## RESEARCH

## In the Lab, Failure Is Part of the Job Description

By Alexander C. Kafka JUNE 15, 2018



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Jay Van Bavel realized that hearing lab colleagues report only on their successes might give younger researchers in particular a false sense of what academic life is really like. Now, at weekly meetings, everyone shares their defeats as well. ay Van Bavel is a highly successful research psychologist at New York University, but he also likes junior colleagues to know about his crummy first year as an assistant professor, when he had 10 papers and three grant proposals rejected, and zero papers published.

Make no mistake, over all, he has kicked scholarly butt. Now an associate professor, he is also affiliated with NYU's Stern School of Business, has published more than 60 papers, and won prestigious academic awards and a wide range of grants.

But Van Bavel, a first-generation college graduate from a tiny town in Canada, studies the impact of social environment on individuals. Naturally, then, he is attuned to such effects in his own lab. Inspired by a colleague's suggestion, eight years ago, he and his labmates started regularly celebrating successes. Over snacks, they'd revel over a publication accepted, a dissertation defended, a student award. He eventually realized that might give younger researchers, particularly, a false sense of what life as a researcher is really like. So now at those weekly meetings 10 to 20 grad students, postdocs, and undergrads also share their defeats.

"I decided to flip the script," Van Bavel says. "We're also going to announce the failures, because they are far more common and they're also part of the process." The change was prompted, in part, by a March article in *Nature* citing "evidence for a mental-health crisis in graduate education." Its authors wrote that a survey of 2,279 respondents, mostly doctoral students, showed that graduate students "are more than six times as likely to experience depression and anxiety as compared to the general population." The authors urged interventions by academic institutions.

Van Bavel didn't have a first authorship on a paper until his fifth year of grad school, he says, and he worried about how anxiety-producing it could be for first-year grad students to only see their fellow scientists toasting victories.

In the spirit of the new proceedings, there were more than enough failures to go around. One postdoc talked about having the same paper, with changes prompted each round by reviewers, rejected five times in five years. Another cited three rejections in three months.

But it's not a pity party, either, Van Bavel says.

"What kind of feedback are you getting?" colleagues would ask each other about papers that didn't make it. Then they'd suggest other journals that might be more receptive to a particular kind of work, other approaches to analyzing data sets, ways to cross-check and document results and catch errors, how to get financial help for open-access journal submission fees, and so on.

"It can have some practical aspects to it, so you can actually walk away with some improved norms," says Diego Reinero, a fourth-year doctoral student in Van Bavel's lab.

"It turned out to be a really constructive group problem-solving activity," Van Bavel says. "You could tell there was a good vibe in the room."

There was a good vibe on the web too when he tweeted about it The tweet quickly garnered several hundred thousand hits, a few thousand likes, more than a thousand retweets, and almost 70 replies, including from labs that said they planned to try the same thing. And, astonishingly, Van Bavel says, there were no naysaying trolls.

I tried something new at my weekly lab meeting.

Normally we start the meeting by announcing any upcoming events and celebrating accomplishments from lab members (eg papers, awards, graduations, presentations).

This week we added failures & setbacks to the announcements.

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— Jay Van Bavel (@jayvanbavel) June 2, 2018

"I wanted," he wrote on Twitter, "to make it transparent how common failure is to everyone in the lab — especially the younger students who haven't yet enjoyed some of the success that happens more frequently to senior students and postdocs. Those first few years are full of failure and criticism."

"Opening up the conversation normalized the process and created an instant brainstorming support session. It also sparked a conversation about how we all deal with rejection."

earning from failure is a scholarly theme, a management trope, and a publishing cottage industry. When Johannes Haushofer, an assistant professor of psychology and public affairs at Princeton, published his "CV of Failures" a couple years ago, it was so popular that he amended it to include a "meta-failure": "This darn CV of Failures has received way more attention than my entire body of academic work."

Still, on a day-to-day level, the discussion of failure really is helpful, Van Bavel's students and associates say.

"I haven't had that in a lab meeting before, but I think it's a really good idea," says Tina Sundelin, a postdoc from Sweden who works at an NYU lab neighboring Van Bavel's. She studies the effects of sleep loss and regularly attends his meetings. She has papers that have been in the submission-rejection-comment-revision cycle for several years. The better the journals you target, the more rejections you'll have, she says, and "it's easy to get dejected." Moreover, stewing over the rewrites, she also gets sick of her own work and wants to move on. "I don't even want to look at it," she says. "I think that happens to everyone." There was a moment during her grad work at Stockholm University, she says, "when I thought, 'Why am I doing this? No one cares about this stuff.'" Fortunately, she had a good mentor, contagiously enthusiastic, and she would come away from meetings with him feeling re-energized.

She counsels grad students to fight the feeling that they need to work seven days a week. "Yes, it's career," she tells them, "but it's also school," a learning opportunity. "You're supposed to make mistakes and learn from those mistakes."

Reinero, the fourth-year grad student, has been a coauthor on four papers and has experienced highs and lows. Toward the end of his first year of grad school, he published a paper in a high-impact journal about scientific-replicability issues and won a National Science Foundation doctoral fellowship. "I was excited," he recalls. But just a half-year ago, he was in an emotional valley. He studies cognitive synchronicity — synchronous brain patterns between people in groups — and he was hitting a lot of road blocks. Experimental subjects were hard to recruit and even when they had signed up they sometimes failed to show. The computational complexity of the project made him feel like he needed Ph.D.s in math and statistics and neuroscience, not just psychology. He felt "stalled out, inadequate." Friends and family talked him through it, but he knows such periods are part of the job description.

Mark Hoffarth is another postdoc in a neighboring lab who joins Van Bavel's meetings. He studies political psychology, group identity, and human sexuality. He's the one who told the group about having a paper rejected five times in five years. (It's about attitudes on well-being. Chalk one up for irony.) Don't think about the setbacks as failure, he tells grad students, but "just as the next step in the process."

Developments, good and bad, seem to happen in clusters sometimes. When Hoffarth was a first-year doctoral student, he was trying to get his master's thesis published, felt frustrated, and wasn't sure he wanted to stay in science. Then, toward the end of that year — after three years of rejections and no papers published — he had three previously rejected papers accepted within two weeks. It was, he says, "a Hollywood drama of ups and downs."

"That's kind of the way science works," he says.

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