



Nothing gold can stay
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SCIENCE

24 Mar 17

IT'S GETTING WORSE! THE SCIENCE OF NEGATIVITY BIAS

The world's going to hell, right? A full 71% of Britons say the world is getting worse. Actually, things may not be so bad – but research suggests we're inclined to feel that way. We sit down with assistant professor of behavioural science Ed O'Brien to discuss the effects of negativity bias.

Location [Global](#)

Scope

"People think the world is getting worse," [says futurist Ray Kurzweil](#). That's the perception." It's true; a study from 2015 showed that 71% of Britons felt the world [was getting worse](#). And in 2017, political uncertainty following two of the most prominent political events in recent history has left it is easy for many to shake their heads, despairing for the state of the world. But in reality, [the world actually isn't getting worse](#) – in lots of ways, it's getting better. The proportion of the world's population living in poverty dropped from ...

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It's getting worse! The science of negativity bias

Ed O'Brien

Scope

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There are plenty of reasons we're inclined to perceive the world as in a state of ongoing decline. Numerous studies have confirmed that we really do perceive the past through rose-tinted specs – it's why Britons [get nostalgic](#) for times of 'austerity', even though there was a war going on. And in our hyperconnected existence, we're notified to more bad news than ever; 100 of your Facebook friends are marking themselves safe on 'Safety Check' when they weren't even in the area. "A century ago, there would be a battle that wiped out the next village, you'd never even hear about it," agrees Kurzweil. "Now there's an incident halfway around the globe and we not only hear about it, we experience it."

But new research suggests there's an even more profound reason for our apparent pessimism; we're simply more inclined to *believe* that decline or decay is happening. When we see improvement, we're more likely to pass it off as a fluke. Canvas8 sat down with Ed O'Brien, assistant professor of behavioural science at the University of Chicago and co-author of ['The tipping point of perceived change: Asymmetric thresholds in diagnosing improvement versus decline'](#), to find out more about negativity bias.

What led you to this area of research?

We were thinking about the power of negativity in the world, and how negative events and stories often dominate our domination. And we were interested in what would happen if you string them together as separate pieces of evidence, if that makes them especially powerful.

We were also interested in these everyday observations of 'good' entities as decaying or declining. You can look across all kinds of domains, and you'll see that the natural trajectory involves things getting worse. The best football player in the world will eventually lose his or her abilities. The smartest person in the world will eventually deteriorate. Maybe, then, by default, when people consider the potential future performance of anything, without any other information, they might assume that it will deteriorate. 'Nothing gold can stay', you know?

What did you want to find out?

From everyday observations, we were thinking about how life is often a series of very small fluctuations. Some days you're happy, some days you're sad, sometimes you fight with your partner, some days your employees are working well, sometimes they're not. And a lot of these fluctuations are very small and ambiguous. I was interested in how people think and feel about these things.

How much evidence do people need to see – how many of those small ups or downs have to occur – before they think something real is going on? When have we seen enough good evidence to conclude that something positive is happening? How much bad evidence do we need to conclude that something negative is happening?

I'm interested in this as a psychologist and as an everyday decision maker, but this isn't just interesting from a personal perspective. Understanding this tipping point – how much evidence people need to accrue to conclude that change is happening – has lots of important policy implications, too. Once you've seen enough evidence that something has improved or declined, that's theoretically the point at which we'd act. For example, we've seen enough good performance from that employee, so we're going to promote them. Or we've seen enough poor performance that we're going to fire them. Understanding how people get to that tipping point could have real-world implications.

How did you test this theory?

The basic idea has been adapted in a lot of different ways since we've started. We show people some early bit of evidence – it might be a chart showing some data about health fluctuating over time, or it might be us verbally telling them a sportsman has done really well in his last couple of games – to give them a starting point. Then, we ask them how much more evidence they'd need to see before they'd consider an improvement or decline to be a hard truth.

We tried to vary it in a lot of ways, and found lots of different kinds of people to ask those questions, starting on campus, moving out into Chicago, and eventually asking nationwide online panels. One study (of a total of ten), involved 500 people found online, who were shown a graph showing fluctuations in America's economy. While the line on the graph was intended to look ambiguous, half of participants were told it demonstrated a slight improvement, and the other half were told it represented a slight decline. Both were then asked how much more evidence they'd need to see before they'd consider it a 'real' trend.

What did you discover?

The finding we observed is that people are really quick to conclude that something is declining. Whereas for improvement, people have a very high threshold for what's true. In the study mentioned, the exact same graphs were interpreted as more 'real' when they were framed as depicting decline than when they were framed as depicting improvement.

People only need to see one or two bad pieces of evidence to conclude the worst. Whereas for improvement, people have a very high threshold for what's true. So even if you string together a lot of good things, people are far more likely to dismiss that as a potential fluke; they need to see more.

This runs in very stark contrast to a field of literature in psychology around inflated optimism; this idea that people are constantly thinking about their own improvement. This body of research suggests that people are often overly optimistic about their goals, their achievements, and good things happening in their lives.

But that's not what we observed at all. So we were thinking about how we might bridge these ideas together. We know that people are very focussed on improvement before any evidence starts to accrue. So before I've even set out to design my product, I'm very optimistic – that's where this culture of improvement stands. Thinking ahead, people are confident.

But our findings reveal that once you've started, and as soon as the slightest evidence of regression or negativity comes up – as soon as you hit the first road block – all of a sudden, this confidence in improvement goes away, and people turn into cynical pessimists. It's about understanding how to meet people at different stages in a journey in order to move forward.

There are some ways around this, though. A colleague of mine has done some research that suggests that motivation to finish a goal goes up if you give people a head start. So take a loyalty card that will give you a free cup of coffee once you've bought ten. If you give people a card with a few already checked off – even if the overall number is the same (you give them a card that requires them to buy 14 cups, but check four off) – they're still much more likely to complete it.

How can these findings be applied?

- People are overly quick to conclude decline. So how can we get them to wait longer? That's an important question that we're trying to figure out. We're currently testing the idea that acknowledgment of this bias could help people make more accurate judgements. We don't know yet, but if that's the case, that could have a lot of implications in terms of training people out of this bias.
- The results of our study could be very interesting to politicians or policymakers in terms of the way they frame information to the public – perhaps good news should only be announced when there's enough evidence to demonstrate a clear and undeniable improvement.
- There's also more 'evidence' at our disposal than ever before. The denizens of the internet are louder and more opinionated than ever, and with [84% of Gen Yers reporting](#) that user-generated content has at least some influence on what they buy, evidence of change is being accessed from a burgeoning body of sources.
- This research proves that you have to be patient to appreciate improvement, and that's a very difficult thing to overcome for services that depend on people perceiving improvement – like dieting services or gyms. People need to check more boxes in a row before they believe they can improve. One way of achieving this would be by introducing short-term goals in the early stages to make them feel like they're progressing.
- Other studies have demonstrated that only the most extreme headlines are shared (both positive and negative), but our research suggests that people are more likely to believe the negative. This is more than an echo chamber; people are genuinely more likely to believe bad news. Overcoming that is a huge challenge.
- That said, bad news can sometimes be good for business. In times of negativity, certain brands win out – satire magazine [Private Eye](#) has seen a spike in [people seeking humour](#) at times of political strife, while [the Guardian](#) has grown its membership from 15,000 to nearly 200,000 paying subscribers for its offering of legitimate journalism.
- Sometimes, what people say, and how they act on these feelings are two very different things. [#DeleteUber](#) was the latest in an extremely long line of scandals for the global ride-sharing service, but just two days later, the scandal had blown over, and Uber has once again the [most downloaded app](#) of its kind on the App Store. If the service that's being provided is good enough, a declining reputation can be quickly forgotten.

Ed O'Brien is an assistant professor of behavioural science at the University of Chicago and Willard Graham Faculty Scholar. He's also the co-author of ['The tipping point of perceived change: Asymmetric thresholds in diagnosing improvement versus decline'](#).