



100 Miler Performance for Women compared to Men

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Motivation

Run Rabbit Run Statement:

- To boost women's participation, allow "tortoise" women an extra hour to complete the race.
 - Reinforces stereotypes that women aren't "strong enough" to complete 100s in the allocated time. May cause barriers to entry as women don't perceive themselves as capable.






Problems to solve

- 1 Currently, do women actually run significantly slower than men?
- 2 Do women disproportionately drop out of races?

Methodology



Examine results from popular 100 mile races on a variety of terrain types

Perform significance testing on mean/median differences in finish times

When available, examine DNF rates for men/women

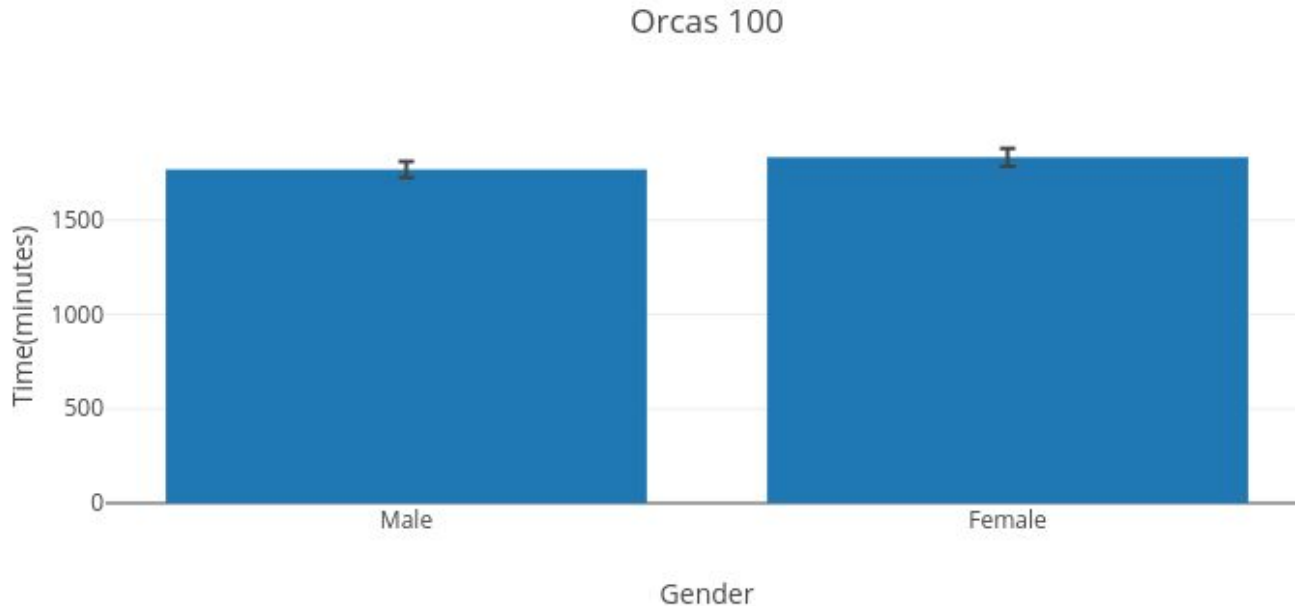
Orcas 100 2018



Male and Female Finish Times Did Not Significantly Differ:

T-Test ind: $T(66) = 1.02, p = 0.31$

Kruskall-Wallis: $\chi^2(2) = 0.28, p = 0.59$

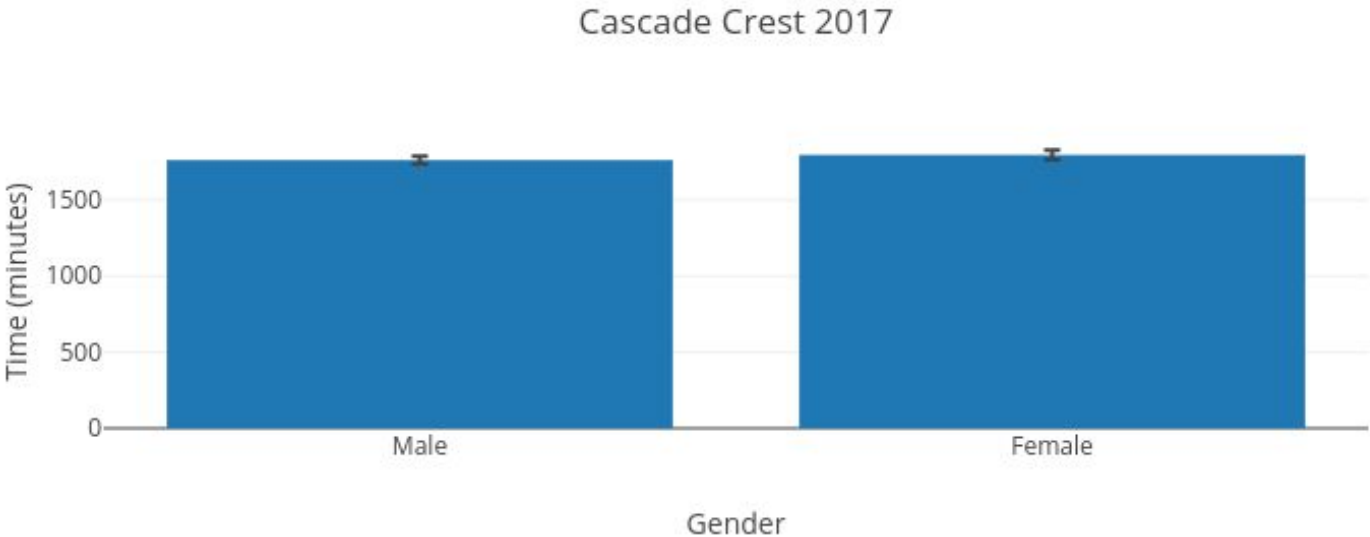


Cascade Crest 2017



Male and Female Finish Times Did Not Significantly Differ:

T-Test ind: $T(107) = 0.85, p = 0.39$

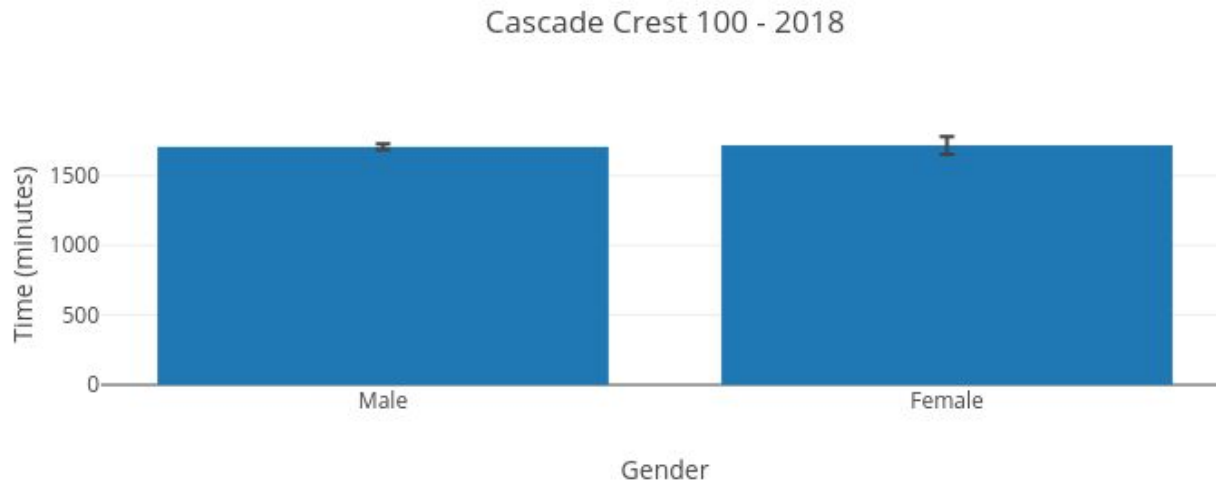


Cascade Crest 2018



Male and Female Finish Times Did Not Significantly Differ:

T-Test ind: $T(144) = 0.16, p = 0.87$

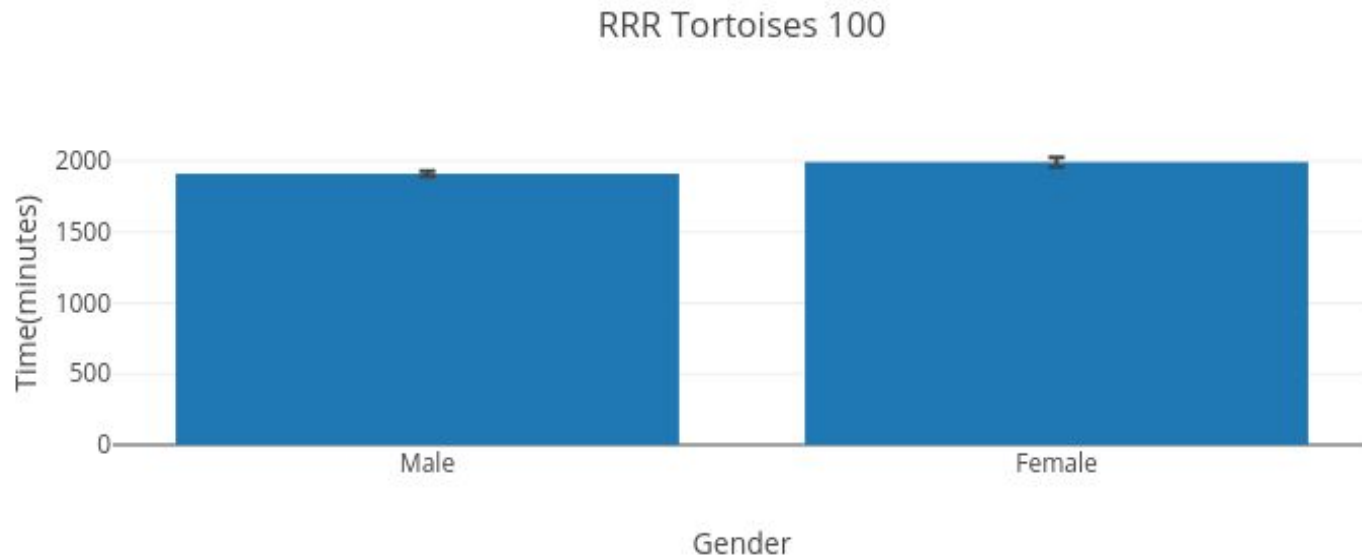


RRR 100 2018



Male and Female Finish Times Did Significantly Differ....but not with bonferroni correction:

T-Test ind: $T(164) = 2.13, p = 0.03$



Other Results



Hardrock 100 - 2018:

- $t(111) = 0.15$, p-value = 0.88

HURT 100 - 2018:

- $t(66) = 1.8$, p-value = 0.08

JJ 100 - 2018: *

- $t(365) = 5.59$, p-value < 0.001



Conclusions:

- For 100 mile races: very rarely do men, on average, run significantly faster than women

