

# PERSONALITY PURSUITS

The Personality and Self-Knowledge Lab at the University of California, Davis, investigates how well we know the person in the mirror—and is advancing a movement to improve research methods in psychology

BY SIMON MAKIN

**H**ow well do you recognize your own personality traits? Many laypeople have long assumed that nobody can know us better than we know ourselves. But is that true?

Simine Vazire, PhD, who directs the Personality and Self-Knowledge Lab at the University of California, Davis, has built a career trying to answer that question. She's amassed evidence that other people's estimates of our personalities can be at least as accurate as our own self-reports—and sometimes more so. She's found that self-knowledge is more accurate for traits that other people can't easily observe from the outside, such as neuroticism, whereas traits that are seen as desirable (or undesirable), like intellect, are estimated more accurately by others. Vazire has also contributed to understanding narcissism, challenging the assumption that narcissists lack insight into their own self-centeredness.

Over the years, her interest in the methods used to study those questions has also led her to take a leading role in one of the most important areas in science today: replicability. She co-founded the Society for the Improvement of

Psychological Science (SIPS)—which aims to improve research practices in psychology—and she blogs about research methods and replicability and advocates open science practices. “It feels pretty easy to dedicate a lot of time to replicability because that’ll directly improve the value of my substantive work,” she says.

## A PERSONALITY PUZZLE

Right now, that substantive work includes research on how people's personality and behavior may fluctuate over time, and how aware they are of these short-term changes.

One recent study, for instance, measured people's self-knowledge at different moments by comparing self-reports of their personality traits gathered four times a day for seven days with concurrent data gathered using a device called the Electronically Activated Recorder (EAR), which recorded periodic snippets of participants' conversations using an iPod Touch. Those conversations were then coded by the researchers for the personality states. Vazire and graduate student Jessie Sun found that people had insight into fluctuations in some aspects of their personality, including

## RESEARCH FOCI

The Personality and Self-Knowledge Lab is:

**1**  
**Studying the accuracy of people's perceptions of their own and others' personalities.**

**2**  
**Examining methodological issues and advocating for replicability and open science practices in psychology.**

extraversion, conscientiousness and neuroticism. But they did not seem to recognize as accurately their degrees of agreeableness, which Sun suggests could contribute to interpersonal problems (*Psychological Science*, Vol. 30, No. 3, 2019). In another not-yet-published study, Sun used the same approach to confirm previous reports that more social interactions are associated with greater happiness—and found that in addition to being true on average, this also held true from moment to moment (*PsyArXiv*, Aug. 5, 2019).

This work grows out of Vazire's long-standing interest in how personality drives behavior and how well people can understand and recognize their own traits. Her first taste of research on self-knowledge was as a graduate student at the University of Texas at Austin, with her adviser, Samuel Gosling, PhD. The two submitted a paper on how people present themselves on personal websites, in which they had used both self- and peer reports to measure participants' personalities. A reviewer of the manuscript commented that self-reports were obviously the better choice to measure personality, and Vazire began to wonder if that



was really true. “I found it a much more interesting question than what I was studying, so I started studying that,” she says. The methodological query soon led her to more theoretical questions about where, and why, people have gaps in their self-knowledge and areas where other people can see them more accurately than they see themselves.

Those are not easy questions to answer because it’s tricky to compare the accuracy of self- and other-personality estimates without an objective “ground truth” to compare them with. How do you know what people’s personalities really are, other than from the self- and other-reports that you’re trying to compare? Fortunately, Vazire happened to be in the Austin graduate program at the same time as fellow graduate student Matthias Mehl, who, with his adviser, James Pennebaker, PhD, had developed the EAR device. Vazire realized she could use this to test the validity of self- and peer reports. “Up to then, most of the literature on self- and peer reports of personality just compared them with each other, which can only take you so far,” says Vazire. “The EAR gave us a way to measure what people are like, independently of self- and peer reports, outside of the lab, in their real life.”

Using this approach, Vazire has gathered evidence that not only is neither self-knowledge nor other-knowledge inherently more accurate, but each provides unique information as well. For instance, in one study, self-ratings more accurately predicted time spent arguing, whereas others’ ratings were

more accurate for instances of talking one-on-one and attending lectures (*Journal of Personality and Social Psychology*, Vol. 95, No. 5, 2008). The implications of this for researchers was to elevate peer reports as a useful measure and to provide support for the idea that combining information from multiple perspectives might produce better predictions.

Vazire has also used the EAR to investigate the behavior and self-knowledge of a specific group of people high in narcissistic traits like arrogance and vanity. In one study, she and Mehl asked: How do narcissists actually behave in their day-to-day lives? Their results confirmed findings from lab-based studies that people who score high on narcissism are more extraverted, less agreeable and use more sexual language (Holtzman et al., *Journal of Research in Personality*, Vol. 44, No. 4, 2010). Vazire's former graduate student at Washington University, Erika Carlson, PhD, who now runs the Self-Knowledge and Interpersonal Perception Lab at the University of Toronto, led another study that used self- and other-reports to study

the self-awareness of people with narcissistic traits, as well as their "meta-perceptions" of how they think others see them. She found that narcissists generally know they have narcissistic traits, such as arrogance, and are aware that others view them more negatively than they view themselves—challenging the idea that narcissists lack self-insight (*Journal of Personality and Social Psychology*, Vol. 101, No. 1, 2011). "We go to great lengths to measure narcissism in a way that obscures what we're measuring, but this suggests that actually you can just ask people," Vazire says.

### METHODS MATTER

While methodological issues had long been an interest of Vazire's—concurrent with her personality research—her interest in methodology intensified in the early 2010s, when questions of replicability began to consume some areas of psychological research. "For many of us, we'd been seeing what came across our desks, thinking, it can't be that perfect," Vazire says. "I was still shocked at the extent of the problem; I'd way underestimated how much these little

corners we were cutting could make something out of nothing, and how many things we were sure about failed to replicate."

Vazire dived into these debates, starting a blog on the issue in 2014. She also began to do research. For example, she and R. Chris Fraley, PhD, a psychology professor at the University of Illinois at Urbana-Champaign, were frustrated that the only journal ranking system that scholars pay attention to—impact factor—does not take into account the quality of the published research. So, they published a study assessing journals in terms of the average sample size and statistical power of the papers they published, a metric they called "N-pact Factor." Studies with higher power are more likely to detect genuine and replicable effects. They found that some journals consistently publish higher-power studies than others (*PLOS ONE*, Vol. 9, No. 10, 2014). "Our goal was to get people thinking: Should we have a ranking that reflects quality better?" Vazire says. "This would be a tiny first step, but hopefully others would develop more measures, then we could come up with a metric that combines them."

After joining the faculty at the University of California, Davis, in 2014, Vazire reached out to Brian Nosek, PhD, a professor at the University of Virginia and the executive director of the Center for Open Science. "I wanted a space where people who agreed we can do better could come together and work on improving things, without getting bogged down

### FURTHER READING

**Handbook of Self-Knowledge**  
Vazire, S., & Wilson, T.D. (Eds.)  
Guilford Press  
2012

**Who Knows What About a Person? The Self-Other Knowledge Asymmetry (SOKA) Model**  
Vazire, S.  
*Journal of Personality and Social Psychology*  
2010

**You Probably Think This Paper's About You: Narcissists' Perceptions of Their Personality and Reputation**  
Carlson, E.N., et al.  
*Journal of Personality and Social Psychology*  
2011



Dr. Simine Vazire (second from right) and her Personality and Self-Knowledge Lab team.

COURTESY OF DR. SIMINE VAZIRE





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debating how big the problem is, who caused it,” she says. Together, they planned the first meeting of what became SIPS, in June 2016. SIPS brings together scholars working to improve methods and practices in psychological science, primarily through putting on an annual conference. Attendance at these meetings has ballooned, going from 100 in 2016 to 530 this year. They also work to improve the training and practices of psychologists and the policies and norms of journals, societies and universities; conduct empirical studies on the current state of research practices in psychology; and engage in outreach activities. “We’re more of a service organization than an advocacy organization,” Vazire says. “We try to facilitate people who share our mission coming together and working on projects that they think will achieve those goals.”

One of the things to have come out of SIPS conferences Vazire is happiest about is the Psychological Science Accelerator, a network of psychology labs distributed across 60 countries

that promotes collaboration between members. “The idea is to be like the CERN for psychology, to facilitate large-scale collaborations across many different labs,” Vazire says. Besides enabling large amounts of evidence to be gathered, “it also allows collecting data from all around the world, which for many psychological questions is really important, to know if things hold in different cultures, or if context matters,” she says.

Vazire was also a member of the panel that worked on the recent National Academies of Sciences, Engineering, and Medicine (NASEM) report *Reproducibility and Replicability in Science*, though she resigned before the report was published, citing frustration with the committee’s process and conclusions.

Today, Vazire’s lab reflects her interest in both personality and methods. Jessie Sun works mainly on personality research, while graduate student Julia Bottesini is studying how an oft-overlooked stakeholder in psychological research—participants—view research practices.

Do participants want researchers to share their (anonymized) data with other researchers, to verify claims? Do they care if studies they participate in that find negative results are never published? Or if it’s published in an open-access journal rather than behind a paywall? “So far, it looks like psychology research participants are very supportive of open science practices and tend to disapprove of practices like p-hacking and file-drawer studies,” says Bottesini. She is also working on ways of analyzing journal articles to determine if reforms are affecting the quality of research being published. “Coming up with new tools, procedures and norms to improve science is great, but how do we know if they’re actually having the intended effect?” she says. “As scientists, we shouldn’t rely on anecdotal evidence of improvement. We should base our decisions on real data.”

Vazire, meanwhile, views her activism in research methods as a necessary investment, though it has slowed her personality research. “But it’s like when you notice there’s a major leak in your house. You can keep working on that nice shed you were building outside, but you feel most of your time should be spent fixing the really urgent problem,” she says. “As long as we don’t fix replicability leaks, we’re losing a lot of the resources and time we’re investing in our research.” ■

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