Why Behavioural Science: my story

Tony Duckenfield (May 2022)

Steven Johnson FRSA has said that "I've been noodling a lot recently on the role (and absence) of theory in modern behavioural science: the need to understand the underlying mechanism behind the statistical associations we find through RCTs and brute forcing data mining. In short, the need to go beyond the WHAT, to explore the WHY" and this has led me to ponder on the role of theory in the application of behavioural science and to reflect on my own journey. In this article I share my own personal story of discovering behavioural science which I hope provides some useful lessons for anyone with an interest in the subject.

The start of the story was a degree in Business Studies where, amongst other topics, I studied psychology, marketing, market research and economics. At the time I never really bought into macro-economic theory, though I did relate to some micro-economic theories such as the Theory of Diminishing Marginal Utility. I also bought into the Theory of Reasoned Action and Attitude-Behaviour Theory which I learnt about in psychology. In parallel, I accepted the AIDA model used in advertising (Awareness-Interest-Desire-Action). These seemed very logical and sensible, and they were taught pretty much as "this is the way things are". I also started out primarily as a quantitative researcher being quite sceptical of the small sample sizes and 'fluffiness' of qualitative research.

Move on about 15 years and I had something of a lightbulb moment. In fairness, my confidence in the theories I'd been taught had gradually been eroded in the face of real-life experiences which didn't match the theories' predictions. I undertook a lot of market research and I increasingly found that more insight was gained from qualitative research than quantitative, which was mainly useful for convincing clients of the value of the findings.

The key moment ('tipping point' even) was when I discovered the Low Involvement Processing model (Robert Heath, 2006). This was in the context of researching advertising effectiveness with my focus at the time being advertising in the UK rail industry.

Behind this model was evidence from the evaluation of award winning adverts (Les Binet and Peter Field 2007) which showed that many successful ads had low awareness – completely contrary to the AIDA model and Attitude-Behaviour theory. What's more there was hard scientific evidence from the field of neuroscience for how and why this is: brain scanning had shown that the first parts of the brain to be activated on seeing an ad are those associated with our emotions, with the more rational parts only engaged later. This explains why the most successful adverts have a positive emotional element to them (as well as rational component). Note that 'success' here is measured in terms of sales impact and ROI, not a false proxy indicator such as awareness or intention.

So in a flash, everything changed and I had hard evidence that many of the things I was taught at university were misleading at best. This had implications not just for advertising and marketing, but for how things were measured: from a research point of view, it means that when people answer a question such as "why did you buy brand A rather than brand B" what you're getting in response is a rationalisation of a primarily emotional decision.

Over the next decade the evidence for the emotional (and habitual) nature of decision making steadily built up. During this time I was involved with many behaviour change projects with my role including their evaluation and examining what worked well and what worked less well. I came across a number of theories and tools aimed at behaviour change practitioners with a frustration throughout this time being the continuing belief in the rational human paradigm, something which still seems dominant today despite the evidence.

The next big milestone was the 2008-9 financial crash, the emergence of 'Nudge' theory and the subsequent creation of 'nudge' units in the US and UK. This, then Kahneman's Thinking Fast and Slow (2011) really put behavioural economics on the map and I found it much easier to talk about the subject and start introducing its principles (or 'cognitive biases') into the work I was doing (see Figure 1 for an example of how I introduced the core concept behind the book). While the outdated ideas persisted, I was able to apply some of the principles of behavioural economics & behavioural science to improve project outcomes without feeling the need to challenge pre-existing thinking, which effectively involves telling people they're wrong, which never goes down well however tactfully it's put.

Figure 1: dual system decision model
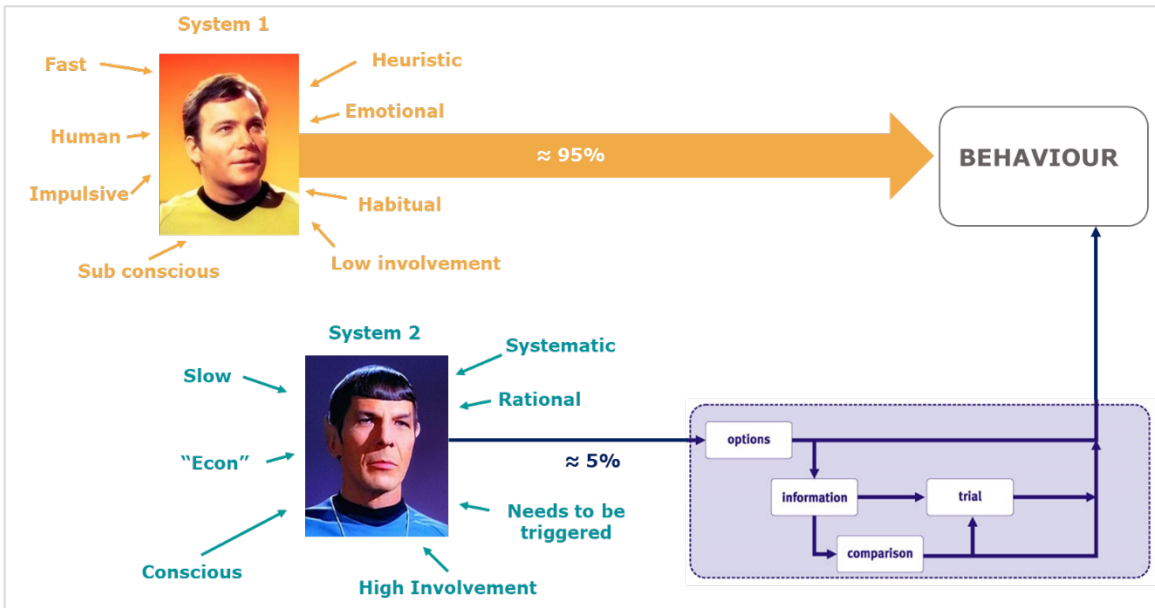
In 2020 everything changed when Covid-19 hit and for me this was especially so as it was the trigger for me to set out on my own and launch Beyond Logic Consulting. The idea was to create a better work-life balance and give me more freedom to pursue behavioural science. With this freedom I made the time to do some reading, looking at the evidence for what makes an effective behaviour change programme. To provide some focus I concentrated on measures to encourage people to be more active and to walk and cycle rather than use the car. This was very topical at the time, and with the climate change crises still is, though in a different context.

This reading included reviewing the theories, models and tools available, with my priority being to seek out evidence for their effectiveness. Recent books I've read which I've been particularly impressed by have been "How Emotions Are Made" and "Seven and a Half Lessons About the Brain" by Lisa Fieldman Barrett. These books help to explain in a very accessible way how the human brain works. One of the key points I always try to remember is that our brain works in a predictive way, so decisions are made even before we are consciously aware of them.

For me, understanding how we make decisions is the key to answering the question 'why'. The job of any theory, model or tool is then to make it easier to utilise this understanding in order to improve the effectiveness of actions aimed at changing behaviour. What we always need to remember is that all theories, models and tools are a convenient simplification of reality which, for one thing, is affected by context (which of course itself changes). This leads onto my top three lessons:

1. People are humans not 'econs' so are driven by emotions (and by the way, this is a good thing not a weakness);
2. All theories, models or tools which proport to explain human behaviour are limited and context-specific;
3. Research therefore plays a vital role in any behaviour change project, to understand the context, to test and refine, then to evaluate and learn.

Footnote

Having written this article and being aware of seeing many adverts which seem to utilise the AIDA model I had a look at what's happened to it and, incredibly, instead of being consigned to history it is indeed still being used, with one example of its latest incarnation being: AISDALS (Attention, Interest, Search, Desire, Action, Like/dislike, Share, and Love/hate). This I think is an excellent illustration of a number of Behavioural Science effects (such as Confirmation Bias) and why change is so hard. The slow pace at which people change (as opposed to technology which changes relatively quickly) was further illustrated on re-reading a report written by Dr Jillian Anable written back in 2006 which exposed the "Attitude – Behaviour gap" and the need to focus on changing people's behaviour rather than their attitudes. This was in the context of climate change and made the point which is as valid now as it was then, that being aware and worried about climate change is not enough to change behaviour beyond token changes which help people to feel like they're doing something.

Bibliography

Ajzen, I. (1991) "The Theory of Planned Behaviour", Organizational Behavior and Human Decision Processes, Volume 50, pp. 179-211

Dr Jillian Anable et al (2006) "An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour", for the Department of Transport

Robert Heath (2006) "The Hidden Power of Advertising", Admap Publications

Les Binet and Peter Field (2007) "Marketing in the Era of Accountability", WARC

Richard Thaler and Cass Sunstein (2008) "Nudge"

Daniel Kahneman (2011) "Thinking Fast and Slow"

Richard Thaler (2015) "Misbehaving: The Making of Behavioural Economics"

Bambang Sukma Wijaya (2015) "The Development of Hierarchy of Effects Model in Advertising" (DOI :https://doi.org/10.21632/irjbs.5.1.73-85)

Lisa Fieldman Barrett (2017) "How Emotions Are Made: the secret life of the brain"

Lisa Fieldman Barrett (2020) "Seven and a Half Lessons About the Brain"