The Effect of Visual Fluency and Cognitive Fluency on Access Rates of Web Pages

Authors: Xiaoying Guo, Xiangyun Wang

Abstract: Access rates is a key indicator of reflecting the popularity of web pages. Having high access rates are very important for web pages, especially for news web pages, online shopping sites and searching engines. In this paper, we analyzed the influences of visual fluency and cognitive fluency on access rates of Chinese web pages. Firstly, we conducted an experiment of scoring the web pages. Twenty-five subjects were invited to view top 50 web pages of China, and they were asked to give a score in a 5-point Likert-scale from four aspects, including complexity, comfortability, familiarity and usability. Secondly, the obtained results was analyzed by correlation analysis and factor analysis in R. By factor analysis; we analyzed the contributions of visual fluency and cognitive fluency to the access rates. The results showed that both visual fluency and cognitive fluency affect the access rate of web pages. Compared to cognitive fluency, visual fluency play a more important role in user's accessing of web pages.

Keywords: visual fluency, cognitive fluency, visual complexity, usability

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