

Confirmation Bias: 'Looking Before You Leap' Is Not Enough

'Confirmation bias' is a self-deception we are all prone to. It distorts analysis, misleading us and others. What is it? And how can we avoid or reduce it?

When trying to buy or sell something; to impress someone; to compete with someone; and in many other negotiations; we're often 'economical with the truth' – omitting or downplaying the negatives and exaggerating the positives. From an absolute moral viewpoint this is wrong, but for most of us – provided it's not outright fraud – it's how we expect and accept how people, including ourselves, will behave. But deception may also be unconscious, and not just of others, but of ourselves. This deception is formally called 'confirmation bias' to which we are all prone - sometimes with dire consequences.

Unless we guard against **confirmation bias**, no matter how hard we 'look', what we see will be overly-coloured by what we imagined or hoped for. Confirmation bias is the disproportionate imposition on a situation of our prior beliefs. Long before cognitive and other scientists began formally studying this bias the phenomenon had been noticed and commented on. For example, Sir Francis Bacon in 1620 stated: "[t]he human understanding resembles not a dry light, but admits a tincture of the will and passions which generate their own system accordingly, for man always believes more readily that which he prefers". The evidence seems compelling that our natural tendency is to look for evidence that is supportive of the views we favour.

The bias is forged or triggered by predispositions.

These may be: strongly-held beliefs; the desire to advance a particular interest or policy; wishful thinking; the power of fashionable or dominant theories or paradigms; conformity pressures; what our superiors or peers expect; our level of impatience with the financial/time cost of searching for alternative explanations and disconfirming data. Put simply, it's created by pre-judices - which are not under our direct or conscious control.

The emotionally-loaded fear or desire-driven wish that something is true unleashes a cognitive bias. This bias makes one both the victim and the perpetrator of what one does not realise is imagined or distorted.

We're not powerless against the bias. Here are three analytical steps or defences against confirmation bias. If you believe, or want to check, whether X has caused, or might cause, Y – apply the following tests:

Defence 1 – Describe in some detail, not simply suppose or assert, to yourself - and if possible and appropriate to others – what the causal chain is - the way(s) in which you think an apparent cause(s) X actually creates its effect(s) Y. This helps counter unwitting mere a priori belief. It also helps distinguish between what is just a coincidence: X and Y happened in the same place and time; and a cause: X caused or will cause Y. **Defence 2** – Undertake a reasonable search for contrary data. If there is significant data which contradicts your initial belief you need to reconsider and alter or abandon your initial causal analysis. **Defence 3** – Consider plausible rival or supplementary explanations. Maybe Z, not X, causes Y. Or X causes Y only in certain circumstances. Or X only in combination with other factors causes Y. Rival/supplementary explanations, might or might not, explain matters better than our initial explanation. If an alternative account better explains matters you should abandon or modify the initial explanation. On the other hand, if your initial explanation remains superior – you have tested it - and can be more confident it is correct and will also as a result probably have better understanding of the situation.

Implementation of these defences doesn't always guarantee the elimination of overly predetermined 'findings'. The defences are palliative and ideal. But even if imperfectly applied they will reduce the influence of confirmation bias on analysis of what has happened, or what might happen, creating better understanding and more effective action.



Professor Dr. Brendan McSweeney Ph.D (LSE) is Professor of Management at Royal Holloway, University of London

Contact:
brendan.mcsweeney@rhul.ac.uk