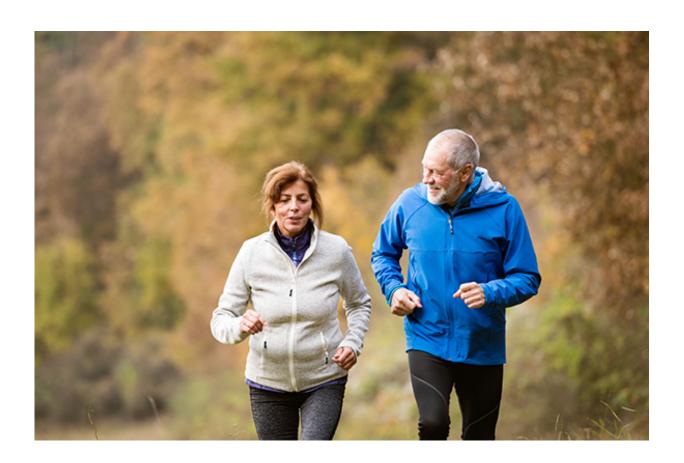


## Researchers show that you run more when your friends run more

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"Knowing the running behaviors of your friends as shared on social networks can cause you to run farther, faster, and longer." Credit: Massachusetts Institute of Technology

When the people you know run more, you run more. And now there's



data to prove it.

A new study published today in *Nature Communications* of the daily-recorded <u>exercise</u> patterns of more than one million runners over five years shows that exercise is socially contagious. Your knowledge of what your friends are doing can and will motivate you to do more. The work marks a watershed moment in the use of detailed fitness tracking data to understand health behavior and causal behavior change.

"Knowing the running behaviors of your friends as shared on social networks can cause you to run farther, faster, and longer," said MIT Sloan Professor Sinan Aral, an author of "Exercise contagion in a global social network."

Aral and colleague Christos Nicolaides, a postdoctoral fellow at MIT Sloan, used a data set that recorded the geographic location, social network ties, and daily running patterns of more than one million people who ran 359 million combined kilometers (223 million miles) and logged those runs digitally in a global social network of runners over five years. The data contain the daily distance, duration, pace, and calories burned by the runners, recorded by digital fitness tracking devices. The results, said Aral, revealed "strong contagion effects."

"On the same day, on average, an additional kilometer run by friends can inspire someone to run an additional three-tenths of a kilometer and an additional ten minutes run by friends can inspire someone to run three minutes longer," the authors wrote.

Historically, in the context of exercise, a debate exists about whether we make upward comparisons to those performing better than ourselves or downward comparisons to those performing worse than ourselves. Comparisons to those ahead of us may motivate our own self-improvement, while comparisons to those behind us may create



"competitive <u>behavior</u> to protect one's superiority." According to Aral, there is evidence for both trajectories in the study, but comparisons to those better than us are more powerful.

Gender matters too. The contagion is most pronounced among men, with men influencing other men to run farther and faster. In this regard, men may be more competitive and, specifically, more competitive with each other. Influence among same sex pairs is strong while influence among mixed sex pairs is weaker. Both men and women influence men. However, only women influence women who have reported, in earlier studies, being more influenced by self-regulation and individual planning than by their peers.

**More information:** Sinan Aral et al. Exercise contagion in a global social network, *Nature Communications* (2017). DOI: 10.1038/ncomms14753

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