Effects of task complexity on online search behavior of adolescents

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Abstract
Evaluation of information during information problem solving processes already starts when trying to select the appropriate search result on a search engine results page (SERP). Up to now, research has mainly focused on the evaluation of webpages while the evaluation of SERPs received less attention. Furthermore, task complexity is often not taken into account. A within subjects design was used to study the influence of task complexity on search query formulation, evaluation of search results and task performance. Three search tasks were used: a fact-finding, cause–effect, and a controversial topic task. To measure perceptual search processes, we used a combination of log files, eye-tracking data, answer forms and think aloud protocols. Results reveal that an increase in task complexity results in more search queries and used keywords, more time to formulate search queries and more considered search results on the SERPs. Furthermore, higher ranked search results were considered more often than lower ranked results. However, not all the results for the most complex task were in line with the expectations. These conflicting results can be explained by a lack of prior knowledge and the possible interference of prior attitudes.

Keywords: web search, eye tracking, logging, verbal data, task complexity

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