The Use of Cognitive Attention in Personal Information <u>Retrieval - Navigation Compared with Search / Maskit Tene-</u> <u>Rubinstein</u>

Abstract

This study examines the difference between attention resources required for the search process as opposed to those required for the navigation process. Such a difference could explain why users prefer navigation when retrieving their personal files, as various studies have shown. The study also tries to find out which of the two retrieval methods – search or navigation – is easier and more efficient, and whether or not personal data, such as age and gender, affect people's ability to retrieve personal information.

In order to examine the cognitive requirements of each retrieval process, a duel-task experiment was designed. Each participant was asked to memorize a list of words, while conducting a retrieval process. The participants' success was examined in each of the task, separately and combined. Also examined was the impact of the participants' age and gender on their performance in the dual-task assignment.

As was assumed, navigating proves to be less demanding than searching in terms of attention resources, and a faster, easier and more efficient retrieval method. The experiment's findings clearly explain why navigating is preferable to searching.

In addition, statistically significant connections were found between participants' age and gender and their ability to retrieve and perform several tasks simultaneously. A higher age meant long retrieval and fewer words; and women remembered in average more words than men.

This study can shed light on PIM characteristics and the variety of information behaviors of deferent users. This can have practical implications, like designing retrieval tool that will better answer the users' needs.

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