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ROLE OF IMPAIRED VISION DURING DUAL-TASK WALKING IN YOUNG AND OLDER ADULTS

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Conflict of interest statement

The authors do not have any financial or personal relationships with other people or organizations that could inappropriately influence their work.

HIGHLIGHTS

- Higher dual-task walking cost was seen with simulated impaired vision and in older adults
- Higher dual-task cognitive cost was seen with simulated impaired vision, but not with aging
- When faced with simulated impaired vision, both young and older adults prioritize walking over cognition
- Future work should aim to evaluate this finding in adults with real visual impairment
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ABSTRACT

While cognitive-motor interference in dual-task activities is well established, it is still unknown how such interference is influenced by concurrent visual challenges. Nineteen community-dwelling healthy, cognitively intact, older adults (Mean \pm SD = 71.45 \pm 1.25 years, 6 males) and nineteen young adults (Mean \pm SD = 22.25 \pm 0.68 years, 4 males) performed a cognitive-single-task (serial subtraction by 3), a walking-single-task and a cognitive-walking-dual-task under normal, blurred and peripheral-vision-loss conditions (artificially imposed using goggles). Gait parameters and the number of correct responses were measured. Dual task costs for both walking

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