The Association of Lexile Level and Reading Comprehension While Multitasking

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The purpose of this study is to provide data to examine the use of cellphones, specifically texting, in relation to reading comprehension, and analyzing the relationship with Lexile scores. The Lexile framework quantifies reading comprehension of the reader and of the text. Initially, 47 participants completed leveled reading comprehension tests, one without texting and one while texting. Students performed 9% worse on reading comprehension while texting.
compared to non-texting and performed 6% worse on long-term memory questions on the material while texting. We conclude this is due to increasing the cognitive load by texting. As a follow up, 57 participants texted during both tests, one test at their Lexile and one test at a Lexile 250L lower. Participants performed 56% better on reading comprehension when the material was 250L below their level and 28% better on long-term memory questions. Overall, texting while completing reading comprehension tests had an adverse impact on performance, but decreasing the Lexile led to a statistically significant improvement over what should be expected through just decreasing the Lexile score by decreasing the cognitive load. These results identify this relationship for more research and eventually might affect what reading level textbooks are written at to increase comprehension.