

THE WALL STREET JOURNAL.

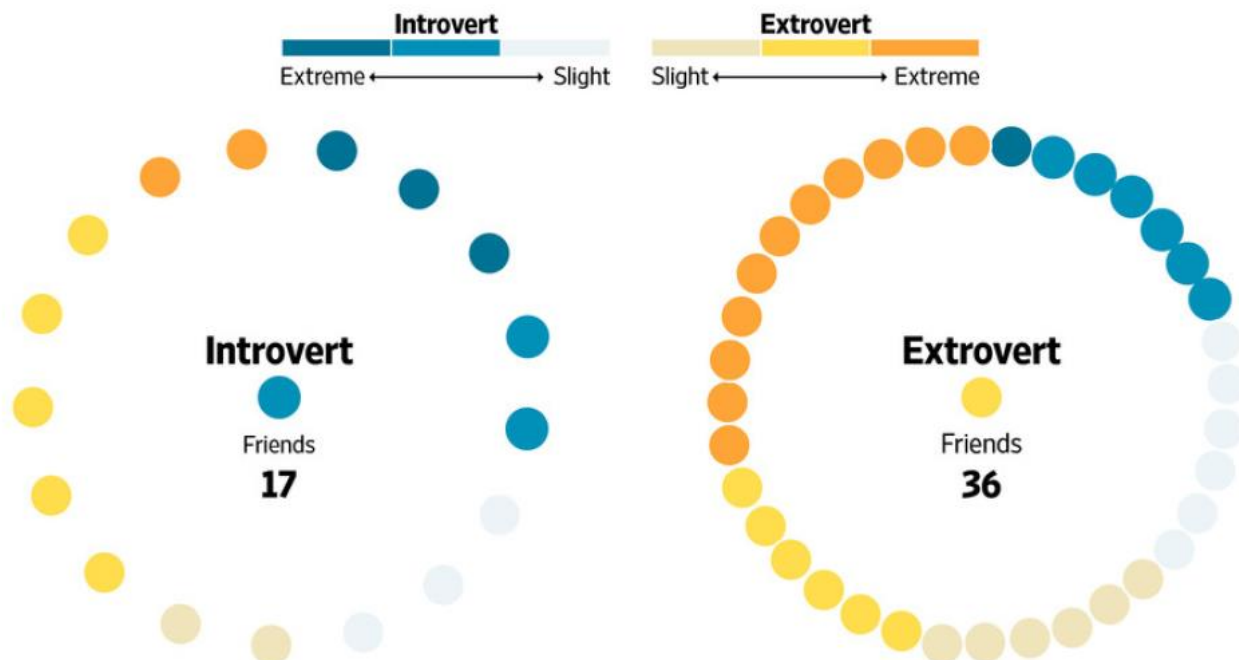
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In Popular Vote, Your Friends Usually Win

Extroverts dominate social connections but beware the network bias

Social Circles

New research explores the effect of extroversion on social networks. Compared with introverts, extroverts tend to have more friends, and more of their friends tend to be extroverted as well.



Source: Drs. Adam M. Kleinbaum and Daniel C. Feiler of Dartmouth College

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By

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Dear introverts, everything you secretly suspected is true: Your friends are more popular than you, and not only that, they are more outgoing. They, not you, are the life of the party.

Perhaps you've noticed this phenomenon while scrolling through long lists of contacts on your friends' Facebook pages. Simply put, on average, your friends have more friends than you and, in general, they are a livelier bunch.

This may sound great -- for your buddies. But there is a catch. The social networks of popular, outgoing people present a skewed view of the world because they include a larger portion of extroverts than the general population. And the more extroverted and popular someone is, the more lopsided his social network, according to new research by two Dartmouth professors.

This popularity bias doesn't just affect who throws the biggest parties. It has implications for leadership choices, policy-making, marketing, even disease tracking.

"If you think about assembling the best team to do a job, the natural tendency is to look to extroverts, but they may not be the most competent people available," said Adam M. Kleinbaum, a professor at Tuck School of Business at Dartmouth College and co-author of the new study. "Network bias could unintentionally cause you to favor people who are less competent."

The work by Dr. Kleinbaum and Daniel C. Feiler, also a professor at Dartmouth's Tuck School, builds on something called the friendship paradox.

The premise is straightforward: Popular people, who are naturally sociable and outgoing, have many friends and are included in the networks of many other people. When one person averages the number of friends his friends have, the networks of popular people inflate the average.

"They get added in over and over," said Scott L. Feld, a professor of sociology at Purdue University, who first documented the paradox, a pattern he said holds true for about 80% of the population.

Dr. Kleinbaum and Dr. Feiler took the friendship paradox one step further. They studied 284 incoming M.B.A. students at an Ivy League college, which they didn't identify for privacy, to examine the role of extroversion in shaping social networks.

The researchers measured the students five weeks after they arrived on campus and then again 11 weeks after they arrived. Each time, they asked the students to identify who they dined with, met for drinks, watched movies with or visited at home.

They measured popularity according to the number of friends each student listed. And they measured extroversion using the Big Five Inventory, a classic personality test.



Research shows that extroverts are likely to have more friends than introverts and that their friends are also likely to be extroverted. The research said nothing of extroverts and selfies, but one might think they're more apt to gather friends for the popular photos. *PHOTO: GETTY IMAGES*

Their analysis demonstrated Dr. Feld's friendship paradox with the added wrinkle that extroverts were overly represented in the social networks, and especially in the networks of other extroverts.

"The logic is the same," Dr. Kleinbaum said. "Most extroverts tend to have a lot of friends, so their high extroversion score will pull up the scores of friends for a larger number of people. And the more extroverted you are, the more you are going to have a network that is overpopulated with extroverts."

There are potential consequences and benefits to the extroversion bias.

"Evidence shows that extroverted individuals are more likely to seek out and rise into leadership positions than their introverted counterparts," said Francesca Gino, a professor at Harvard Business School and author of the book "Sidetracked."

For example, she said, a study by psychologists Stephan Dilchert and Deniz Ones demonstrated that although 50% of the U.S. population is extroverted, approximately 96% of U.S. leaders are extroverted.

Yet, Dr. Gino's research suggests extroverted leaders aren't always effective, particularly when they are managing people who are proactive and more likely to be viewed as a threat. Awareness of the bias could help counterbalance the natural tendency to gravitate toward similar personalities, and other disciplines could find ways to benefit from the bias.

Marketers, for example, might try to place products with friends of a random sample of people because the friends are likely to be more influential, Dr. Feld said, an application he is studying. Or health-care workers faced with an epidemic might reach out to the friends of a random sample of people because they are more likely to be highly connected and among the first to get sick.

But if you're a wallflower or a party animal, keep this in mind: "Very extroverted people are less normal than they think," Dr. Feiler said. "People in the middle are more normal than they think. And the very introverted people have about the right idea about how social they are relative to the general population."

So, if you, like Greta Garbo, want to be alone, go ahead. It's perfectly normal.