To Go or to Stay: Age Differences in Cognitive Foraging

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Abstract: Cognitive foraging used the metaphor of animal foraging over patches of food to study how people allocate time to multiple resources for obtaining information. We used the word search puzzle paradigm to examine age differences in cognitive foraging behavior, especially when younger and older adults switch between patches (i.e., word puzzles). Results showed that older adults were able to adjust their departure time and switch frequencies depending on patch densities and switch time costs, and found as many words as younger adults in the puzzles despite their age-related change in processing capacities. Although older adults needed more time to find a new word in the puzzle, they adaptively persisted longer and switched fewer times between puzzles than younger adults to improve their performance. The connections between age differences in information uptake rates and the time to switch to different patches were also discussed.