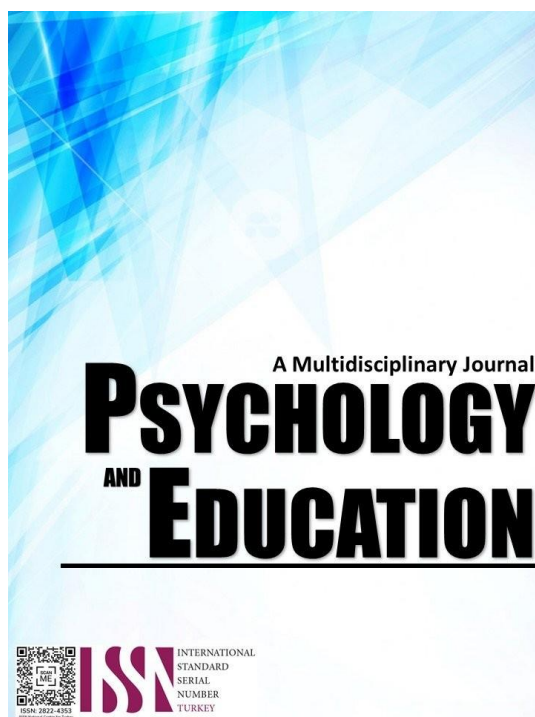


READING PERFORMANCE IN THE DIGITAL AGE: COMFORT AND PREFERENCES BETWEEN PRINT AND ELECTRONIC TEXT AMONG UNIVERSITY STUDENTS



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Reading Performance in the Digital Age: Comfort and Preferences Between Print and Electronic Text Among University Students

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Abstract

This study investigates the comfort levels and preferences of students regarding print and electronic texts within the context of their academic pursuits. The chief objective is to assess how these formats influence students' reading experiences and academic performance. Utilizing a mixed-methods approach, quantitative data were collected through surveys administered to students in School Business Management and Accountancy, complemented by qualitative interviews to gain deeper insights. Results indicate that while students reported higher comfort level with electronic texts, they still exhibit a strong preference for print materials for tasks requiring deep concentration. Statistical analysis reveals significant differences in comfort levels, with electronic texts providing greater ease of use. The findings suggest that although digital formats are increasingly accepted, print texts remain essential for fostering focus and comprehension. In conclusion, this study highlights the need for educational institutions to adopt a hybrid approach that integrates both formats, catering to diverse student preferences while enhancing overall learning outcomes. Recommendations include enhancing digital literacy programs and providing resources that support both reading formats effectively.

Keywords: *comfort levels, print texts, electronic texts, student preferences, academic performance.*

Introduction

The digital revolution has transformed the landscape of academic reading, with the increasing prevalence of eBooks alongside traditional printed books. While eBooks offer numerous advantages, such as portability, searchability, and multimedia capabilities, studies have shown that students often prefer to read academic materials in print format (Mizrachi et al., 2018). Researchers have explored the reading format preferences and behaviors of university students worldwide, finding that many students believe they learn better from print materials (Mizrachi et al., 2018). It should be noted that the physical interaction that occurs while reading on paper or screen is significantly different. Actions like turning a page or feeling the paper of a book produce a multisensory experience that increases the cognitive, affective, and emotional insertion in the subject matter (Jacobs, 2015; Kuzmičová et al., 2017; Mangen et al., 2019). The biggest challenge to reading attentively on digital platforms is that we largely use digital devices for quick action: Look up an address, send a Facebook status update, grab the news headlines (but not the meat of the article), multitask between online shopping and writing an essay. When we go to read something substantive on a laptop e-reader, tablet, or mobile phone, our now habitual instincts tell us to move things along (Baron 2017). Being competent in both digital and print media, and choosing the most suitable medium for each context, is vital for maintaining strong reading skills and optimizing comprehension in the contemporary world (Baron 2017, Cohn 2021, Cull 2011, Delgado et al. 2018, Wolf 2020).

Research Objectives

Given the increasing prevalence of digital resources in education and the ongoing debate regarding the impact of reading format on student learning, this study was undertaken with the following key objectives:

1. To assess the comfort levels of university students with both print and electronic texts in the context of their academic studies.
2. To identify the reading preferences of university students for either print or electronic texts for academic purposes.
3. To investigate the influence of reading format (print versus electronic) on the reading experiences of students.
4. To investigate the influence of reading format (print versus electronic) on the reading experiences of students.
5. To provide insights for educational institutions to adopt a hybrid approach that effectively integrates both print and electronic formats.
6. To recommend strategies for enhancing digital literacy programs and providing resources that support both reading formats effectively.

Methodology

Research Design

The study employed a descriptive-comparative research design, appropriate for examining differences between groups or variables. This design compares students' comfort levels and preferences between print and electronic texts and their impact on academic performance. By describing and analyzing the similarities and differences, the study aims to identify significant patterns and relationships that can inform educational practices in the digital age. Descriptive-comparative research is a quantitative research design

that aims to describe the differences between groups in a population without manipulating the independent variable (Cantrell, 2011; Formplus Blog, 2020).

Participants

The participants of the study are university students enrolled at Liceo de Cagayan University (LDCU). The study will involve two groups of participants: one group will read print texts, and the other will read electronic texts. Each group will comprise approximately 50 students, totaling around 100 participants. The sampling procedure follows a purposive sampling method, where participants are selected based on their relevance to the study's objectives. Specifically, students who regularly use both print and electronic texts for academic purposes are included to ensure meaningful comparisons.

Instrument

The data for the study was collected through a self-made questionnaire, validated by three professional experts. This questionnaire gathered data on participants' reading comprehension, preferences for print versus electronic texts, and the level of comfort with each format. It utilized Likert-scale items to quantify responses regarding their frequency of use and perceived ease of use. These structured questionnaires were designed to assess students' reading performance, level of comfort, and preferences. A total of 59 items were used with a 5-Likert Scale, which was originated by Likert (1932), with five response options ranging from "Strongly Agree, Agree, Disagree, Strongly Disagree" with a score of 5 to "Strongly Agree" and "Strongly Disagree" with a score of 1. Part 1 measures the level of comfort exposed to print and electronic text. 19 items were sought to gather responses. Part 2 measures the students' reading preferences exposed to print and electronic text. There were 20 items. Part 3 measures the reading performance evaluation of students exposed to print and electronic text. There will be 20 items. To ensure the clarity and relevance of the questionnaire, a pilot test was conducted with 30 students. Feedback from this test led to refinements, enhancing the instruments' validity and reliability.

Procedure

The distribution of research instruments was done in person to ensure the study's proper execution. A formal request for permission to use these instruments with the students of Liceo de Cagayan University was submitted in a letter addressed to the dean of the School of Business, Management, and Accountancy at Liceo de Cagayan University. Along with the research tools, participants received a consent letter and an informed consent form, which affirmed their voluntary participation.

After obtaining approval, the research instruments and accompanying instructions were distributed and later collected after a few weeks. The collected data were organized in MS Excel and sent to a statistician for computation, analysis, and interpretation using SPSS. Participants were assured of the confidentiality of their responses and were informed of their rights if they decided not to participate in the study. Should they choose to withdraw their participation, there were no risks or consequences imposed on them.

Furthermore, the data collected were stored in a secure file, with access limited to the researcher. Strict confidentiality was maintained, ensuring that the identity of the participants remains unknown to anyone, including the readers of the research.

Data Analysis

Problems 1 & 3. Mean and Standard Deviation to understand the central tendency and variability of student comfort levels and reading performance for both print and electronic texts. The mean provides an average score, indicating the typical comfort level or performance score. The standard deviation indicates how spread out the scores are around the mean, showing the consistency of the responses.

Problems 2 & 4. Independent Samples t-test was employed to analyze the differences in reading comprehension scores between two groups of university students: those who read print texts and those who read electronic texts. The t-test was assessed if there was a statistically significant difference in performance, which is essential for understanding how the transition from traditional print to digital formats affects academic learning.

By utilizing the Independent Samples t-test, this study aims to provide empirical evidence regarding students' preferences and comfort levels with print versus electronic texts, contributing valuable insights to the ongoing discourse on reading in the digital age.

Results and Discussion

The first statement of the problem addresses the level of comfort and preference of students exposed to print and electronic text. The findings indicate that students exhibit a notable level of comfort with both formats, although preferences differ. Among print texts, the highest mean was the statement "I enjoy the convenience of having multiple texts available on one device." This suggests that while students recognize the convenience of digital formats, they also value the tactile engagement associated with print materials. In contrast, the statement with the lowest mean was "I often choose electronic texts for their portability," reflecting an acknowledgment of the convenience offered by digital texts, while still indicating a preference for the comfort associated with print for extensive reading. For electronic texts, the highest mean was the statement "I feel comfortable reading printed texts for extended periods," indicating a preference for print in prolonged reading scenarios. The lowest was for "I find the navigation in electronic texts to be user-friendly," which suggests challenges associated with digital navigation. Overall, students reported a greater level of comfort using electronic texts

compared to print texts. These findings suggest that while there is general comfort with both formats, there remains a tendency to favor print for certain tasks.

The second statement of the problem examined the significant difference between the levels of comfort and preference of students exposed to print and electronic text. The analysis revealed a significant difference in comfort levels between students using print and electronic texts. Students exposed to electronic texts reported a higher mean compared to those using print texts. The t-test results yielded a probability value ($p=.002$) that is less than the alpha value of .05, indicating statistically significant differences in comfort levels. This suggests that students exhibit greater comfort with electronic texts than with print materials.

The third statement of the problem examined students' preferences regarding print versus electronic text. The findings indicate that students exhibit distinct preferences for different reading formats. For print texts, the highest mean was the item "I find it easier to concentrate when reading printed materials," which underscores a notable preference for print due to its perceived capacity to enhance focus and comprehension. Conversely, the lowest mean was the statement "I find electronic texts less distracting than printed texts," suggesting that many students consider electronic formats to be more distracting, despite their inherent advantages related to portability and accessibility. In the case of electronic texts, the highest mean was the statement "I prefer reading printed text for academic purposes," indicating a robust preference for traditional materials in academic contexts, even as students acknowledge the benefits offered by digital resources.

The fourth statement of the problem investigated whether there is a significant difference in performance levels between students exposed to print texts and those exposed to electronic texts. The findings indicate that there is no significant difference in performance between the two groups. The overall means were for electronic texts and print texts. Although there is a slight preference for electronic formats, this difference is not statistically significant, as indicated by a p-value greater than 0.05 ($p=0.873$). This suggests that both formats can effectively support student learning outcomes.

Conclusions

In Problem 1, the study found that students were more comfortable with electronic texts due to their ease of access, but they preferred print materials for tasks requiring deep concentration and critical thinking. This shows that while students appreciate the convenience of digital texts, they also value the cognitive benefits of print. In Problem 2, statistical analysis showed significant differences in comfort levels and preferences between print and electronic texts. Students reported being more comfortable with digital formats but still preferred print for complex reading tasks. This indicates that print remains crucial for maintaining focus and comprehension in academic settings. In Problem 3, the assessment of reading performance revealed that students generally performed better with print texts for tasks that required deep understanding and information retention. Although electronic texts have advantages like portability, they do not support the same reading performance as print materials in situations that require sustained attention. In Problem 4, there was a notable difference in reading performance; students scored higher when using print materials compared to electronic texts.

The following recommendations are suggested, considering the abovementioned findings and conclusions. By implementing these recommendations, educational institutions can better support the School of Business Management and Accountancy students in navigating their reading preferences effectively while enhancing their learning outcomes through a balanced approach to print and electronic texts.

Librarians may offer both print and electronic resources, demonstrating how each helps with academic tasks. Workshops on using these resources can teach students effective navigation. Reading challenges can also encourage exploration and diverse reading habits. By supporting students' preferences, librarians may enhance their academic experiences and foster a love for reading.

Policymakers may improve education by advocating for funding that balances print and electronic texts. They may support digital literacy programs and ensure all students can access quality print materials. Researching how different reading formats affect learning will guide future policies. Additionally, creating digital accessibility standards will help all students learn inclusively.

Future Researchers may have a chance to improve our understanding of how different reading formats affect student learning. Long-term studies may show how university students' preferences for print or electronic texts change over time. Comparing academic performance based on reading format may provide useful data for teachers and policymakers. Also, using ideas from cognitive psychology, educational technology, and library science can enhance the discussion about reading habits in the digital age. This may help develop new and effective educational practices.

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