

Age differences in information search: An exploration-exploitation tradeoff model

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Abstract: Past research often found that older adults searched less in terms of browsing and generating keywords; few studies examined the processes and underlying mechanism that caused the age-related reduction on search. In the current study, 20 younger and older adults performed ill-defined search tasks with a search box we implemented. In addition to the age differences in the quantities of search, results showed that there were qualitative age differences in allocating resources to exploration and exploitation across tasks varying in difficulties. Older adults were found to do more exploitation within one information cluster as defined by the keywords than younger adults. There was also age difference in the ways to reformulate keywords, that older doing more total changes in keywords and younger doing more partial changes in terms of narrowing or broadening the search. The links between search processes and the age differences in cognitive profiles were also discussed.