The Effects of Medium on Text Comprehension Monitoring and on the Estimation of Other People's Comprehension (Poster)

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השפעת המדיום על ניטור ההבנה של טקסטים ועל שיפוט ההבנה של אחרים (פוסטר)

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Abstract

People often need to estimate how other people would comprehend texts, but the factors influencing this process remain unexplored. Research on knowledge estimation suggests that people rely on their estimation of self-knowledge when estimating others' knowledge (Tullis & Feder, 2023). We therefore assume that people may rely on their estimation of their own comprehension of texts when estimating others' comprehension. This study will explore this assumption and will test how reading medium (digital text vs. printed text) affects the estimation of self and others' reading comprehension.

Studies consistently show that readers tend to overestimate their comprehension (Yang et al., 2022). This tendency reflects low monitoring accuracy, meaning that readers have difficulty accurately assessing how well they understand what they read. Numerous studies have found that monitoring accuracy is significantly lower during digital reading, suggesting that digital formats hinder readers' ability to judge their true level of understanding. In contrast, reading printed texts typically promotes both deeper comprehension and more accurate self-monitoring (Salmerón et al., 2024). This difference may be explained by learners' tendency to associate digital environments with shallow information processing and minimal effort (Annisette & Lafreniere, 2017; Sidi et al., 2017). If reading medium affects personal monitoring of comprehension, and self-monitoring informs estimations of others' comprehension, reading medium can also affect others' estimation of comprehension.

In the current study, 80 students will read four expository texts in digital or printed format. After each text, participants will predict how well they and other people would be able to answer questions regarding the text correctly. Then, they will then answer five questions, rate their confidence in each of their answers on a 0-100 scale, and estimate how likely others are to answer the same questions correctly. Estimation accuracy will be measured using a calibration measure, which is the difference between confidence ratings and actual performance (Schwartz & Efklides, 2012). We hypothesize

that reading comprehension will be lower for digital texts than for printed texts. Furthermore, reading digital texts is expected to induce overconfidence, whereas comprehension monitoring in printed texts will be more accurate. Finally, since judgments of others' understanding are informed by one's own monitoring, reading in digital formats is expected to lead to overestimation of others' comprehension as well, while judgments following print reading will be more accurate.

Keywords: Reading comprehension, Knowledge Estimation, Digital Reading, Metacomprehension.

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