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Paper 8

Calling time on binge drinking

Behavioural economics uncovers the hidden influences behind binge drinking

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Abstract

Traditional economists would have us believe that people are rational, utility-maximising, cost-minimising and socially isolated individuals with stable preferences. This view also pervades market research and our practices, but is being challenged by a relatively new field in the social sciences, known as Behavioural Economics (BE). Influenced by BE and related psychological theories, this paper provides a new behavioural model that identifies some of the influences on our behaviour that the research industry regularly overlooks. It shows how ideas from the behavioural sciences have been used to develop a new mass ethnographic approach – The Behavioural Detectives – and describes how this might be applied to understand the factors that lead to irresponsible drinking in the UK.

Introduction

Irresponsible drinking is a serious problem in the UK; it leads to anti-social behaviour, violence and health problems. It puts enormous strain on the judiciary, public health and police services and it is estimated that it costs the UK taxpayer approximately £20 billion a year. Despite advertising campaigns and traditional messaging to reduce it, irresponsible drinking still remains a significant problem. Even the after-effects of excessive drinking are not enough to deter us from future episodes. If we were the rational, benefit-maximising creatures that traditional economics purports us to be - 'homo economicus', we would not drink so that we were ill or put ourselves in danger through insobriety. The fact is that we are very malleable our preferences: our decisions are influenced more than we realise by our frame of mind, the people we are with and our environment. We are not, as many (and many research approaches) would paint us, perfectly logical and socially isolated individuals with stable, lasting preferences. Information and educational campaigns are often not sufficient in and of themselves to change behaviour. There are many factors that contribute to excessive drinking and they are routinely overlooked by politicians and policy-makers, and little understood by the general public.

The problem is that alcohol drinking is woven into the fabric of everyday life; a stressful day at work can soon lead to a habitual drink to wind down at the end of the day, our friends buy drinks for us and even just the physical reminder of the wine bottle in the fridge or the beer taps on the pub bar can influence us into to have a drink. There are many external influences on our behaviour such as these that can make moderate drinking difficult – or rather, that make excessive drinking very easy. To get to the bottom of irresponsible drinking and to understand why we have so little self-control, are so influenced by our environment and the people around us, we need to look at the psychology of decision-making.

Psychologists, such as the Nobel-prize winning Daniel Kahneman, assert that humans use two thinking processes to make decisions: [i]

- System 1 is a perceptual and intuitive system, generating involuntary impressions that do not need to be expressed in words. This system is automatic, effortless and influenced by emotion.

- System 2 on the other hand is effortful, analytical and reflective. Our capacity for processing information using System 2 thinking is limited, however, and so we are instead often happy enough to trust a plausible (System 1) gut judgement that comes easily to mind.

Whilst System 2 thinking monitors all our decisions, psychologists contend that it is System 1 thinking that guides a great deal of our thinking and behaviour on a day-to-day basis.

System 1 thinking explains many of the seemingly irrational short-cuts (or heuristics) we use in decision-making – and is an important idea that runs through a relatively new social science discipline known as *Behavioural Economics* (BE). Behavioural science questions the premise that the choices we make are the result of deliberative, linear and controlled processes, and instead asserts that we are strongly influenced by context; our decisions are guided by the conditions of the moment – by social and environmental influences (including the way in which choices are presented) – as well as by cognitive short-cuts, emotions and habits. We are not the rational, benefits-maximising, cost-minimising, socially isolated individuals with relatively stable preferences that traditional economics purports us to be.

This is of enormous significance to the market research industry because it, too, is largely founded on the traditional economic view of humanity, of homo economicus. While some market research practice shows an awareness of the phenomena identified by Behavioural Economics, a behavioural view offers us a completely new perspective on how people behave, and its implications for market research are far-reaching. Many of our research practices, for instance, assume that what a respondent says now will predict their course of action in the heat of the moment some time in the future. Market research also often assumes that respondents are able to recall faithfully, report fully and understand their behaviour when often they can't. Reported behaviour, attitudes and declared intentions often bear little relation to real world behaviour and we can often explain this discrepancy through behavioural and cognitive biases. If we are to move forward as an industry then we need to understand the "hidden" influences on human behaviour and the natural biases inherent in all of us.

This provides new opportunities for market research to understand the context within which people make decisions, as Richard Thaler says: '*just as no building lacks an architecture, so no choice lacks a context*'. This new direction shifts the emphasis of research from how people perceive their own behaviour to one which is sensitive to their surroundings and to their internal states. It can therefore help to fill in the gaps missed by traditional market research.

This paper therefore sets out to:

1 provide a review of behavioural theory for the benefit of the research industry

2 share with the industry BrainJuicer's Behavioural Model, which is rooted in BE and describe how it influenced a new mass ethnography approach that is fine-tuned to identify "hidden" influences and describe/explain behaviours

3 describe how this approach was applied to the difficult and serious problem of irresponsible drinking in the U,K and how it generated a number of solutions that could be tested as interventions in the real world to help reduce the problem.

A new behavioural model for the research industry

Whilst Behavioural Economics has provoked interest from certain quarters of the market research industry, very little has been written yet to distil the underlying principles of Behavioural Economic thinking or to discuss its implications for market research. Amongst those writing on the subject, there is an implicit acknowledgement that qualitative research practices are naturally more in tune with behavioural theory and that it is our quantitative practices with the most to learn. Notable contributors include Wendy Gordon, who has suggested that qualitative research and Behavioural Economics already naturally share a "socio-psycho-cultural" perspective on human behaviour; Perry & Johnston, who have asserted that Behavioural Economics re-affirms the importance of qualitative research, and urge the quantitative arm of the industry to embrace more qualitative practices; and Jules Berry, whose concerns lead him to assert that we should adopt a combination of different approaches (quantitative, qualitative, ethnographic, sensory and neuroscience) if we are to ensure that market research does not mislead. Berry also calls for the industry, in the light of Behavioural Economics, to examine the situations in which research is poor at predicting behaviour. Market research has for some years been moving towards understanding actual behaviour in context through observation (rather than stated attitude), and so against this backdrop, we believe it is a timely and helpful exercise to summarise the thoughts running through Behavioural Economics, and to reflect on how it might help us. But what would such a summary for the research industry look like?

Embarking on a reference guide for market researchers is a considerable challenge. BE, like most of the social sciences, is by no means a clearly delineated field. In the broadest sense, BE overlaps with a number of areas within economics and psychology, including cognitive, social and obviously consumer psychology, and touches on aspects of evolutionary psychology, anthropology and sociology. We take as our starting point the UK government-sponsored project MINDSPACE, which presents a comprehensive account of behavioural theory relevant to behaviour change policy. We feel it's helpful to simplify some of the ideas outlined by MINDSPACE, while extending the definition of BE to

include some others that are more on the periphery of BE theory.

BrainJuicer's Behavioural Model, developed with marketers, advertisers and researchers in mind, seeks to condense and structure the ideas outlined in Behavioural Economics and related fields (mainly social and environmental psychology) into three areas so that the ideas can be easily applied to identify and solve commercial, cultural and social problems:

1 Personal Factors:
  a Humans don't like change: people often 'go with the flow' by inaction, sticking to what they know or doing the same things repeatedly
  b People live in the here and now:
    i Behaviour is often the result of how we feel in the moment of decision-making
    ii We often lack self-control and foresight; we can be impulsive and our thinking is biased toward the present

2 Social Factors:
  a People are influenced by others: we often do what others are doing and what's expected of us
  b We are not inherently selfish: reciprocity and altruism also motivates behaviour
  c Humans want to feel good about themselves: behaviour is often motivated by wanting to maintain a positive self-regard and consistent self-image

3 Environment:
  a Surroundings: the physical environment holds cues capable of influencing behaviour non-consciously
  b Choice architecture:
    i Choices are relative: behaviour depends on the options that are available to people and how they are presented to them
    i Humans are 'cognitive misers': people can't attend and process all information available to them and as a result choices are guided by the salience of information and mental shortcuts (heuristics)

Armed with a behavioural perspective, and how external and internal context can influence our behaviour, we can begin to change people's behaviour by influencing the context of decision-making. This is different and often radically more effective than the traditional view of behaviour change (and established principles of marketing), which assumes that the only way to change people's behaviour is to provide them with the right information, education or incentives to make informed (and desired) decisions.

Exploring the influences and biases that make us human

1 Personal Factors

Humans don't like change: people often 'go with the flow' by inaction, sticking to what they know or doing the same things repeatedly

Human beings don't like thinking too hard and they don't like change either. We like the familiar and the stable, the route that requires the minimum amount of effort over time. The preference for things to remain the same, the tendency not to change a behaviour unless the incentive to do so is really strong, has been termed the *status quo bias*. [ii] A status quo bias usually results in people ignoring the choices available to them in favour of behaviour established through routine. *Habits* are automatic and appear as instinctive. They "usually develop when actions are repeatedly paired with an event or context". [iii] Drinking coffee immediately after waking up, locking the front door as you leave the house or throwing all rubbish into the same bin (instead of recycling) are all examples of habituated behaviours.

If habit is about the repetition of behaviours and a rigidity regarding the change of those behaviours, human inertia is often characterised by doing precisely nothing. Our tendency to go with the flow, along with an inclination to be influenced by social norms (discussed later), is related to the behavioural economic concept of defaults. [iv] Defaults are courses of action that take effect if the decision-maker does nothing. [v] One of the most well-known examples of a default is in the area of organ donation. Where countries such as Austria use opt-out defaults (i.e. you need to specify if you do not wish to donate your organs) higher rates of organ donation are seen than in countries with opt-in defaults. [vi] The more complex choices are, the less people are likely to make an active or informed choice, and the more likely they are to maintain a default option. Simplifying the way that choices are put to people (through choice architecture) by making clear the best course of action for them at the point of decision-making (i.e. highlighting the desired action) can have an enormous effect on choice. Providing feedback, a sense of what other people have done or recommend at the point of choice, has been shown to guide people to make the desired choice. [vii] We are of course acutely aware of this in market research in our questionnaire design, and go to some lengths to ensure that we do not inadvertently

guide respondents to a particular decision.

A special case of inertia that has been identified by behavioural researchers relates to "consumption momentum". How many of us have continued to munch our way through a super large packet of crisps (potato chips) until they are gone, even though we began to feel full when we were half way through? One solution to the problem appears to be partitioning. [viii] Both the quantity and speed of consumption can be reduced by introducing a partitioning of resources (i.e. additional packaging) or by decreasing portion sizes. For instance, the rate of biscuit (cookie) consumption will tend to be lower when they are individually wrapped. A similar principle applies to spending; a £1,000 salary paid in one bundle of cash will typically lead to a higher proportion being spent in a given time period than the same amount paid in 10 sealed envelopes containing £100 each. One theory behind the phenomenon is that partitions provide physical boundaries between pools of resources. They give consumers a decision point – a psychological hurdle encouraging people to stop and think. In addition to the actual cost incurred once resources are used, opening a new partitioned pool of resources incurs a psychological 'transgression cost' [ix] that triggers guilt, regret or even feelings of failure. [x]

Humans live in the here and now:
- Behaviour is often the result of how people feel in the moment of decision-making
- People often lack self-control and foresight; they can be impulsive and their thinking is biased toward the present

Psychologists have shown that emotional associations and evaluations guide our decisions. [xi] Emotions can unconsciously or consciously reduce the complexity of decision-making, influencing automatic evaluations [xii] that help us towards a decision. This occurs by means of 'somatic markers', associations between stimuli and affective states that are based on past experience. [xiii] Moreover, if we feel good about a brand, it is likely that we will be prepared to pay more for it than for a brand we feel less well-disposed towards. [xiv] Not only is our behaviour guided by these long-lasting emotional impressions and associations, however, it is also clear that our visceral state in the moment can guide our behaviour.

We all know from personal experience that the way we feel at a particular moment can cloud our judgment. Behavioural economists refer to emotional states that interfere with 'clear thinking' as hot states. Examples include hunger, sexual arousal, pain or fear. Hot emotional states increase our desire for instant gratification by making the thoughts associated with current needs more accessible, while reducing the accessibility of other thoughts [xv] that might moderate our behaviour. Have you ever entered the supermarket hungry and caught yourself buying food that was not on your shopping list? Or come to regret an angry email sent in the heat of the moment?

The hot-cold empathy gap therefore refers to people's tendency to underestimate (in a cold state) the effect of such

hot states on their future behaviour. [xvi] So for example, people would probably predict that they will practise safe sex, but this prediction often doesn't materialise in an actual 'hot' state. [xvii] The same is true for drink-driving, dieting, drug taking, and many other behaviours. [xviii]

Empathy gaps demonstrate that we are a species that lives very much for the present and often lacks self-control. Given a choice between instant and delayed gratification, we are biased towards a decision that will benefit us in the present. We are very poor at deciding on a course of action that will benefit us in the future, if an alternative course of action will benefit us in the present (even if it benefits us less). When given a choice between receiving a gift worth £8 today or one worth £10 in a week's time, some of us will take the gift worth £8 today. But when asked whether we would take a gift worth £8 in exactly one year from now or a gift worth £10 in one year and one week from now, most of us would opt for the 'gift worth £10 in one year and one week from now' option. We are more likely to wait the extra week for the greater reward in the latter case, because the delay occurs in the distant future. This is known as hyperbolic discounting. [xix] Present-biased preferences are evident in a range of domains, including finance, health and environmental behaviour.

Value can be personal: we prize what we own and are averse to loss

Behavioural Economics places great emphasis on our shifting perceptions of value. The way we approach potential loss and potential gain, possession, price and scarcity all have a bearing on the way we perceive value.

The most commonly featured and applied idea developed in BE research is that of loss aversion. [xx] People dislike a loss more than they like an equivalent amount of gain. They will work harder to avoid losing £1000 than to gain the same amount and the threat of material or financial loss can act as a more powerful incentive than can a reward. The way to work with this bias is in many cases to frame a decision in a certain way. For example, in some countries, deposit schemes exist that require people to pay a small amount of extra money at the till when buying beverages in glass bottles. The money is only refunded upon returning the bottle to the shop. The alternative approach would be to include the deposit in the price of the bottle, but it is unlikely that the scheme would be as successful if shoppers were not charged at the point of purchase and given an opportunity to recoup the loss.

In standard economic theory our willingness to pay for an object should be equal to our willingness to accept compensation to lose it, [xxi] but in actual fact we place a higher value on goods (or services) once we have established ownership. This is known as the endowment effect. [xxii] Marketing that allows consumers to experience or own a product first, such as free introductory subscription trials for a magazine, take advantage of the endowment effect. Think of this the next time a credit card company tries to entice you by sending you a mock credit card with the look and feel of a real credit card and your name on it!

The immediate joy that ownership brings is seldom long-lasting, however. We tend to adapt to newness fairly quickly and the sheer delight we take in an object when we first obtain it rarely lasts. This is known as hedonic adaption. Research suggests, however, that the repetition of small positive experiences, such as exercise or religious practices, has a longer lasting effect on our well-being. [xxiii] The implication for marketers is that they should provide customers with "hedonic boosts", frequent renewal of the happiness that first accompanied product ownership or receiving a service.

Both social scientists and marketers have long been fascinated by the fact that expectations colour experiences or perceptions. Expectations associated with receiving a medical treatment can be so powerful as to produce a placebo effect, an actual improvement of the condition based on a state of mind. This effect can be manifested in perceptions, like taste and smell, and actual behaviour, such as performance on a task. People tend to infer better quality from higher prices and experiments have found that price can lead to powerful effects akin to those of a placebo. In one such study participants were given a drink that claimed to improve mental acuity and were asked to solve puzzles. In the first condition, subjects received a discounted drink, in the second condition it was available at a regular price and in a control condition there was no treatment. Results showed that the discounted drink negatively affected performance (the number of puzzles solved correctly), compared with both the regular-priced and control conditions. [xxiv] In theory, price should follow value, but here value was determined by price. [xxv]

Research has also shown that the relationship between price and value is not linear and is linked to the object carrying the value. [xxvi] To a 'rational' economic decision-maker, a price reduction of 50p might suggest the same magnitude of change in incentive to buy the product regardless of the starting point, but this is not the case: a product becomes more attractive if its price is reduced from 50p to nothing (FREE!) than if it is reduced from £1 to 50p. Money also conveys power and authority (symbolic or otherwise) that goes beyond the value it represents. While we would all agree that a bottle of Coke worth £1 is worth £1, many of us would feel it was 'more ethical' to take (or "borrow") a bottle of coke from a colleague in the work fridge than a £1 coin. [xxvii] And why do we sometimes part with money more easily when it's less tangible, such as in a credit card transaction, rather than actual cash? Brain scan research suggests that the 'pain of paying' may be

"anaesthetised" with credit card use because it doesn't feel like we're parting with real money, i.e. cash. [xxviii]

Another phenomenon related to the association of price with quality, is the scarcity effect, where perceived shortage leads to higher valuation of a product. For example, one study has shown that the limited availability of books makes individuals rate the books as both more unique and more costly. [xxix] By the same token, the appeal of unavailability is evident on the high street whenever "limited time only" or "closing down" sales signal scarcity. [xxx]

There are also differences in value perception depending on the immediacy of the payoff. As a general rule, "we prefer smaller, more immediate payoffs to larger, more distant ones". [xxxi] As we saw earlier, present bias means that we are likely to value something much less if it is a far-off possibility compared with a present reality. Our lack of self-control and the lower value put on future payoffs are key issues that behavioural interventions attempt to tackle. Delayed feedback about the effects of one's actions makes self-control and the learning of new behaviours more difficult. For example, people might learn health lessons much more effectively if hangovers occurred instantaneously or if weight gain from overeating were immediate rather than gradual. In cases where the effects of human behaviour are not only delayed, but also largely invisible and diffuse, as is the case with global environmental problems, behaviour change presents a particularly difficult challenge.

We want to feel good about ourselves: behaviour is often motivated by wanting to maintain a positive self-regard and consistent self-image

People have a need to maintain a positive self-image and we tend to "act in ways that make us feel better about ourselves". [xxxii] This fundamental need influences the way we interpret events and experiences. [xxxiii] Psychologists assert that it is common for people to distort reality or interpret it in their favour, because it allows them to maintain a positive feeling about themselves. How many of us can truthfully say that we haven't exhibited this self-serving bias, when we attribute successes to personal (internal) factors, but consider failures to have been beyond our control, due to the situation or other people? [xxxiv] Similarly, illusory superiority leads people to overestimate our positive abilities or qualities, while underestimating negative ones, relative to other people. This is sometimes referred to as the 'above average effect', and explains why most people tend to consider themselves to be of above average intelligence or even driving ability. [xxxv]

A positive self-image is often threatened by our own outward behaviour. Heavy smokers usually consider themselves to be rational people, and are fully aware of the risks associated with smoking, yet they continue to smoke. The uncomfortable tension that exists between two simultaneous and conflicting ideas or feelings – sometimes an inconsistency between who one would like to be and who one appears to be – is called cognitive dissonance. According to the theory, people are motivated to reduce this
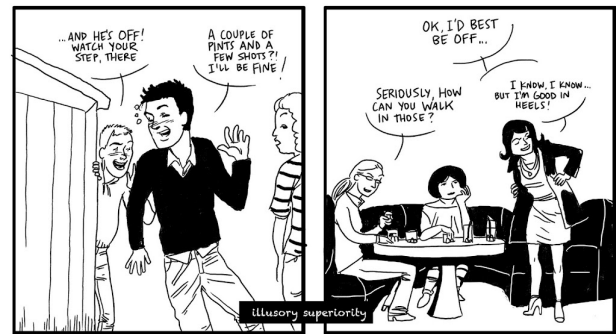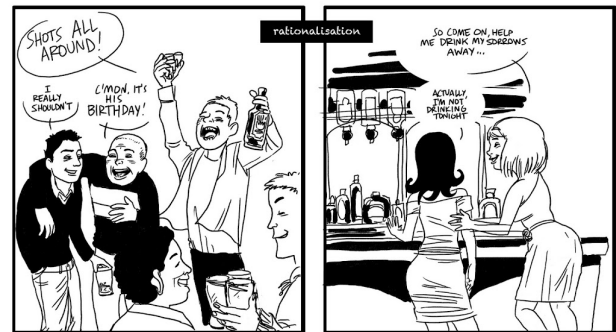
tension by changing their attitudes, beliefs, or actions. [xxxvi] One popular dissonance reduction technique is what we all know as rationalising. Unlike rational choice and information processing views of human decision-making, however, where reason and preferences guide choices, rationalisation implies the opposite: preferences often justify actions after the fact, and knowledge, education and attitudes are modified so that they can co-exist with a certain behaviour. [xxxvii] Research among smokers highlights these 'self-exempting beliefs'. Compared with ex-smokers, current smokers are significantly more likely to hold beliefs such as 'The medical evidence that smoking causes cancer is not convincing', 'Most people smoke' or 'Many people who smoke all their lives live to a ripe old age,

so smoking is not all that bad for you'. [xxxviii]

Cognitive dissonance theory is an example of the human need for certainty, continuity and consistency. Consistency also manifests itself in the salesman's foot-in-the-door technique, where the salesperson makes their target comply with a seemingly small request first (such as asking for a glass of water), in order to increase the chances of compliance with a bigger request (making a sale). We have all most likely been asked by a passer-by for the time of day, only then to be later asked for money. Having shown ourselves to be helpful or friendly, it is difficult then for us not to maintain that precedent when we are asked for money; we are likely to comply with the subsequent request in the (non-conscious) interest of consistency.

Consistency is also at the root of another behavioural bias known as (public) commitment. Our reputation will be damaged if we declare a course of action publicly, only then to break our commitment. The website stickK allows people to create 'commitment contracts' (including a designated referee and supporters drawn from the stickK community, along with an optional financial stake) in order to change behaviour in favour of achieving a personal goal. StickK maintains that commitment is key: "years of economic and behavioral research show that people who put stakes - either their money or their reputation - on the table are far more likely to actually achieve a goal they set for themselves".

2 Social Factors

People are influenced by others: we often do what others are doing or what's expected of us

Humans are not inherently selfish: reciprocity and altruism also motivates behaviour

A belief central to the traditional economic model is that humans make decisions in relative isolation and to serve their own interest. An important area of the social sciences, including BE, involves the influence of others on individual decisions: the power of the 'messenger' (rather than just the message itself) to influence. [xxxix] It is certainly true that we are likely to be influenced by experts or sources of authority, but the people we like and people like us (e.g. our peers) also hold tremendous sway over what we do. [xl] Who would be more likely to influence the way you behave, the government or a friend?

Knowing to whom certain groups of people are more likely to listen, and whether the effect is likely to last, is a key question in planning behaviour change campaigns that rely on information and persuasion. In certain African countries, like South Africa, programmes involving the dissemination of condoms and health-related information by peers (members of target groups) have been adopted in order to prevent the spread of HIV and AIDS. [xli] Similarly, marketers who have focused largely on models of direct persuasion in the past have become increasingly conscious of the fact that consumers are more likely to listen to other consumers than marketers in their decision making. [xlii]

Why in the West do we shake hands with people we meet for the first time? This is a simple example of a social norm – a rule (usually unspoken) within a society or group of people. Social norms tend not only to vary across social groups, but to differ according to context and culture. Dan Ariely points out, for example, that while market norms would dictate that payment is required for goods or a service, social norms are quite different – would you offer to pay your mother- or father-in-law for the meal she/he has prepared for you? [xliii]

One of the most deeply engrained social norms is that of reciprocity. While we wouldn't pay a friend or family member for a home cooked dinner, we may feel compelled to invite hosts back or reward them with a gift, like a bottle of wine. Our "instinct" for reciprocity is linked to a human desire for fairness and a commitment to return favours. This is why free samples (such as pens included with charity contribution envelopes [xliv]) are often effective marketing tools. [xlv] Reciprocity can contribute to behaviours that mainstream economics would deem irrational, because they are not the result of a desire to maximise gains and minimise losses. Instead, reciprocity follows a social and evolutionary logic.

We also often look to others for guidance in ambiguous situations. This is known as informational influence, and is sometimes related to the concept of "social proof". [xlvi] A popular example is that of nightclub queues, which can be manipulated to be excessively long and serve as evidence for the venue's popularity! If we adapt our behaviour to be accepted or liked, we are subject to normative influence. [xlvii] This influence is evident in social groups and networks and it has been shown, for instance, that heavy drinkers and smokers report the same unhealthy behaviours across their social group (which is also due to the fact that 'birds of a feather flock together'). [xlviii]

3 Environmental Factors
a Surroundings
Our surroundings matter: the physical (and social) environment holds cues capable of influencing behaviour non-consciously

Sometimes we are affected by other people in ways we do not consciously realise and we mimic our social environment. [xlix] For example, have you ever noticed how you unwittingly keep pace with others in the room when eating snacks at a party? Alex Bentley and Mark Earls have argued that random (or "undirected") copying has much greater explanatory power

than we would like to believe. [l] It is the visibility of products and behaviours that allows copying behaviour to occur. [li]

That the local environment can influence our behaviour is perhaps no better demonstrated than in an experiment conducted in the UK. Shoppers in an off-licence (liquor store) were exposed either to stereotypical French music or to stereotypical German music, and sales of French and German wine were monitored. During the period in which French music was played, French wine outsold German wine by a ratio of 5:1. During the period in which German music played, German wine outsold French music by 2:1. The music, it was concluded, was responsible for the difference in sales. Responses to a questionnaire, however, indicated that customers were not aware of the effect that music had on their choices. [lii]

It has been shown that classical music affects the pace of in-store traffic; slower music can decrease the speed of traffic while increasing sales volume. While slower music may increase drinking of alcohol in restaurants, drinking in other settings, such as bars or pubs, has been shown to be stimulated by loud music. [liii]

Music is not the only environmental factor that can influence consumption behaviour. Atmospheric stimuli that influence choice have been shown to exist across five categories: [liv]

1 external variables (e.g. shop exterior and general area)
2 interior variables (e.g. lighting, music and temperature)
3 layout and design variables
4 point-of-purchase and decoration variables (e.g. price and permanent product displays)
5 human variables (e.g. how crowded the space is and the people who work there)

The effect of music on our subsequent behaviour in the

wine purchasing example is just one instance of priming. Priming occurs when a stimulus sub-consciously activates existing memories, making them more readily available. [lv] Words, visual representations, sounds or even smells can all act as potential primes. Words are often used in priming research to act as cues to activate certain mindsets. One study, for example, primed participants with religious and non-religious words and found that those exposed to the religious prime were more likely to help a charity at the end of the experiment, i.e. to act more pro-socially as a result. [lvi] Another experiment found that people primed with newspaper articles about asylum seekers behaved in line with negative 'dishonesty' stereotypes associated with this group: they were more likely to accept an "accidental" extra payment of £5 for their research participation, when they had already accepted £5 at the start of the experiment. [lvii]

Research on alcohol consumption showed that the amount of beer consumed by individuals primed with 'positive expectancy outcomes' (words like 'talkative', 'confident', 'relaxed', etc.) was higher than among those primed with negative words ('sick', 'clumsy', 'dull', 'slow', etc). [lviii] Visuals, either in the form of still pictures, videos or objects can also produce priming effects. Seeing walking shoes and runner's magazines can steer people towards healthy courses of action, such as taking the stairs instead of the lift (elevator). [lix] The smell of a cleaning product has made people more likely to keep their table clean in a canteen. [lx]

Market researchers are, of course, well aware of how order or context effects in questionnaire design can lead to inadvertent priming. Consider a research study involving a question measuring happiness. In the study, a sample of students participated in a survey that included two questions, "How happy are you with your life in general?" and "How many dates did you have last month?". The correlation between the two questions was very small when they were asked in this order, but it rose to 0.66 when the question about dating was asked first. [lxi] The dating question evokes an evaluation of one's satisfaction in that domain of life, which subsequently colours one's assessment of overall well-being. [lxii]

b Choice Environment

Humans are 'cognitive misers': people can't attend and process all information available to them and as a result choices are guided by the salience of information and mental shortcuts (heuristics)

Choices are relative: behaviour depends on the options that are available to people and how they are presented to them

An important idea running through social and cognitive psychology and consistent with Behavioural Economics is that people have two systems of thought for decision-making. System 1 and System 2 thinking are terms coined by Stanovich and West, [lxiii] and used by Nobel Prize Winner, Daniel Kahneman, to describe the two mental processes we use to make decisions. System 1 is a perceptual and intuitive

system, generating involuntary impressions that do not need to be expressed in words. This system is fast to react, automatic, associative, effortless, influenced by emotion and learns gradually over time. System 2 on the other hand is slow to react, effortful, analytical, rule-governed but flexible enough to assimilate and process new information. Our capacity for processing information using System 2 thinking is very limited, however, and so we are instead often happy enough to trust a plausible (System 1) gut judgement that comes easily to mind. Too much information and too many messages leave us unable to cope, and System 2 thinking breaks down. Whilst System 2 thinking monitors all our decisions, behavioural scientists argue that it is System 1 thinking that guides a great deal of our behaviour on a day-to-day basis. [lxiv]

People often consider things important if they come to mind easily, [lxv] and decisions are often influenced by the accessibility of information in perception or memory. The way we mentally prioritise anecdotal human stories is a good example of this. We are likely to believe that an unhealthy lifestyle poses little risk of an early death to us simply because we know a heavy drinker or smoker in the family who lived to be 90 years old. Media coverage of moving individual human stories similarly fuels people's exaggerated sense of risk when it comes to paedophiles or air crashes. These are examples of the availability heuristic which often causes us to give too much weight to small probabilities. This heuristic, along with humans' greater sensitivity to improbable outcomes (the possibility effect), explains why we enter lotteries with a very small chance of winning and why people's overemphasis of the small chance of being audited leads to greater tax compliance than a rational choice model would predict. [lxvi]

As we all know from experience, people also tend to mentally prioritise information that supports rather than challenges an existing belief or hypothesis. [lxvii] Most of us will read a newspaper that we know is in sympathy with our political leanings and that will pre-filter information in a way that confirms our existing beliefs. This is known as confirmation bias. Related to the concepts of priming and confirmation bias is anchoring, which also relies on a judgment of similarity. This occurs when we come across a piece of information and then later perceive all new information in light of that initial piece of information or 'anchor'. [lxviii] For example, the price of the first house shown to us by an estate agent may serve as an anchor and influence perceptions of houses subsequently presented to us (e.g. as cheap or expensive).

Which would you prefer to hear if you were in hospital with a life-threatening illness – that you had an 80% chance of survival or a 20% chance of death? Would you be more likely to stop drinking if the goal is giving up alcohol (an 'inhibitional goal') or to accumulate alcohol free days (an 'acquisitional goal', as practised by Alcoholics Anonymous)? Information can be communicated in different ways to people, and can affect thought-processes and preferences. [lxix] This is broadly known as framing, which describes how "different descriptions of the same problem highlight different aspects of the outcomes". [lxx] In other words, when presenting a problem

or choice, one of two sides of a coin is emphasized by making one more salient than the other.

Humans tend to approach decisions with the view that choice is "relative to what you can have, not absolutely about what you want". [lxxi] From a rational choice perspective, preferences between two different options should not depend on the presence or absence of additional options, but this is not the case, it seems. In one experiment, participants were given the option of choosing an elegant pen or $6. 36 percent of people chose the pen. With the addition of a less elegant pen as a decoy third option, 46 percent chose the elegant pen – an increase of 10%. The perceived attractiveness of the existing option (the elegant pen) was enhanced by the presence of a similar but less attractive option (less elegant pen). This is known as an asymmetrically dominated choice. [lxxii]

"Salience" effects also apply to the way our memory operates. Primacy and recency effects describe how our memories give precedence to items at the beginning or end of a sequence, such as items on a list. [lxxiii] Our memory of an experience, by contrast, is most strongly shaped by the way we felt at the peak and the end of the experience. [lxxiv] Instead of remembering the average level of happiness we felt at a party, for example, we use a mental shortcut by remembering the most exciting moment (e.g. chatting with a group of interesting people) and how we felt when we left (saying good-bye to the host). These effects are of course well-known to researchers, who go to great lengths to overcome order effects in quantitative research with the use of rotations and balanced designs.

The effect of salience and physical accessibility can be seen in the experimental redesign of a school lunch canteen. Moving the chocolate milk behind the plain milk leads students to purchase more of the plain variety, while placing the salad bar away from the wall in front of the checkout register dramatically increases sales of salads. Similarly, if school lunch serving staff ask each child whether they want a salad, significant increases in salad sales can occur. [lxxv]

The Behavioural Detectives – A Mass Ethnography Pilot Study Inspired by Behavioural Economics

One of the challenges highlighted by Behavioural Economics for market research is that our behaviour is largely dependent upon context. Our appreciation of BE led us to consider how we might re-examine alcohol purchasing and consumption through a behavioural lens. Ethnography has an advantage over self-report research in that it can capture unguarded behaviours that reported behaviour is unlikely to identify as they unfold in context. It also allows us to focus on what is happening during the moment – for example the social scene, the look and feel of a place etc. But what if an ethnographic approach could be 'fine-tuned' so that it was sensitive to the biases, drives and influences outlined by BE? What if we could, in some sense, prime people to look for behavioural evidence?

The challenge we set ourselves was to uncover influences on irresponsible drinking behaviour in pubs and bars, as this topic allowed us to cover both the buying and consumption of the

products, as well as the social and environmental context in which this happened. Irresponsible ('binge') drinking is a considerable problem in the UK and puts enormous strain on the public health and the police services, not to mention the personal cost to those who indulge in it, and to those around them.

The pilot project we conducted took the form of a mass ethnographic study, where teams of participants were asked to become 'lay-ethnographers' or our field detectives. By means of a playful but carefully structured exercise, participants were briefed to examine the drinking environment from one of four behavioural dimensions. To bring the four dimensions to life and make them both intuitive and accessible, we used the characters of four famous fictional detectives, whose approach might be seen to mirror the four behavioural dimensions, to examine four slightly different lines of enquiry:

Miss Marple: Chosen to lead the Individual line of enquiry for her sharp logical mind and a masterful understanding of how people think and feel.

Poirot: Chosen to lead the Social line of enquiry for his social approach to detective work - focusing on getting people to talk by positioning himself as "Papa Poirot". A master when it comes to understanding social influences and conventions.

Holmes: Chosen to lead the Local Environment line of enquiry. Completely logical, Holmes is able to observe environmental evidence dispassionately to draw conclusions. "From a drop of water", he once proclaimed, "a logician could infer the possibility of an Atlantic or a Niagara without having seen or heard of one or the other."

Columbo: Chosen to lead the Choice Environment line of enquiry. His keen eye for detail means he understands what

we're being offered, and how we're being offered it, affects our decision-making.

We adopted the character of these detectives when briefing and moderating discussions. Each detective leader 'personally' welcomed the lay-ethnographers in their own style and thanked them for joining the investigation. To motivate our participants further we added a competitive element: no TV detective wanted to be outdone by the others! The intention was to inject a sense of fun into the project and make the task more like a game. Whilst the subject is a serious one, we wanted to make the task playful, as we hoped this would encourage participation and improve the observations we received.

As this was a pilot project, our participants were first drawn from BrainJuicer employees, but following encouraging results we broadened our recruitment to participants from a market research panel. The findings reported here are taken from both sets of participants. We ensured that all participants were planning to visit a pub/bar within the following week, before assigning them to one of the four groups according to their preference. Using the behavioural influences specific to each detective, we provided leads – a number of prompts related to the particular dimension under investigation. The lines of enquiry were specific enough to give direction to our detectives (e.g. what do you notice about the sound in the bar, the seating, the décor – and what effect do you think this has on people's behaviour?), without leading them to a particular observation. We hoped this would strike a balance of engaging their curiosity and guiding them to use their initiative. Sherlock Holmes' brief is shown as an example below.

Respondents reported their observations on our community platform and conversations developed around what people had identified. Pictures and videos taken on participants' camera phones were also uploaded with commentary.

Findings

The framing of the four groups meant that they each provided very different sorts of evidence for our 'investigation'. Here are highlights from the four detectives' investigations.

Local Environment - Holmes

The physical environment and layout of a bar are important aspects in establishing the prevailing atmosphere. In pubs where there was minimal seating and people were forced to stand close together, we found higher levels of drinking. This is for a couple of reasons, the noise and energy of people closely grouped together seems to create a state that encourages faster drinking, undoubtedly the noise levels also mean it is harder to hold conversations (especially with more than two people) so people drink in the conversation lulls. Some pubs strategic use of tables forced people into space-restricted areas and wooden floors amplified the sound making the most of this effect. For example, one of our detectives observed:

> "I went to a bar last night that is a big place but I find that it's actually really cramped inside lots of tables all close together. The place is packed and you're constantly rubbing shoulders with people and bumping into them… Overall I think this is the sort of place or sort of offer that encourages irresponsible drinking."

Also on a practical note, if there is nowhere to put your drink then you are more likely to take more frequent sips, partly just because it's there (consumption momentum) but also to avoid the discomfort provided by a cold drink in your hand. As one detective identified:

> "People who stand while drinking drink much faster as the glass / bottle always remains in the hand (and can be cold)".

Clearly the décor plays a central role in signalling and forming the expected behaviour in a bar, some pubs seem to actively prime people with energetic signs and posters (see picture). This makes the ideas they are advertising more salient and in turn encourage people to behave accordingly.

The environment outside bars and pubs was also seen to play a role. The proximity of venues to each other in a particular area of town was observed to fuel excessive drinking, with parties moving on easily from one bar to the next.

> "It was clear that the environment on all of West Street is conducive to the consumption of copious quantities of alcohol in a variety of forms. Most notable was the very profusion of drinking establishments in such a small area. Revellers flowed from one pub to another bar, then into a club."

Choice Environment - Columbo

Although it can easily go unnoticed, the "choice architecture" can influence our decision making. An interesting example of this is the trusty pint glass, despite the increase in alcoholic content of beer since the 1890s the pint glass has remained the default drinking vessel in Britain's pubs and bars since then. [lxxvi] Of course, it is possible to order a "half-pint" but this has to be specifically requested and the name itself "half" suggests you aren't getting a full drink which means it is rarely done.

Similarly, some of our observers ordering a spirit and a mixer (e.g. gin & tonic) reported having been given double measures as a default, while others were given a choice nudged to favour the more potent (and expensive) option: 'is that a double [measure]?'

Pubs clearly face a dilemma; whilst they may not want to encourage or be associated with irresponsible behaviour, it is in their commercial interests to sell the alcohol that causes the problem in the first place. Inevitably, our detectives came across many drinking establishments that encouraged binge drinking (consciously or unconsciously) through straightforward economic incentives:

> "My friend tried to order a 'cheeky vimto' blue WKD with a shot of port. The barman encouraged her to get a pitcher – because it worked out cheaper"

as well as clever positioning:

> "There was a display of 'shots' behind the bar, which we were encouraged to buy as a 'knock back'".

Whilst alcoholic drinks are visibly displayed and promoted, the same cannot be said of soft drinks, which are mostly relegated to a low down fridge or are out of sight under the bar:

> "Why are soft drinks mostly in the fridge below the level of the bar, so unless you go to order you don't know what they have – I'm female and don't like going up to the bar if I can help it – so I'd like the soft drinks made more obvious."

The same is true for bottled beers, which are usually less than the default pint. If something is not salient, it is less likely to enter our consideration set, so by placing alcoholic drinks in more prominent places (beer taps, bottles of spirits behind the bar etc), we are more likely to order them.

The alcoholic default on drink ordering is strong, as illustrated by one of our detectives who ordered ginger ale and was surprised when the barman responded with "What do you want in your ginger ale? Whisky? Gin?" Our detectives visited some pubs that relentlessly pursued the assumption that more alcohol equates to better value and a better time. The picture below is a typical price promotion that makes doubling up behaviour common and widely accepted:

Despite this, some pub and bar environment were actually better at encouraging responsible drinking than others – what were they doing differently? Our detectives noticed that the choice architecture at some drinking establishments emphasised certain kinds of drinks and the quality of those drinks, and staff can also help to engender a sense of respect for the drinks on offer:

> "The menu is almost entirely taken up by cocktails, they are all specially made i.e. not your standard mojito, bloody mary here. They are made with very particular ingredients like aged whiskeys or specific rums. This makes you want to savour the taste and not rush it, there is a lot of respect for the drinks here."

> "The staff are knowledgeable about the drinks on offer which again adds to the sense of respect for the drinks."

This was just restricted to cocktails; the real ale movement has resulted in the display of flavour descriptions and tasting notes in pubs and bars. Flavour associations are likely to prime people to savour drinks rather than consume them quickly, as one detective acknowledged following a trip to a real ale pub: "its much better to advocate drinking where the consumer needs to savour the drink - such as a real ale or a malt whisky - something that you wouldn't drink down quickly."

Social Factors - Poirot

Drinking is an inherently social activity, especially when out of the home. Round buying is the most obvious manifestation of social factors where reciprocity is clearly in evidence. This social norm can make people feel obliged to buy or receive drinks that they don't really want, or didn't plan on having (especially in larger groupsThe pacing of

rounds is often set to the quicker drinkers in the group, meaning slow drinkers are pressured to keep up.). If you are in a round, a drink can just appear in front of you without you having asked for it.

Social factors are not confined to the round system however, our detectives also found examples of it elsewhere. One of the individual factors that can dictate people's speed at almost anything be it walking, breathing or drinking are 'hot states'. Many things (music, alcohol, shock, sexual arousal etc) can trigger hot states. In a social drinking context, the energy that comes with "being social" adds to the hot state induced by alcohol. Energy levels within groups may increase or decrease over the course of an evening, however certain situations or people can change the dynamic. As one of our detectives noticed:

> "I was at a bar on Sunday where the atmosphere was pretty relaxed/easygoing until a friend came in who was already 4 sheets… and his arrival did change the atmosphere – he started ordering lots of booze and the evening definitely took a turn for the worse, i.e. much heavier drinking etc."

Other times individuals within groups can find their attempts to up the energy backfiring.

> "Observing a group of couples in the pub, I noticed that one male, aged mid-twenties, seemed to be drinking more than others in the group… [He] finished his drink quickly then asked the others whose round it was. The other males had been chatting and joking and their drinks were hardly touched… They were not persuaded into increasing their drinking levels, and I heard one of the guys telling him to quieten down."

Women were reported by some to reduce their male partners' alcohol intake – and their absence was thought to result in higher levels of drinking:

> "Brian seemingly took the chance that his girlfriend didn't come to party with us and drank far more than he would have had she been present. Also, his dancing with Julie wouldn't have happened either…"

So whilst social factors can encourage drinking, it can also have the opposite effect and constrain drinking.

Interestingly, hangovers can become shared social experiences, a kind of mutual bonding event, as everyone would suffer it was somehow ok.

> "One suggested alternating shots with the drinks and they all complied. One mentioned he will pay for this in the morning and they all laughed."

Rationally, a hangover should act as a deterrent to drinking, but a social context makes it a more bearable – perhaps even a desirable, shared experience. In some cases, hangovers were worn as a badge of honour and boasted about on Facebook or during the next night out. This is an example of someone who recognises but resists this pressure:

"If we go out, most of the time I don't drink, I don't like hangovers, and I don't like the feeling of being out of control of my body. But these reasons don't stick with the group and as a result I can feel isolated from group conversations."

Individual – Miss Marple

Planning to drink moderately on a night out can be difficult, partly due to the social and environmental factors listed above but also because we are not very good at anticipating how we will behave in a future situation. Consider the unused cookery books, bought with the best intentions but destined to a life on a shelf. We find this same effect with drinking, going to the pub after work for a 'quick pint' quickly descends into a few more. But what are the individual factors at work?

Unlike the environmental and observable aspects of the social dimension, personal factors were by definition described more subjectively; access to individual experience, habits, thoughts and feelings is difficult to gain by means of observation alone. What's more, people's observable behaviour is often inherently social. Nevertheless, there were some interesting ideas generated in the observation of the 'individual' dimension.

For some men in particular the ability to drink a lot of alcohol is central to feelings of ego and self-worth as one detective commented: "Volume and strength of drink is a way of 'proving your manliness'". Due to this people can fall into the trap of believing they have a greater capacity to drink alcohol than others – behavioural economists call this effect "illusory superiority", the sense we're better than we actually are at something, and it can contribute to excessive drinking. In some social groups, social factors can further enhance the role of ego by adding a sense of competition.

It is easy to find occasions to drink alcohol, sporting occasions for example can provide the excuse to 'drown your sorrows' or celebrate a victory. Either way the result is the same. Other events like birthdays, promotions, holidays, weddings etc also provide more 'reasons' to drink heavily. Added together these events can be quite common, so whilst the drinker can claim that it is a 'one-off' occasion and downplay the event's significance, the opposite is true.

"It was two friends' birthdays, and they were very drunk due to being bought drinks which they couldn't refuse: 'Thanks to everyone who came out to SLP last night, awesome night! Thanks especially for the tequilas, pina coladas and rum cocktails. I puked absolutely everywhere' (birthday boy FB quote)."

Such events can also introduce great excitement and hot states that make certain types of high risk behaviour more likely. Social influence, consumption momentum and the 'hot state' of intoxication and excitement all combined to reduce individuals' ability to self-regulate their intake in one example:

"a lot of people knew that they'd probably had enough to drink, but after several drinks their inhibitions were much lower / non-existent and so they decided to carry on anyway. The classic 'Oh go on then, one more!' tagline cropped up a few times (myself included)."

It's interesting to consider the implication that it isn't necessarily wanting a drink that makes people drink more, but instead wanting the company and staying for the occasion.

How might policy-makers and the drinks industry learn from these behavioural insights to change behaviour?

A fascinating experiment by Wansink & Just demonstrated that simple 'nudges' in school canteens could encourage children to make healthier food choices. For example, moving broccoli to the start of the lunch-line increased purchases by 10%, smaller bowls reduced cereal portion sizes by 24%, moving the salad bar away from the wall and next to the checkout tripled salad sales. Behavioural interventions do work in changing behaviour, and this is the second challenge we set our detectives.

Changing the Local Environment

The layout of a bar has a strong effect on the atmosphere and drinking intensity. By creating a larger seating area and more high tables / shelves the speed of drinking could be reduced. This is because sitting down creates a more sedate atmosphere and having a place to put your drink could reduce the frequency of people's sips. It is now common to refer to 'vertical drinking establishments' [lxxviii] – this refers to places where most people are standing while drinking. Since this project was conducted, police in parts of the UK have called for a ban on these so-called drinking establishments because they recognise the problems associated with them.

Loud music, especially if fast, creates an energetic setting for a bar (and more opportunities to drink than to talk), creating quiet spaces / rooms in pubs for people who don't want to be in that environment could help people who want to drink more moderately yet still enjoy themselves.

In psychology, theory in the area of regulatory focus [lxxix] suggests that people can be primed to adopt different strategies with respect to how they approach consumption: prevention (characterised by vigilance and security, leading to a conservative bias) or promotion (characterised by eagerness and advancement, leading to a risk-taking bias). Perhaps visual and verbal primes associated with individual responsibility rather than aspirational cues might have a beneficial effect on drinkers' self-regulation. This may be worth some experimentation.

Changing the Choice Architecture

The NHS recently launched a 'Drinks Tracker' app, allowing users to keep track of the number of units they drink over time. The government advises men not to exceed 4 units of alcohol per day and women only 3 units, however a pint of premium lager contains 2.8 units meaning 1.5 pints puts both males and females over the recommended limit. Clearly, bars need to help customers partition their consumption by reducing the size of the glasses or even introducing waiter service, which interrupts the drinking cycle. Since our study,

the government has proposed a new 2/3s pint measure - although it has yet to be widely adopted. Smaller beer glasses would help to prevent consumption momentum, as it requires the drinker to stop more frequently. Making half-pints instead of pints the default measure would undoubtedly be difficult. The 2/3 pint measure provides an alternative that breaks from the pint and half-pint UK norms for draught beer altogether. To make people comfortable with the idea of having less beer per glass, the 2/3 glass could perhaps be named or referred to as 'large', with the pint-sized glass named as a 'extra large' (or similar). It might also be made mandatory for beers and lagers over a certain % abv (e.g. 5%) to be served only in this 2/3 pint measure. Similarly, large glass sizes for wines and spirits could be withdrawn and smaller glass sizes displayed prominently at the bar to set a new default (wine glass sizes have increased steadily and substantially since 1950s in the UK).

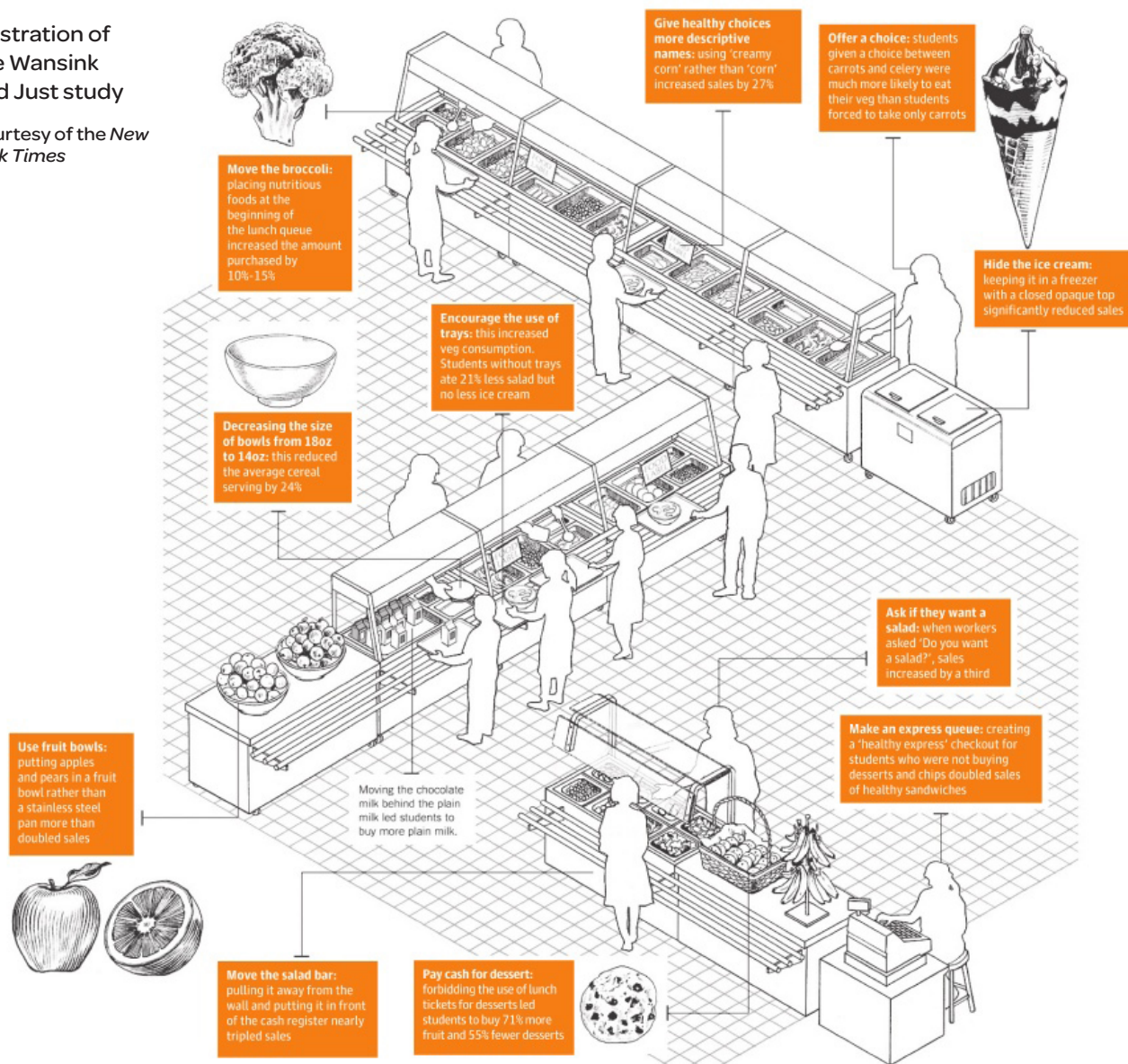Greater respect for the drinks might be encouraged through beer menus that highlight the flavour characteristics of the beer (as wine lists already do), and decorative glasses (such as those available in Belgium) could increase the sense of value people attribute to the product. Consumption of non-alcoholic drinks could be increased by placing them in more prominent positions – such as on the bar, or at eye-level behind the bar staff – or even introducing an express queue for those only buying soft drinks. Prominent signage for free water and the introduction of complementary water jugs on tables could also help counter drunkenness.

Changing Social or Cultural Factors

Round buying can make it hard for people to say 'no' to another drink, introducing table-service could be used to remove this problem. When people order from a waiter the bill gets evenly split at the end of the night – this means you don't need to wait until everyone has bought their round, giving you the freedom to stop when you like. It could also slow down the speed of drinking, rather than increase it as

Illustration of the Wansink and Just study

Courtesy of the *New York Times*

Give healthy choices more descriptive names: using 'creamy corn' rather than 'corn' increased sales by 27%

Offer a choice: students given a choice between carrots and celery were much more likely to eat their veg than students forced to take only carrots

Move the broccoli: placing nutritious foods at the beginning of the lunch queue increased the amount purchased by 10%-15%

Hide the ice cream: keeping it in a freezer with a closed opaque top significantly reduced sales

Encourage the use of trays: this increased veg consumption. Students without trays ate 21% less salad but no less ice cream

Decreasing the size of bowls from 18oz to 14oz: this reduced the average cereal serving by 24%

Ask if they want a salad: when workers asked 'Do you want a salad?', sales increased by a third

Use fruit bowls: putting apples and pears in a fruit bowl rather than a stainless steel pan more than doubled sales

Moving the chocolate milk behind the plain milk led students to buy more plain milk.

Make an express queue: creating a 'healthy express' checkout for students who were not buying desserts and chips doubled sales of healthy sandwiches

Move the salad bar: pulling it away from the wall and putting it in front of the cash register nearly tripled sales

Pay cash for dessert: forbidding the use of lunch tickets for desserts led students to buy 71% more fruit and 55% fewer desserts

round-buying tends to (round buying encourages people to drink at the speed of the faster drinkers, while with table service the waiter tends waits for all to finish first). It could also potentially make it more socially acceptable to deliver a jug of water to a table, which would have the dual benefit of reducing drinking speed and increasing hydration. Purchase limits on the number of drinks any one person can buy might also restrict consumption, as could doing away with the last orders bell, which is a signal for people to get another round in even if one is not required.

Providing Behavioural Feedback

Interventions could be adopted to provide regular feedback on behaviour. Bars and pubs could clear empty drinking vessels from tables less promptly or provide other visual cues about consumption level (a rip in a beer mat for every drink bought) to provide behavioural feedback that primes slower drinking. Bar tabs could also be done away with and cash only bars introduced. This provides consumption feedback by informing customer of current level of spending after each visit to the bar. Organisations interested in promoting responsible drinking might consider health feedback through 'drinking buddy' phone apps, for instance, to remind users at the appropriate time of week (e.g. Friday night) how badly they felt following a previous drinking session, or might consider a 'hangover predictor' app that uses historical self-reported levels of drinking and illness to predict severity of tomorrow's hangover.

Implications for Hypotheses Testing

The Behavioural Detectives approach, with its behavioural underpinning, therefore brought to the surface many 'hidden' influences on drinking behaviour that might easily be overlooked by policy makers focused on simply changing awareness and attitudes towards the issue. It also pointed to potential interventions that could reduce irresponsible drinking, whose effectiveness could be tested in behavioural studies.

Of course, irresponsible drinking is a complex problem, and a combination of such interventions would be required to tackle it successfully. Whilst the inspiration for some of these ideas belongs to individual behavioural principles, others, such as table service, are more multi-dimensional, and may therefore be particularly effective. Table service discourages the reciprocal norm of round buying, while (depending on the speed of service) also providing 'cooling off' periods or an opportunity to partition consumption. Interacting with the waiter who is on his feet in a position of authority, while the customer is seated, may also discourage the acceptability of excessive drinking. Similarly, having a cash-only bar counteracts the potentially higher spend associated with the intangibility (lower "pain of paying") of debit/credit card purchases and better feedback on consumption levels. It also counters runaway spending and minimum spend policies.

It is clear that the standard government response of increasing prices through taxes on alcohol or diverting large amounts of public money to public information campaigns (the traditional economist's response) is not the only answer to this problem. Many small-scale interventions may well provide a much more efficient solution to the problem of irresponsible drinking.

We do not believe that all of these influences or interventions would have been identified or suggested by traditional ethnography. [lxxx] By giving a behavioural focus to an ethnographic approach we can identify category behaviours or problems that we would not normally see. And because the approach rests on a framework of human behaviour, it leads us to consider straightforward and relatively cost-effective interventions (as well as legislation) to overcome the many influences it identifies.

Conclusions

This paper has set out to provide a Behavioural Model of human decision-making for the research industry. It has sought to show how Behavioural Economics challenges the traditional economic view of human decision-making, and has provided a summary of its underlying principles

Behavioural Economics challenges the view that pervades traditional marketing and much of what the market research industry does. The quantitative arm of the industry, in particular (though not exclusively), tends to assume that individuals are socially isolated with relatively stable preferences, when in fact we are socially connected people with very malleable preferences. It tends to assume that our choices are the result of deliberative, linear and controlled thought processes, when in fact our choices are often impulsive and influenced by the context of the moment. It also tends to assume that people are principally guided by market forces, when it has been shown that social forces dictate much of people's behaviour. We believe that Behavioural Economics provides us with a new lens with which to view our practices and a means to improve them.

This paper has sought to demonstrate how we can apply our Behavioural Model to observational or ethnographic research, and 'fine tune' it to better understanding human behaviour. This framework can help us to understand and interpret behaviour in such a way as to help marketers, advertisers and policy makers to influence behaviour through cost-effective and highly efficient small-scale interventions.

This paper has sought to show how an appreciation of Behavioural Economics and related ideas might enhance our approaches and perhaps even change the way we conduct research. It points to a future where we cease to behave economically with the truth, but instead edge closer to it by better understanding the biases and influences that make us human.

Acknowledgements

like to thank Anna af Hallstrom (BrainJuicer) for her excellent cartoon illustrations, which feature throughout the paper and are copyright of BrainJuicer. Full cartoon strip is available on request.

Notes

i   Daniel Kahneman, "Thinking Fast and Slow", 2011

ii   Samuelson & Zeckhauser, 1988

iii   Dolan et al, 2010, p. 76

iv   Dolan et al, 2010, p. 76

v   Thaler & Sunstein, 2008

vi   Johnson & Goldstein, 2003

vii   Thaler & Sunstein, 2008

viii   Cheema & Soman, 2008

ix   Thaler, 1985

x   Cheema & Soman, 2008

xi   Damasio, 2006, and also Wood, 2010

xii   Many consumer decisions are guided by a 'how-do-I-feel-about-it?' heuristic, see Finucane, Peters, & Slovic, 2003

xiii   See Damasio, 2006, and Stanovich & West, 2000

xiv   See Wood, 2010

xv   Loewenstein, 1996

xvi   Loewenstein, 2005

xvii   For a truly revealing study on this subject, see Ariely and Lowenstein, 2006.

xviii   Fear or anxiety is another powerful hot state, as demonstrated Lowenstein. See Loewenstein, 2005

xix   Laibson, 1997

xx   Kahneman & Tversky, 1979

xxi   Kahneman, Knetsch, & Thaler, 1991

xxii   IPA, 2009

xxiii   Mochon, Norton, & Ariely, 2008

xxiv   Shiv, Carmon, & Ariely, 2005

xxv   IPA, 2009

xxvi   Ariely, 2008

xxvii   Ariely, Predictably Irrational, 2009

xxviii   Knutson, Rick, Wimmer, Prelec, & Loewenstein, 2007

xxix   Verhallen & Robben, 1994

xxx   IPA, 2009

xxxi   Dolan et al, 2010, p. 21

xxxii   Dolan et al, 2010

xxxiii   The behavioural economist, Dan Ariely, maintains that the ego plays a role in the popularity of the hybrid car Toyota Prius. Its distinctive looks signal to others that the driver is not driving a conventional car, but is doing something for the environment. We also suspect that the name on some subconscious level communicates 'pious'!

xxxiv   Miller & Ross, 1975

xxxv   Hoorens, 1993

xxxvi   Festinger, 1957

xxxvii   March, 1978

xxxviii   Chapman, Wong, & Smith, 1993

xxxix   Dolan et al, 2010

xl   Cialdini, 2001; Kelman, 1958; See also Bentley & Earls, 2008

xli   Campbell & MacPhail, 2002

xlii   IPA, 2009

xliii   Ariely, 2008

xliv   One field experiment investigating donation behaviour showed that people who received a large gift with a donation solicitation letter had a 75 percent higher donation frequency compared to a 'no gift' baseline condition. Falk, 2004

xlv   Dolan et al, 2010

xlvi   Cialdini, 2001

xlvii   Aronson, Wilson, & Akert, 2005

xlviii   Ormerod & Wiltshire, 2009

xlix   Chartrand & Bargh, 1999

l   Bentley, A, & Earls, M., 2008

li   Mimicry has been referred to as a phenomenon akin to priming, but representing a more direct "perception-behaviour" link. See Dijksterhuis et al (2005).

lii   North, A. C., Hargreaves, D. J., & McKendrick, J. (1999). The influence of in-store music on wine selections. Journal of Applied Psychology, 84, 271-276.

liii   Van De Goor, Knibbe, & Drop, 1990

liv   Jansson-Boyd, 2010

lv   Higgins, 1996

lvi   Pichon & Boccato, 2007

lvii   Lido et al, 2006

lviii   Carter, McNair, & Corbin, 1998

lix   Wryobeck & Chen, 2003, in Dolan et al, 2010

lx   Holland, Hendriks, & Aarts, 2005, in Dolan et al, 2010

lxi   Strack, Martin, & Schwarz, 1988

lxii   Kahneman & Frederick, 2002

lxiii   Stanovich & West, 2000

lxiv   Kahneman, 2002

lxv   Tversky & Kahneman, 1974

lxvi   Dolan et al, 2010

lxvii   Oswald & Grosjean, 2004

lxviii   Tversky & Kahneman, 1974

lxix   Tversky & Kahneman, 1981

lxx   Kahneman, 2002, p. 456

lxxi   IPA, 2009, p. 17

lxxii   Bateman, Munro, & Poe, 2008

lxxiii   Murdock, 1962

lxxiv   Kahneman, 1999

lxxv   Wansink, Just, & McKendry, 2010

lxxvi   Ben McFarland, "Calling time on the pint glass", Guardian Newspaper, January 2012. http://www.guardian.co.uk/lifeandstyle/wordofmouth/2012/jan/26/beery-tyranny-pint-glass?INTCMP=SRCH

lxxvii   Brian Wansink and David Just: HYPERLINK "http://www.nytimes.com/interactive/2010/10/21/opinion/20101021_Oplunch.html?ref=contributors" http://www.nytimes.com/interactive/2010/10/21/opinion/20101021_Oplunch.html?ref=contributors, 2010

lxxviii   See e.g. http://www.bbc.co.uk/news/uk-england-derbyshire-16701991

lxxix   Pham & Higgins, 2005

lxxx   In a traditional ethnographic study conducted by BrainJuicer, which used an ethnographer to observe drinking behaviour, many fewer influences were identified.