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The influence of planning and interruptions on multitasking assessment in healthy aging

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Introduction
- In neuropsychological assessment, measures which reflect the demands imposed in everyday life are thought to be better predictors of an individual’s performance in daily life (Chaytor & Schmitter-Edgecombe, 2003).
- Performance on everyday tasks such as preparing a meal or shopping is typically assessed in clinical and research settings using multitasking paradigms.
- In these paradigms, individuals attempt several tasks within a limited time period by switching between the tasks and planning the best order to perform them.
- While multitasking is thought to decline in healthy aging (Kliegel et al., 2000; Levine et al., 1998), how it might be improved remains poorly understood.

Aim
- We present two experiments investigating the influence of planning (Experiment 1) and unexpected interruptions (Experiment 2) on multitasking in healthy aging.

Experiment 1 (Plan versus No Plan)

Participants
- Younger (n = 16) Plan: 25.44 (16.69)
- Old (n = 15) Plan: 70.67 (14.40)

Experiment 2 (Interruption versus No Interruption)

Participants
- Younger (n = 9) Interrupt: 26.33 (16.60)
- Older (n = 12) Interrupt: 66.83 (15.18)

Discussion
- These findings suggest that older adults’ multitasking is improved when encouraged to formulate a plan or take a break mid-task, allowing them to focus and refocus on the task at hand.

The findings from Experiment 2 are in line with multitasking studies involving individuals with traumatic brain injury or stroke who have been found to be resistant to interruptions (Law et al., 2004) or even improve in their performance (Manly et al., 2002).

References