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Don't Ditch the Laptop Just Yet: A Direct Replication of Mueller and Oppenheimer's (2014) Study 1 Plus Mini Meta-Analyses Across Similar Studies

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Abstract

In this direct replication of Mueller and Oppenheimer's (2014) Study 1, participants watched a lecture while taking notes with a laptop ($n = 74$) or longhand ($n = 68$). After a brief distraction and without the opportunity to study, they took a quiz. As in the original study, laptop participants took notes containing more words spoken verbatim by the lecturer and more words overall than did

longhand participants. However, laptop participants did not perform better than longhand participants on the quiz. Exploratory meta-analyses of eight similar studies echoed this pattern. In addition, in both the original study and our replication, higher word count was associated with better quiz performance, and higher verbatim overlap was associated with worse quiz performance, but the latter finding was not robust in our replication. Overall, results do not support the idea that longhand note taking improves immediate learning via better encoding of information.

Keywords: laptop; longhand; note taking; open data; open materials; preregistered.

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