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Psychology Higher level Paper 3

13 May 2024

Zone A morning | Zone B morning | Zone C morning

1 hour

Instructions to candidates

- Do not open this examination paper until instructed to do so.
- Read the passage carefully and then answer all the questions.
- The maximum mark for this examination paper is **[24 marks]**.

The stimulus material below is based on a published quantitative study on the possible differences in recall and comprehension between screen reading and paper reading.

As more students are using laptops and smartphones, they are reading more digital texts (screen reading) and less printed texts (paper reading). Although some studies indicate that paper readers score significantly higher in comprehension and recall tests than screen readers, not all studies agree. Because past findings were inconsistent, the aim of this study was to
5 further investigate possible differences in recall and comprehension between screen and paper reading.

The hypothesis of this study was that participants in the paper reading condition would score higher in recall and comprehension tests compared to screen readers. All participants read the same information. The study used a volunteer sample consisting of 80 fourth year students
10 (mean age 22) from a medical college in Asia. The sample consisted of 34 males (42.5%) and 46 females (57.5%) of several ethnicities. The participants were not forced to participate, were fully informed about the study and signed consent forms. They were also told that they could withdraw from the study whenever they wanted.

The participants were tested in groups and randomly allocated into the two conditions: screen
15 reading and paper reading. The study took place in a psychology laboratory at the college. The material used had nothing to do with medicine but was judged to be interesting enough to maintain focus. All participants had the same amount of time to read the same material. After this, they all had the same amount of time to take a recall test and a comprehension test.

The statistical tests showed no significant difference between performance in the two conditions;
20 therefore, the null hypothesis was accepted. The researchers concluded that this study showed little difference in recall and comprehension between paper and screen reading. In follow-up discussions, participants said that the material was easy to read and that there was enough time to answer the questions. According to the researchers, screen reading is convenient and encourages enthusiasm to learn. Consequently, more research is needed to determine if screen
25 reading can also promote increased recall and comprehension.

Answer **all** of the following three questions, referring to the stimulus material in your answers. Marks will be awarded for demonstration of knowledge and understanding of research methodology.

1. (a) Identify the research method used and outline **two** characteristics of the method. [3]
 - (b) Describe the sampling method used in the study. [3]
 - (c) Suggest **one** alternative **or one** additional research method that could be used to investigate the aim of the original study, giving **one** reason for your choice. [3]
 2. Describe the ethical considerations that were applied in the study and explain whether further ethical considerations could be applied. [6]
 3. Discuss how the researchers in the study could avoid bias. [9]
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