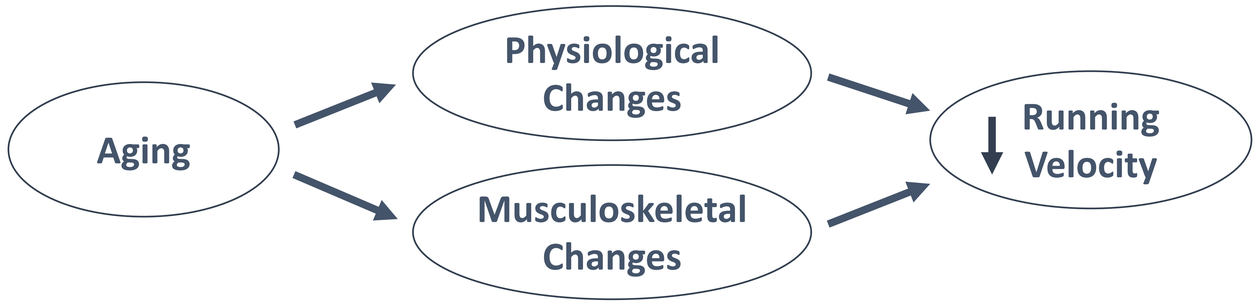
Self-selected maximum but not jogging speed decreases with age in male and female runners

BACKGROUND: It is established that running velocity decreases with age.

TAKE HOME: Our results show that maximal running speed appears to be more indicative of changes in running biomechanics associated with aging.

Females demonstrated a greater percent decrease in maximal speed with age compared to males, possibly related to females' unique aging process.

NEXT STEPS: Understanding biomechanical changes with age during running is important to maximize running ability throughout the lifespan.



Determine the relationship between age and running speed separately for male and female runners.

Male and female runners

Age: 18-65 years

Task: Treadmill running

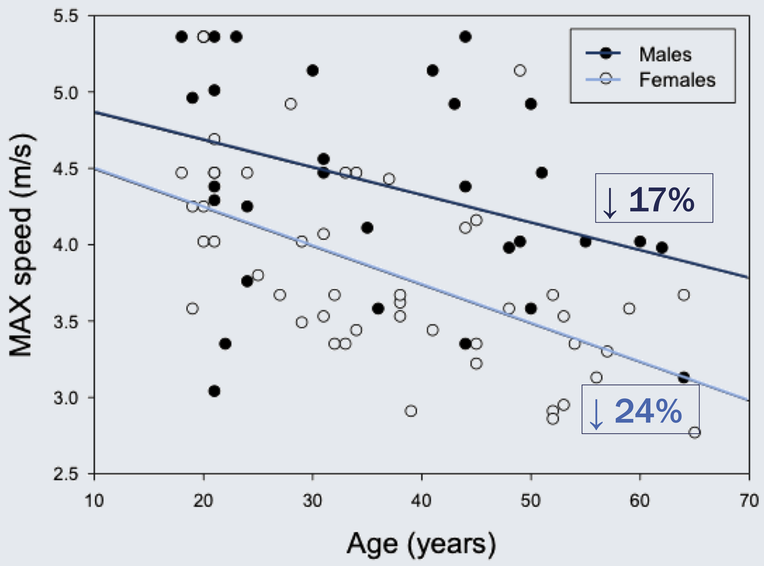
n = 33

n = 46

Conditions: JOG (long distance) and MAX (maximal running) self-selected pace

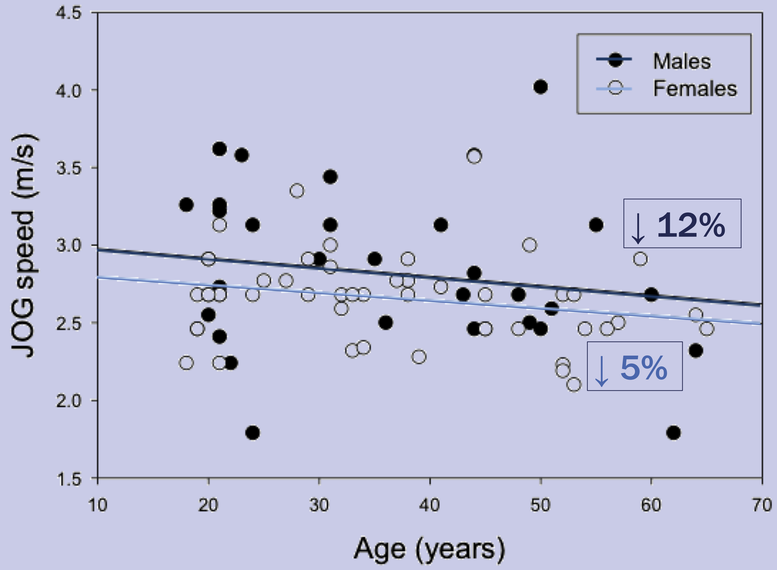
Results: Age was not associated with JOG speed, but there was a significant negative correlation between age and MAX speed for males and females.

Age & MAX Speed



	R^2 (p-value)
Males	.14 (.034)*
Females	.31 (<.001)*

Age & JOG Speed



	R^2 (p-value)
Males	.03 (.342)
Females	.05 (.129)

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