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When walking together, middle-aged and older males & females both slowed down, which may reduce health benefits and gait quality.

Walking Speed Choices among Middle-aged and Older Adults Married Couples

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INTRODUCTION

- Walking is the most common physical activity for older adults [1].
- Walking is facilitated by support of a partner [2].
- Young adult males reduced speed when walking with a romantic partner [3].
- Habitually walking at reduced speed may adversely affect critical health outcomes [4] and gait quality [5].
- The purpose was to determine whether and how middle-aged and older adult married partners change gait when they walk together versus alone.

METHODS

1. 39 married couples (N=78; male: 64 yrs., female: 62 yrs.)
2. Walked 15.2 m (50 feet)
3. A video camera and smartphone based system (SmartGait®)

[1] DiPietro (2001) J Gerontol A Biol Sci Med Sci
[2] Victor et al (2016) Arch Gerontol Geriatr
[3] Wagnild & Scheffler (2013) PLoS One
[4] Studenski et al. (2011) JAMA
[5] Huijbena et al. (2018) Gait&Posture

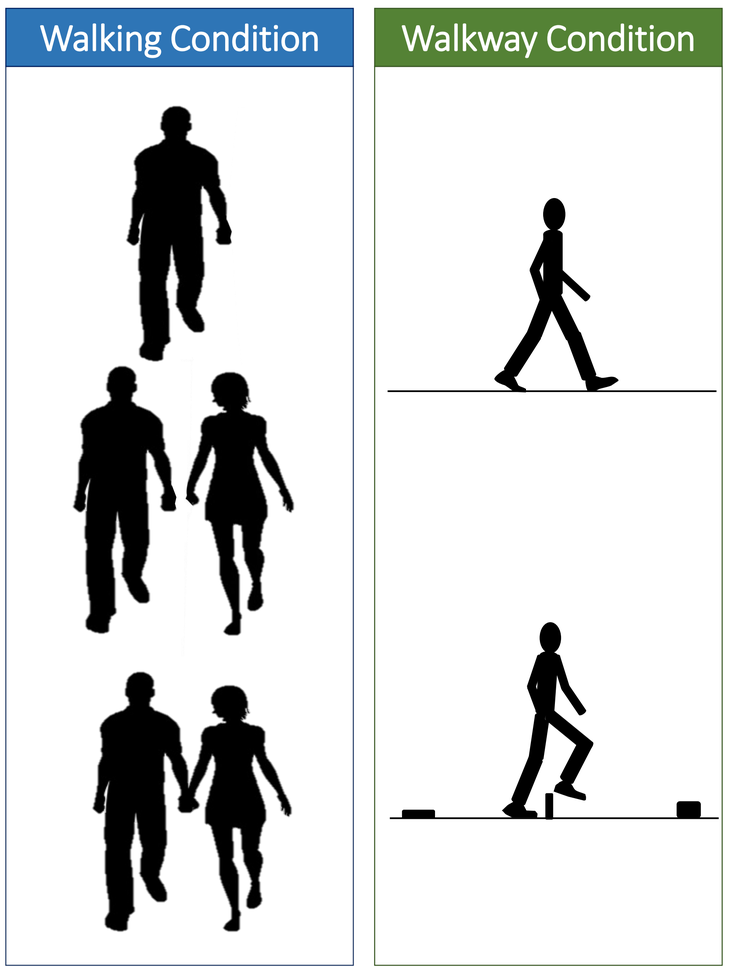

FIGURE 1. 39 married couples walked in three conditions (alone, together, holding hands). Walkway conditions were clear or 5 obstacles.

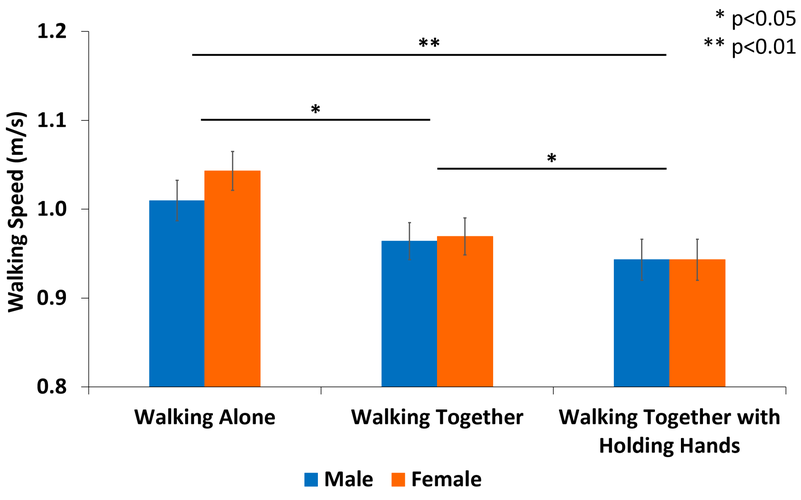

FIGURE 2. Gait speed was not different between males and females (p=0.69). Both males and females walked slower when walking together (p=0.03).

RESULTS

- Male speed was not different from female speed in the three conditions (p=0.69).
- Both males and females reduced speed and step length when walking together (p≤0.01); speed was further reduced while holding hands (p=0.03).

CONCLUSIONS

- Males walked at the same speed as females in this cohort, which likely reflects that some of the males in this study were in poorer health than the females.
- Adapting to a partner's speed is not consistent across the lifespan: young adult males reduced speed to match females [3], while middle-aged and older males and females both slowed down when walking together, which may reduce health benefits [4] and gait quality [5].
- Interventions should consider how to increase gait speed of the slower partner, in order to optimize health benefits of walking for both partners.

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