Behavioural economics

Harvard fraud claims fuel doubts over science of behaviour

Field that includes 'nudge' theory has gained broad traction within businesses but some findings are contested



Academic bloggers have claimed that there is 'evidence of fraud in four academic papers' published by Harvard professor Francesca Gino, pictured © YouTube

Andrew Jack and Andrew Hill 16 HOURS AGO

Claims that fraudulent data was used in papers co-authored by a star Harvard Business School ethics expert have fuelled a growing controversy about the validity of behavioural science, whose findings are routinely taught in business schools and applied within companies.

While the professor has not yet responded to details of the claims, the <u>episode</u> is the latest blow to a field that has risen to prominence over the past 15 years and whose findings in areas such as decision-making and team-building are widely put into practice.

Companies from Coca-Cola to JPMorgan Chase have executives dedicated to behavioural <u>science</u>, while governments around the world have also embraced its findings. But well-known principles in the field such as "nudge theory" are now being called into question.

The <u>Harvard</u> episode "is topic number one in business school circles", said André Spicer, executive dean of London's Bayes Business School. "There has been a large-scale replication crisis in psychology — lots of the results can't be reproduced and some of the underlying data has found to be faked."

Academic bloggers have claimed in recent weeks that there is "evidence of fraud in four academic papers" published by Francesca Gino, Harvard professor of business administration.



Barack Obama presents the Presidential Medal of Freedom to Daniel Kahneman, author of 'Thinking, Fast and Slow' © Mandel Ngan/AFP/Getty Images

Gino, who is on administrative leave, has said <u>on LinkedIn</u> that she continues "to evaluate these allegations and assess my options . . . I want to assure you that I take them seriously and they will be addressed." Harvard has not commented.

Academics who run the Data Colada <u>blog</u>, which probes the evidence behind behavioural science studies, challenged research co-authored by Gino suggesting that people were more likely to report their income honestly when they signed a "declaration of honesty" at the start, rather than the end, of their tax return. That study had already been retracted, but Data Colada said it had found new signs of tampering in the underlying data.

<u>Follow-up posts</u> have queried research findings indicating that acting dishonestly led to greater creativity and that there were links between feeling authentic and behaving morally.

While the claims are a fresh blow to behavioural science, it is not the first time its findings have come into question since Richard Thaler and Cass Sunstein brought the field to popular attention with their 2008 book *Nudge*.

The exposure of fabricated data in dozens of research projects overseen by Dutch researcher Diederik Stapel a decade ago led to questions about the importance of "social priming", the idea that prompts can change people's behaviour. Stapel's downfall led Nobel Prize winner Daniel Kahneman, a father of behavioural research — who cited priming in his cult book *Thinking, Fast and Slow* — to warn that he saw "a train wreck looming" in the field.



David Halpern, president of the UK's Behavioural Insights Team © Felix Clay/Guardian/Eyevine

Last year a paper led by Maximilian Maier at University College London even suggested that properly correcting for "publication bias", the tendency among researchers to withhold studies that fail to unearth significant findings, left "no evidence for the effectiveness of nudges".

That cast a shadow over the use of behavioural science by government-linked "nudge units" such as the UK's Behavioural Insights Team, which was spun off into a company in 2014, and the US Office of Evaluation Sciences.

However, David Halpern, now president of BIT, countered that publication bias is not unique to the field. He said he and his peers use far larger-scale, more representative and robust testing than academic research.

Halpern argued that behavioural research can help to effectively deploy government budgets. "The dirty secret of most governments and organisations is that they spend a lot of money, but have no idea if they are spending in ways that make things better."

Academics point out that testing others' results is part of normal scientific practice. The difference with behavioural science is that initial results that have not yet been replicated are often quickly recycled into sensational headlines, popular self-help books and business practice.

"Scientists should be better at pointing out when non-scientists over-exaggerate these things and extrapolate, but they are worried that if they do this they will ruin the positive trend [towards their field]," said Pelle Guldborg Hansen, chief executive of iNudgeyou, a centre for applied behavioural research.

Many consultancies have sprung up to cater to corporate demand for behavioural insights. "What I found was that almost anyone who had read *Nudge* had a licence to set up as a behavioural scientist," said Nuala Walsh, who formed the Global Association of Applied Behavioural Scientists in 2020 to try to set some standards.

According to academics, ways to make the field more rigorous could include more sharing of underlying data; simplification of large, multilevel research teams; and greater caution over studies based on "lab" experiments. They have also suggested "preregistering" of research hypotheses to prevent researchers cherry-picking to seek conclusions once data is collected.

Hans Ijzerman at the University of Grenoble and fellow researchers cautioned against the overuse of behavioural research in responding to the Covid-19 pandemic. They highlighted the widespread use of "weird" study participants, "mainly students . . . drawn from populations that are in western (mostly US), educated, industrialised, rich and democratic societies".

"We need to get to a place where we're not getting excited that someone finds a quirk in human behaviour," said Grace Lordan, associate professor in behavioural science at the London School of Economics. "We should just emphasise that this is a highly novel result and should be replicated."

Usha Haley, a professor at Wichita State University, warned against the desire of specialists in behavioural and managerial studies to seek definitive rules and laws of the sort more common in the natural sciences.

"The latest scandal... is a symptom of a wider problem spanning over two decades dealing with knowledge generation in the social sciences and the 'physics envy' that characterises business and economics," she said.

Advocates of behavioural science say recent controversies are exceptions and that the field can be a valuable corrective to unfounded forecasts about behaviour.

For instance, at the start of the pandemic in 2020, UK health officials argued against the rapid imposition of infection control measures such as lockdowns because people would be reluctant to conform over any significant period — so-called "behavioural fatigue". Yet nearly 700 scientists then stated publicly that there was no basis for such claims in research. High levels of obedience to lockdown rules appeared to bear out their scepticism about the "fatigue" concept.

There is still good evidence for concepts such as loss-aversion bias — that people's pain over losing something is proportionally larger than the happiness they take from gains — and status quo bias, in which people display a preference for the existing situation over alternatives.

Evidence-based applications in the field include "opt out" policies that encourage pension contributions and organ donations.

Katy Milkman, a professor at the Wharton School of business, said: "I've had more conversations in the last week about how we can make our science more robust and fraud-proof than I'd had in the past year. So I anticipate very positive side effects of these revelations for those of us who study nudging."

In the meantime, the ripples from the accusations against Gino's work are affecting co-authors, researchers, students and colleagues. As she wrote in her recent LinkedIn post, "there will be more to come on all of this".

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