educators increasingly recognize the need to balance digital and traditional reading practices. While digital texts provide convenience and interactivity, print texts offer an environment conducive to deep reading and critical analysis. Strategies such as combining both formats in curricula, encouraging note-taking, and teaching digital literacy skills are being implemented to optimize learning outcomes.

Implications for Management Practice and Education

The transformation of reading habits in the digital era carries significant consequences for management education, organizational practice, and leadership development. The shift from traditional, sustained engagement with printed texts to fragmented consumption of digital media including e-books, audiobooks, online articles, and social media reflects a fundamental change in how individuals acquire, process, and apply knowledge (Phillips, 2021). While digital platforms enhance accessibility, immediacy, and engagement, they also encourage skimming and superficial reading, potentially undermining the analytical depth, critical thinking, and reflective judgment that are essential for effective decision-making, strategic planning, and problem-solving in management contexts. Multitasking, notifications, and hyperlinked content further fragment attention, creating cognitive overload that challenges sustained comprehension and integration of complex information.

These changes carry profound pedagogical implications. Management education must balance the benefits of digital literacy with the cultivation of traditional deep reading practices. Structured exercises, guided annotation, reflective discussions, and blended learning approaches enable students to leverage the convenience of digital media while maintaining the cognitive rigor necessary to synthesize information, evaluate evidence, and make informed managerial decisions. Equally, the democratization of digital information facilitates broader access, inclusivity, and exposure to diverse perspectives, enhancing cross-cultural understanding and creativity. However, it also requires the development of strong information literacy and evaluative judgment to discern credible sources and mitigate the risks of misinformation in strategic decision-making (Spjeldnæs & Karlsen, 2022).

Within organizations, the preference for concise, rapidly accessible digital content may increase efficiency and responsiveness but can simultaneously hinder integrative thinking and reflective analysis necessary for high-stakes decisions. Organizations should therefore implement knowledge management strategies that combine rapid access with structured reflection, collaborative synthesis, and scenario analysis to maintain cognitive rigor, foster innovation, and support informed decision-making.

Furthermore, the societal and leadership implications of evolving reading habits are notable. Reduced engagement with complex texts may compromise cultural literacy, empathy, and ethical reasoning, diminishing leaders' capacity to navigate organizational complexity and stakeholder dynamics. Leadership development programs must therefore integrate deep reading, reflective practice, and digital proficiency to cultivate analytical rigor, cultural awareness, and ethical judgment.

The careful orchestration of digital and traditional reading practices represents both a challenge and an opportunity. By fostering environments that promote deep engagement, critical analysis,

and reflective thinking, management education and organizational practice can equip students and professionals with the skills necessary to navigate a digitally mediated, knowledge-intensive economy. This integrated approach ensures that the advantages of digital accessibility do not come at the expense of cognitive depth, strategic insight, or leadership effectiveness.

Conclusion

The rise of virtual media has profoundly converted reading behaviour, reshaping how, what, and the way lengthy human beings' study. While digital advancements have democratized access to statistics and various content intake, they have got also introduced challenges inclusive of shorter attention spans, fragmented reading patterns, and elevated multitasking. These changes necessitate a balanced method that integrates the blessings of virtual media with the depth and engagement associated with conventional analysing. Understanding these shifts is critical for educators, content creators, and policymakers as they navigate the evolving panorama of studying within the digital age.

References

- Andrey, S., Masoodi, M. J., Malli, N., & Dorkenoo, S. (2021). *Mapping Toronto's digital divide*. Toronto Metropolitan University: Brookfield Institute for Innovation+ Entrepreneurship.
- Baba, J., & Affendi, F. R. (2020). Reading Habit and Students' Attitudes towards Reading: A Study of Students in the Faculty of Education UiTM Puncak Alam. *Asian Journal of University Education*, 16(1), 109-122.
- Barber, A. T., & Klauda, S. L. (2020). How reading motivation and engagement enable reading achievement: Policy implications. *Policy Insights from the Behavioral and Brain Sciences*, 7(1), 27-34. <https://doi.org/10.1177/2372732219893385>
- Baron, N. (2021). *How we read now: Strategic choices for print, screen, and audio*. Oxford University Press.
- Carter, S. M., Shih, P., Williams, J., Degeling, C., & Mooney-Somers, J. (2021). Conducting qualitative research online: challenges and solutions. *The Patient-Patient-Centered Outcomes Research*, 14(6), 711-718. <https://doi.org/10.1007/s40271-021-00528-w>
- Clinton-Lisell, V. (2021). Stop multitasking and just read: Meta-analyses of multitasking's effects on reading performance and reading time. *Journal of Research in Reading*, 44(4), 787-816. <https://doi.org/10.1111/1467-9817.12372>
- Din, M. (2020). Evaluating university students' critical thinking ability as reflected in their critical reading skill: A study at bachelor level in Pakistan. *Thinking Skills and Creativity*, 35, 100627.
- Dunbar, E., Pichigian, I., Thomas, A., & Greco, A. N. (2022). The Impact of the Redigi Case on the US Library and Book Publishing Industry: E-Books and Audio Books. *Publishing Research Quarterly*, 38(1), 53-70. <https://doi.org/10.1007/s12109-021-09857-y>
- Dunford, E. K., Miles, D. R., Ng, S. W., & Popkin, B. (2020). Types and amounts of nonnutritive sweeteners purchased by US households: a comparison of 2002 and 2018 Nielsen Homescan purchases. *Journal of the Academy of Nutrition and Dietetics*, 120(10), 1662-1671. <https://doi.org/10.1016/j.jand.2020.04.022>
- El Shamsy, A. (2020). Rediscovering the Islamic Classics: How Editors and Print Culture Transformed an Intellectual Tradition.

- Furenes, M. I., Kucirkova, N., & Bus, A. G. (2021). A comparison of children's reading on paper versus screen: A meta-analysis. *Review of educational research*, 91(4), 483-517. <https://doi.org/10.3102/0034654321998074>
- Füssel, S. (2020). *Gutenberg*. Haus Publishing.
- Gargantini, T., Daly, M., Sherlock, J., & Lazebnik, T. (2022). Providing safe space for honest mistakes in the public sector is the most important predictor for work engagement after strategic clarity. *Sustainability*, 14(12), 7051. <https://doi.org/10.3390/su14127051>
- Gasser, L., Dammert, Y., & Murphy, P. K. (2022). How do children socially learn from narrative fiction: Getting the lesson, simulating social worlds, or dialogic inquiry? *Educational Psychology Review*, 34(3), 1445-1475. <https://doi.org/10.1007/s10648-022-09667-4>
- Heppt, B., Olczyk, M., & Volodina, A. (2022). Number of books at home as an indicator of socioeconomic status: Examining its extensions and their incremental validity for academic achievement. *Social Psychology of Education*, 25(4), 903-928. <https://doi.org/10.1007/s11218-022-09704-8>
- Hollis, H. (2023). Readers' experiences of fiction and nonfiction influencing critical thinking. *Journal of Librarianship and Information Science*, 55(1), 18-32. <https://doi.org/10.1177/09610006211053040>
- Hsieh, Y., & Huang, S. (2020). Using an E-book in the secondary English classroom: Effects on EFL reading and listening. *Education and Information Technologies*, 25(2), 1285-1301. <https://doi.org/10.1007/s10639-019-10036-y>
- Kazazoğlu, S. (2020). Is printed-text the best choice? A mixed-method case study on reading comprehension. *Journal of Language and Linguistic Studies*, 16(1), 458-473. <https://doi.org/10.17263/jlls.712879>
- Kim, S. J., & Hargittai, E. (2021). Looking back at millennials mobile transitions: Differentiated patterns of mobile phone use among a diverse group of young adults. In *Handbook of Digital Inequality* (pp. 114-130). Edward Elgar Publishing. <https://doi.org/10.4337/9781788116572.00015>
- Kozyreva, A., Lewandowsky, S., & Hertwig, R. (2020). Citizens versus the internet: Confronting digital challenges with cognitive tools. *Psychological Science in the Public Interest*, 21(3), 103-156. <https://doi.org/10.1177/1529100620946707>
- Lamore, T. H., & Kotze, D. A. (2024). The Reversed Reality: The Reported Double-Digit Incremental Economic Growth Versus the Decreasing Trend in GDP Performance in Ethiopia During 2011-2020. *Asian Journal of Advances in Research*, 7(1), 23-38.
- Luk, G., Pliatsikas, C., & Rossi, E. (2020). Brain changes associated with language development and learning: A primer on methodology and applications. *System*, 89, 102209. <https://doi.org/10.1016/j.system.2020.102209>
- McMenemy, D., Robinson, E., & Ruthven, I. (2023). The impact of COVID-19 lockdowns on public libraries in the UK: Findings from a national study. *Public Library Quarterly*, 42(1), 92-110. <https://doi.org/10.1080/01616846.2022.2058860>
- Mehra, D., & Galor, A. (2020). Digital screen use and dry eye: a review. *Asia-Pacific journal of ophthalmology*, 9(6), 491-497. <https://doi.org/10.1097/APO.0000000000000328>

- Moran, G., Muzellec, L., & Johnson, D. (2020). Message content features and social media engagement: evidence from the media industry. *Journal of Product & Brand Management*, 29(5), 533-545. <https://doi.org/10.1108/JPBM-09-2018-2014>
- Okojie, V., Orim, F., Oluwatoyin, O., & Tella, A. (2020). Opportunities and Challenges of E-Book Readers and Mobile Devices in Libraries: Experiences From Nigeria. *Handbook of Research on Digital Devices for Inclusivity and Engagement in Libraries*, 208-230.
- Phillips, A. (2021). The dynamics of the book publishing industry. In *The Routledge Companion to Media Industries* (pp. 291-300). Routledge.
- Pontes, J. (2020). Why Millennials and Generation Z prefer print books over E-books.
- Snelling, M. (2021). The audiobook market and its adaptation to cultural changes. *Publishing research quarterly*, 37(4), 642-656. <https://doi.org/10.1007/s12109-021-09838-1>
- Spjeldnæs, K., & Karlsen, F. (2022). How digital devices transform literary reading: The impact of e-books, audiobooks and online life on reading habits. *new media & society*, 14614448221126168.
- Støle, H., Mangen, A., & Schwippert, K. (2020). Assessing children's reading comprehension on paper and screen: A mode-effect study. *Computers & Education*, 151, 103861. <https://doi.org/10.1016/j.compedu.2020.103861>
- Thompson, N., Wang, X., & Daya, P. (2020). Determinants of news sharing behavior on social media. *Journal of Computer Information Systems*. <https://doi.org/10.1080/08874417.2019.1566803>
- Tonguç, G., & Ozkara, B. O. (2020). Automatic recognition of student emotions from facial expressions during a lecture. *Computers & Education*, 148, 103797. <https://doi.org/10.1016/j.compedu.2019.103797>
- Vermeer, S., Trilling, D., Kruikemeier, S., & de Vreese, C. (2020). Online news user journeys: the role of social media, news websites, and topics. *Digital Journalism*, 8(9), 1114-1141. <https://doi.org/10.1080/21670811.2020.1767509>
- Wischenbart, R. (2021). Deposing the King of Content: Understanding the shift triggered by audiobooks and subscriptions. *Logos*, 32(2), 29-33.
- Xie, W. (2021). Discussion on E-books and Library Borrowing Service. *Journal of Electronic Research and Application*, 5(4), 4-7.