

Cardiorespiratory Kinetics: Importance of Age, Physical Activity, and Exercise Mode



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OBJECTIVES

- ➔ Cardiorespiratory Fitness
- ➔ Older Adults
- ➔ Treadmill Exercise
- ➔ Cycling Exercise
- ➔ Age
- ➔ Physical Activity
- ➔ Exercise Habits
- ➔ Exercise Mode

METHODS

- Exercise mode influences age-related $\dot{V}O_2$ kinetics: despite comparable physical activity levels, older adults show slightly faster $\dot{V}O_2$ kinetics during treadmill walking, whereas no age-related differences are observed during cycling.
- Heart rate kinetics remain similar between younger and older adults across both exercise modes, suggesting that HR responses are more closely related to habitual physical activity than to chronological age.

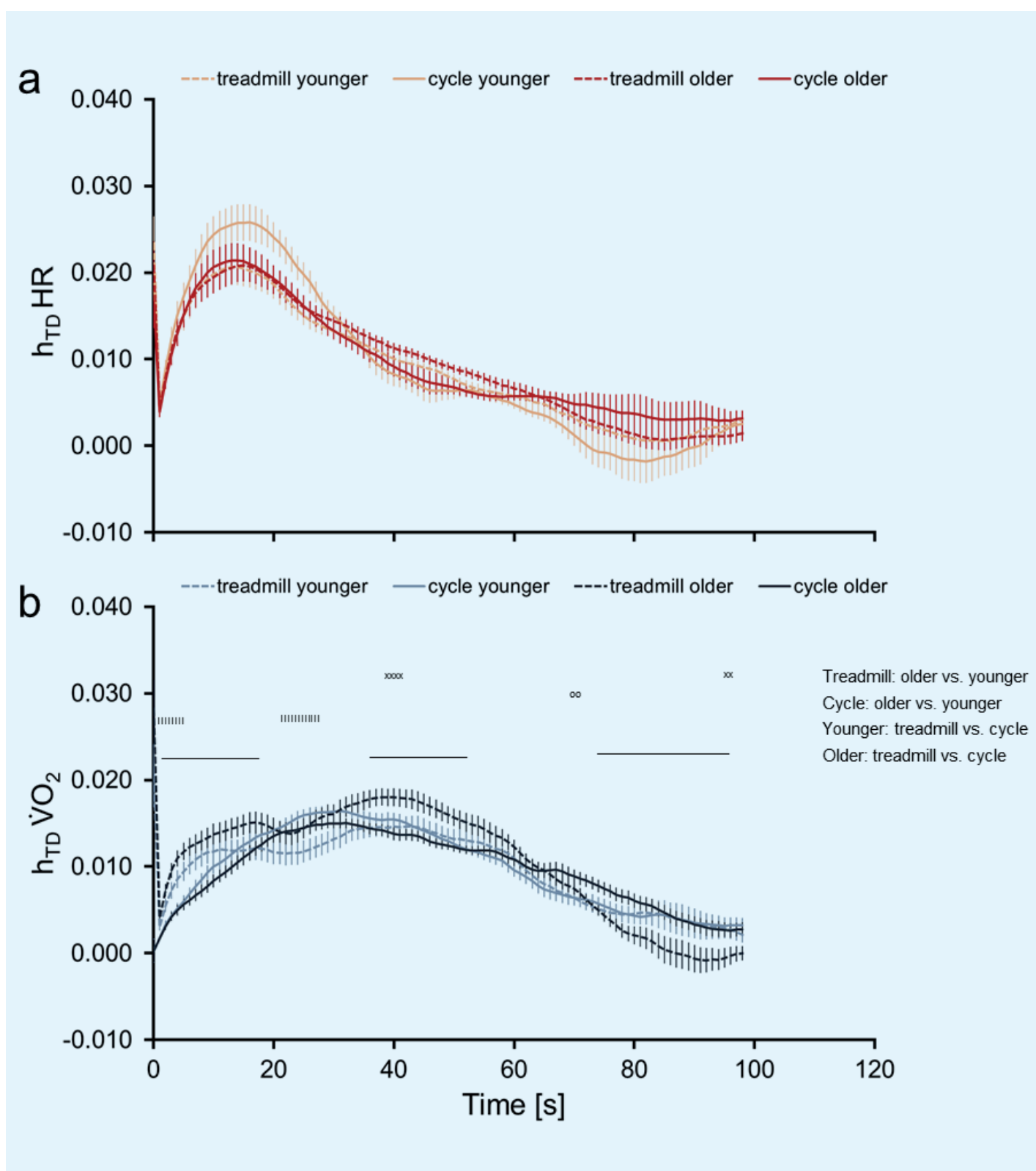


Figure 1 from Original Article

Impulse responses of younger and older adults for treadmill and cycle ergometry.

IMPLICATION FOR CLINICAL ASSESSMENT

The findings underscore the need to choose the appropriate ergometer (treadmill for older adults) when evaluating sub-maximal cardiorespiratory fitness.