Can a Longtime Fraud Help Fix Science?

Diederik Stapel faked more than 50 studies in social psychology. What can we learn from his misdeeds?



Koos Breukel

Diederik Stapel is known for perpetrating one of science's most audacious frauds. To prevent similar scandals in the future, he suggests dismantling the "perverse incentives" that put pressure on scientists.

Enlarge Image

By Tom Bartlett

Diederik Stapel was once known as a clever, prolific social psychologist.

The Dutch researcher's studies on subjects like unconscious stereotyping and the effect of environment on emotion aimed to explain the strangeness of human behavior. Why do we do what we do? How can a deeper understanding of our motivations lead to a better, more humane world?

Now Stapel is known for perpetrating one of science's most audacious frauds. Since 2011, when his fakery was first exposed, more than 50 of Stapel's papers have been retracted. He made up data for dozens of studies he never conducted. The extent of his deceit is jaw-dropping, and his downfall felt like an indictment of the field.

I thought of Stapel recently when news broke about a heralded young political-science researcher named Michael LaCour, who had apparently faked data for a high-profile study of gay marriage. Like Stapel, he was able to fool colleagues for years. Like Stapel, his lies cast doubt on the safeguards in science.

Unlike LaCour, though, Stapel has spoken publicly about what he did. In 2012 he published a memoir, Derailment, about how he had become addicted, to use his word, to fabricating data, and about how his world had collapsed when he was caught. A few months ago that book was translated into English by Nicholas Brown, a graduate student in health psychology at the University of Groningen, and retitled Faking Science: A True Story of Academic Fraud. The book is a seemingly honest, engaging attempt at introspection by someone with a long history of deception.

I spoke with Stapel for several hours via Skype from his home in the Netherlands. He was by turns lighthearted and dejected. One minute he was talking about Raymond Carver, a favorite writer, and the next admitting that for several months he didn't leave the house for fear he would be spit on or worse. These past few years have been hard for Stapel. As he admits, he brought it on himself — and harmed colleagues, co-authors, and the cause of science as well.

But you don't need to sympathize with Stapel to think he might have something useful to say.

I wanted to speak to you because of Michael LaCour. Like you, it appears that LaCour made up data out of thin air, constructed graphs and charts based on that fictional data, and spent years lying to colleagues and editors, friends, and mentors. I'm not saying the cases are identical — for one thing, your fraud

involved dozens of studies, not just one or two — but do you feel that you have any insight into what was going through LaCour's head?

Obviously, no, because he's a different person. But I totally agree with you that it's fascinating that what he's been doing apparently is very similar to what I did. There are differences. One of the most important differences is that he's so young, and he seems to have been caught in an early stage, and I got caught after years of doing this, constructing data, etc. Hopefully that will help him. He is perhaps more flexible — more moves he can make to amend things and do something differently in his life.

Like LaCour, you published a paper in Science that was retracted because you made up the data. Yours was about chaotic environments and stereotyping. In your book, you write that you tried the experiment early on with actual subjects, but it didn't work. You were genuinely interested in this issue. Someone connected to the LaCour case told me that "if somebody is genuinely interested, they don't just make it up." This appears to be a sincere interest of yours, and yet you ...

I think the problem with some scientists, like LaCour and me, is you're really genuinely interested. You really want to understand what's going on.

Understanding means I want to understand, I want an answer. When reality gives you back something that's chaos and is not easy to understand, the idea of being a scientist is that you need to dig deeper, you need to find an answer.

Karl Popper says that's what you need to be happy with — uncertainty — maybe that's the answer. Yet we're trained, and society expects us to give an answer.

I think to be genuinely interested has two sides. Really trying to find reality. Or trying to find an answer. Scientists are in the business, many of them, of trying to find answers. Clear, nice, simple results. If you don't have those results, it's more difficult to publish your data. I wanted certainty more badly than others, and perhaps LaCour is similar in that respect.

You mention lots of possible reasons for your fraud: laziness, ambition, a short attention span. One of the more intriguing reasons to me — and you mention it twice in the book — is nihilism. Do you mean that? Did you think of yourself as a nihilist? Then or now?

I'm not sure I'm a nihilist. I'm not sure that a real nihilist can be alive, because if you're really a nihilist, and you think there's emptiness, how can you survive, how can you get up every day? I think the fact that I'm still here shows that only a part of me is nihilistic. Perhaps there's something else that gives me meaning. My family, my daughters, my friends, love. But I do think that I have this nihilistic tendency.

Did you think of the work you were doing as meaningful?

I was raised in the 1980s, at the height of postmodernism, and that was something I related to. I studied many of the French postmodernists. That made me question meaningfulness. I had a hard time explaining the meaningfulness of my work to students. How can we then have an impact on society? But I always had a problem with my role in society. What can we add? I don't know. I also describe in my book that social psychology has found some consistent and robust effects that are true and are really helpful in designing a better world. But I never sensed that I was part of that.

You have repeatedly taken the blame. In a 2013 interview you said, "I did it. There were many circumstantial things, but I did it." In the book you write, "I'm a person who went wrong." More than any other researcher accused of fraud I can think of, you've owned up to your wrongdoing. But you also write that there was "a toxic environment that allowed all this to happen." Tell me about this toxic environment.

I find this very difficult. I feel responsible for my acts, and I really take responsibility. I think I've been punished for my acts. But I think there's a difference between taking responsibility for something and trying to explain

why it happened. At the moment I honestly try to explain what happened, people say, "Oh, he's trying to explain it away." But, of course, trying to explain and taking responsibility are two completely different things. Related, but different.

Time and again, it's hard for us human beings to distinguish the antecedents of human behavior. There's something about me. And there's something about the environment. The publication pressure. The need for simple answers instead of allowing for complexity. The focus on egos and individual researchers, first authors, and grants to individuals versus groups or universities. That's what I mean with environmental factors.

You write in the book about working in "professional isolation." That you were alone with the "big cookie jar right next to me," and you couldn't help yourself. You kept colleagues in the dark. You fed them bogus data. So is part of the solution here eliminating that isolation? If you had been truly and deeply collaborating with others, would that have kept you honest?

Of course we don't know. And in hindsight, it's always easy to come up with solutions. Yeah, that's what I'm suggesting there — that it wasn't helping. It could have been avoided by more group relationships, more social control, and also real interest in each other's work. If I look back now, I say we were counting each other's journal articles. "Hey, Tom or Jim has another paper. Oh, well, wonderful!" Nobody said, "What was the paper about?" or "What did he prove?"

So it was checking boxes? Just another notch on the belt?

In the book, I describe a friend of mine who used to work at another university who was sitting next to someone who wanted to become a full professor, and my friend asked, "What do you need to do?," and he says, "Well, I now have 60 journal articles. I need 90, and then I'm a full professor." That's pretty ridiculous. But it's a true quote.

I think of cases like yours and LaCour's as aberrations. Science in general, and social psychology specifically, has some well-documented systemic problems, like p-hacking and the file-drawer effect, and there is lots of discussion about how to remedy those problems. Arguably some progress has been made. But that seems categorically different than simply making up data. Am I wrong? Obviously they are qualitatively different. You could also say, Well, let's look at the similarities and try to look at this as a continuum. Maybe that's more important. What's the motivation behind these effects? If you only get rid of the symptoms — oh, let's open up all the file drawers or let's do this or do that. No. That's not going to take away the desires of scientists that go wrong or use questionable research procedures or delete data.

I think the desire is probably the same. The motivation is the same. I think it's a steppingstone sort of process. That is why I think studying the more deviant, the more extreme excesses, you can learn a lot about the motivation behind all of this. It's about ambition, it's about status, it's about fitting in, it's about trying to change the world. If you say, Well, LaCour, Stapel, Smeesters, and all the others we know are there and nobody knows them. They're deviants, and they're sick. Perhaps that's true.

It may also be helpful to try another story line. If you really want to solve the problem, it's not enough to get rid of the symptoms. You need to delve deeper to get a look at the motivations. That's where extreme cases can help you. That's how we normally do it in psychology.

You mentioned that it's good that LaCour was caught at a relatively young age. He was on the cusp of a position at Princeton. He hadn't gotten his Ph.D. Do you wish you had been caught earlier?

Definitely, definitely.

Why?

Because I'm so old now. You have to start all over again.

I'm interested in the moment when it all comes crashing down. When confronted, you initially scramble to cover your tracks, to invent a back story that would somehow account for the discrepancies. You do some fast talking. But then you realize it's over, and you confess, first to your family and then to the wider world. I want to know — and this is just my curiosity — what does that moment feel like? Is it utter anguish? Is there some relief maybe mixed in?

It's been a long time. Almost four years ago. Relief? That sounds as if you are very happy and there's this cleansing, blah blah. But it's not that kind of relief. But of course, it's over. It has become simpler. It's not so complex and strange and warped anymore because you have to keep juggling all your constructions and illusions. It's more, Hey, I don't have any secrets anymore. That's a relief. Of course, along with that relief your life is tumbling down and crashing. I didn't know the impact would be as enormous as it turned out to be. I knew I would get fired and would have to leave science.

You reached a settlement with Dutch prosecutors that involved giving up payments you would have earned for being unemployed, and serving 120 hours of community service doing work in graveyards. You lost your job. You surrendered your Ph.D. You've been unable to find steady work in the four years since the fraud was exposed. You write, "I've got more regrets than hairs on my head, and an infinite amount of time to think about them." What's been the worst part?

Being an outcast. Being ostracized for everything. I've contacted people I've worked with, and some of them talk to me. Being excluded — and not only from the university, but not being able to be part of society anymore. It's difficult not to have a job. Being an outcast is surrealistic.

When you walk down the street in the Netherlands, go to the grocery store, coffee shop, does it feel as if it's always there? Is your level of infamy such that

. . .

No. Some people recognize me because we used to be colleagues. It's more that I try to find work or come up with things as an entrepreneur. I apply for odd jobs, strange jobs. People are afraid of hiring me because they worry it might be bad for the reputation of their company.

The book wasn't available in English until a few months ago, but it was published in Dutch in 2012. I wonder if, after having more time to reflect, you would modify any of your conclusions? Have you come to a clearer understanding over the years of why you did what you did?

I haven't read the book recently. It's very emotional and very chaotic in a sense. With a Dutch writer, I wrote another book, which is called the Fiction Factory, that came out last year. That's also sort of an essay on life or freedom, dealing with exclusion, inclusion. There's more reflection, and it's more philosophical. I think I'm progressing, I'm learning. It would be different, and the focus would be more from a distance if I wrote the book now. I think how I see it now is our desire for convenient truths. That may be an explanation for it all.

The way people are treating me is a desire for convenient truths, too. The inconvenient truth is that it's complicated and not nice. We like the truth, but the truth is harder to accept when it's uncomfortable.

You write that "every psychologist has a toolbox of statistical and methodological procedures for those days when the numbers don't turn out quite right." Do you think every psychologist uses that toolbox? In other words, is everyone at least a little bit dirty?

In essence, yes. The universe doesn't give answers. There are no data matrices out there. We have to select from reality, and we have to interpret. There's always dirt, and there's always selection, and there's always interpretation. That doesn't mean it's all untruthful. We're dirty because we can only live with

models of reality rather than reality itself. It doesn't mean it's all a bag of tricks and lies. But that's where the inconvenience starts.

I think the solution is in accepting this and saying these are the tips and tricks, and this is the story I want to tell, and this is how I did it, instead of trying to pose as if it's real. We should be more open about saying, I'm using this trick, this statistical method, and people can figure out for themselves. It's the illusion that these models are one-to-one descriptions of reality. That's what we hope for, but that's of course not true.

I've written out some true-false questions. If answering "true" or "false" doesn't seem like the best way to answer, answer however you like.

You were more interested in status than truth.

[Long pause.] Yes, true. You also need to report the reaction time.

If you hadn't been caught, you would still be faking studies today.

Hopefully false. But I'm worried that may be true.

You thought you could get away with it.

True.

You love social psychology.

Loved or love?

I had it in present tense.

Less so than before. Considerably less than six years ago.

You remain tortured by what you did.

True.

You understand why you did it.

True.

You've tamed your demons.

Yeah. They're dead now.

You believe you've paid for your wrongdoing at this point.

True.

How do we prevent future Diederik Stapels and Michael LaCours?

I think focusing less on ego and individual scientists and focusing more on groups. Less focus on research output in the sense of numbers of publications and more on grants or interesting books. And also on other dimensions like education and team building. It's an argument against perverse incentives. If you make incentives more complete and more complex, there's less of a sense that you need to do this one thing to be successful.

Is redemption possible? What would it look like in your case?

I don't understand the question because I'm not the one to judge. I guess I redeemed myself. In the end, that's all I can do. The rest is not up to me. You can't ask others for forgiveness. The only thing you can do is forgive yourself.

What is the thing that you want now?

I don't know. Just to fit in somewhere. Make some money. Take care of my family. I don't need to be visible. Survival, that would be nice. And moderately happy, so you don't wake up every morning like, "Shit, what's next?"

Tom Bartlett is a senior writer who covers science and other things. Follow him on Twitter @tebartl.