

Globally Irrational, Locally Rational?

Localising Behavioural Economics for the Asian Market

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INTRODUCTION

Behavioural economics has been one of the big trends in market research for the past couple of years. Insights from BE are often portrayed as universal human tendencies despite the fact that 96% of psychology research is based on populations in Western countries. If culture influences how people think, can we use BE the same way in Asia? This paper will help in understanding the ways in which culture can affect biases and heuristics, and how to adapt applications of BE into the Asian context.

THE SCIENCE OF DECISION MAKING: WHAT DO WE KNOW SO FAR?

Behavioural economics has been one of the big trends in market research for the past couple of years and, as it spreads across the globe, we are at a point where we need to consider whether we are as irrational as we seem and whether we are all irrational in the same way. However, before we can explore the cultural nuances of behavioural economics, we need to establish a solid foundation with the basic concepts from the science of decision making.

What is behavioural economics

Over the past couple of years, behavioural economics has become one of the biggest buzzwords in market research with many debates at conferences as well as industry media over what role, if any, it could or should play in market research and what it might mean for our current practices. While the discussion is slowly converging to a consensus that principles of behavioural economics should have at least some influence over our current practices, there is still much disagreement over the way in which we should change.

Part of the reason for the disagreement is due to differing views about what behavioural economics actually is: some say it is the study of irrationality while others claim it is all about emotion. Indeed, many are dismissing it entirely as a “bag of biases” – intellectual party tricks that make entertaining anecdotes of just how fallible and irrational we humans are but nothing that can be applied practically in market research.

In fact, behavioural economics could be better understood as the study of how we make decisions. Although it draws heavily on both social and cognitive psychology, the academic discipline most focused on what we think of as behavioural economics is known as judgment and decision-making psychology. Long before Daniel Kahneman and Amos Tversky, the discipline originally emerged in the 1950s when the findings of psychologists such as Ward Edwards, Herb Simon, Sarah Lichtenstein and Paul Slovic began to show that we did not actually behave as traditional economics was suggesting: they discovered that humans do not always make decisions to maximize their individual happiness (utility) by evaluating their options in a rational way.

Why behavioural economics matters to market research

One of the fundamental concepts of traditional economics that psychologists were challenging was the idea that humans have preferences that are consistent and stable: in other words, if you like A more than B, and B more than C, then you will also logically prefer A to C. However, this early research by psychologists discovered that we are actually very fickle: instead of having such *stable preferences*, the context in which we make decisions affects our preferences and we often construct them on the go (Tversky 1969). This idea of *constructed preferences* (Lichtenstein & Slovic, 2006; Weber & Johnson, 2009) is the underlying premise of much of the behavioural economics literature as it suggests that what we do is less driven by internal factors such as our attitudes, values and beliefs but often radically swayed by the context in which we make decisions. This, in turn, makes us seem “irrational”.

One of the regular criticisms of behavioural economics is that “market researchers have always known people are not rational”. While there are undoubtedly many who are enlightened enough to rightfully claim this, we only need to look at the standard practices that are currently in use to see that we are not all that different from the traditional economists in our assumptions about human decision making.

Firstly, we assume that *people have stable preferences* (or *likes*, as we call them) that we can easily measure and file into databases of norms. We ask consumers which products they prefer and why in environments such as viewing facilities or online surveys that are far removed from the context in which they actually make decisions about the same products. This suggests that we implicitly assume that the context in which consumers answer our questions about which products they prefer matters very little to their answer, because their preferences will remain the same regardless of the situation they are in and the options they are facing. For example, because they have answered in the survey that they rate apples more highly than pears and pears more highly than bananas, they will always choose apples over bananas if they are the only two options available.

Secondly, we assume that *people are able to tell us why they do what they do*. From open-ended questions about why they liked a certain product concept or why they purchase a particular toilet roll brand, our way of asking questions reveals our faith in consumers’ ability to both know their minds and reliably relay their reasoning to us on cue.

Thirdly, we assume that *people make their decisions rationally* by weighing up different options in a logical way. Examples of research methods based on this assumption are standard conjoint studies or questions where consumers indicate how important specific aspects of a product are to them. Both of these examples show an assumption that consumers are able and willing to meticulously evaluate all the benefits and features of a product or service, assign different weights to them and subsequently calculate net scores of preferences for each.

The discoveries in behavioural sciences are increasingly challenging these assumptions and consequently challenging the way in which we have been conducting market research for decades. How can we reliably measure preferences if they change from one moment to the next? And how can we trust what consumers say if even they do not know their own minds? Despite the battle cries for a revolution, these discoveries represent an opportunity for *evolution* for the market research industry – an improvement in the ways in which we can understand consumers’ decision making.

The constraints that bind our minds

Many of the popular science books on behavioural economics talk about System 1 and System 2 (first described by Stanovich & West, 2000; popularised by Kahneman, 2011), the irrationality of the human mind as well as the overwhelming number of heuristics and biases that have been discovered by behavioural scientists – Wikipedia alone lists over a hundred biases and heuristics with new ones regularly documented by the hundreds of academic journal articles published every year. Trying to understand all of these departures from standard consumer theory is difficult and while in theory we could test for some of these effects in market research, in practice it would be nearly impossible given the time and cost limitations of commercial projects.

The real insights from this science of decisions are that people need to take shortcuts to process information quickly enough for daily life, that those shortcuts fit a specific pattern and that they are predictable and habitual. When we look at human behaviour more carefully, we can see that it isn't as simple as being rational or irrational, system 1 or system 2. Instead, the decisions we make are nearly always the best ones we can make in the circumstances, based on the information we have and the limits on how fast our brains can work.

Every minute of our waking lives we are faced with making decisions – some extremely complicated if we tried to analyse all of the thousands of relevant factors which might be relevant. Humans need to make choices quickly and decisively if we want to avoid “paralysis by analysis” so our minds save us the effort by quickly processing a few key clues and jumping to a sensible conclusion. However, once in a while our brain misses some detail and leads us down the wrong path.

In order to function in the world, we need these mental shortcuts and lazy ways of thinking: “Thinking Fast” (half of the title of Daniel Kahneman's book on behavioural economics). These govern our moment-to-moment behaviours, many of which are highly predictable when we know the basic patterns. However, we do sometimes “Think Slow” – the other half of Kahneman's title and slow down to weigh up the interest rates on a mortgage versus the returns on our savings because we decide that the time and extra effort of calculating is worth it.

Instead of branding consumers as irrational, we need to consider physical constraints our minds are under as well as the evolutionary context in which human decision making has developed. This helps us see various behavioural phenomena as ways of navigating a complex, modern world the best way we can as well as leverage this understanding of decision making to uncover the mental shortcuts consumers are likely to take and help them make better and faster decisions while benefitting brands and companies in the process.

An ideal mind might be able to absorb unlimited amounts of information and use it to calculate the best choices in an optimal way but a realistic mind cannot do these things. There are three specific limits that stop us from having and using all the information that would point us towards making the perfect choice every time (Caldwell & Halonen, 2014):

1. We can't process all the information the world throws at us.
2. We can't work out all the consequences of every decision.
3. We can only make decisions based on the here and now.

Each of these barriers could potentially have been fatal to the survival of our ancestors so our brains have developed clever tricks and shortcuts to do their best regardless.

The first limitation is an *attention* constraint. Throughout our lives, our minds receive vast amounts of data from their environment to process. However, there is no realistic way that we can (consciously) handle all the information we receive, let alone be able to store it so only the information that is deemed most important, most salient, or easiest to process will be recorded while the rest is discarded.

The second limitation is a constraint on our ability to *calculate* and manage the information that we have gathered or received. Additionally, in order to act on the information, we often need to transform the information into a different form. For example, to make a conscious and rational decision on whether to take out a mortgage, we need to calculate the probabilities of future interest rate paths, likely career trajectories along with the likelihood of job losses versus promotions, the likely trend for house prices and so on. Integrating all these aspects into a clear yes or no decision would require processing the information accurately – however, in reality that is extremely difficult for a human being to do.

The third limitation is on our ability to project ourselves into the future or imagine ourselves in other situations, which is necessary for making the kinds of choices now that will benefit us later. To some extent all decisions are *myopic* or short-sighted as they can only be made on the basis of present feelings and knowledge but if the decision is intended to bring future rewards (as most decisions are) we need to rely on our brain's ability to trade off current costs and benefits as a proxy for future costs and benefits.

These constraints or limitations hinder us from finding and implementing the theoretically optimal way to achieve our desires but they don't derail us completely as the brain has evolved extraordinary tools and shortcuts to operate effectively even in the presence of these limitations. These tools and shortcuts are what we call *heuristics*:¹⁾ they include ways of estimating the approximate value of something, ways of comparing several options to narrow them down, and ways of deciding which goal to pursue right now. They are not perfect and sometimes, with enough resources, we can see that an alternative choice or strategy could have worked better.

Many of the apparent *biases* documented in the behavioural economics literature are in fact *side-effects of heuristics* we use to make quick and mostly reliable decisions. Given the almost infinite amount of information we have to deal with as well as the need to make decisions quickly, heuristics are a very good approximation.

It is at this level that many of the key contextual influences enter the decision process: taking cues from the environment or following one's social group are important ways for consumers to gain reliable information more quickly than they could work it out themselves.

TAKING A GLOBAL PERSPECTIVE: DOES "IRRATIONALITY" TRAVEL?

After laying the foundation for an understanding of human decision making and its constraints, we can now take a more global perspective and look at whether those basics apply in other contexts.

Three dimensions of every decision

In addition to the constraints of our minds, we need to consider the three sets of factors that affect every choice or decision (Appelt et al, 2011):

1. Decision features
2. Situational factors
3. Individual differences

FIGURE 1. THREE SETS OF FACTORS THAT AFFECT DECISIONS



Features of the *decision* task itself include factors such as whether the decision maker has been primed in a certain way and how the options are framed or ordered. In addition to the decision, every decision is also affected by *situational factors*: for example, the cognitive load, time pressure or social context experienced when making the decision. Finally, every decision is also influenced by *characteristics of the decision maker*: their age, gender, personality traits, social class as well as the cultural context they grew up in.

The first two, decision features and situational factors, have received a lot of attention among scientists, which is reflected in the popular science portrayal of behavioural economics (e.g. *Nudge* and *Predictably Irrational*) and consequently they have also featured prominently in the public discussion around behavioural economics within market research. However, the impact of individual factors such as culture has been largely ignored. The mental shortcuts we take are connected to underlying psychological processes which, in turn, are largely affected by the cultural context we have grown up in.

The world of psychology is WEIRD

The increase in research in markets such as Asia and Latin America has increased the importance of understanding the impact of cultural context on consumer decision making. Although in quantitative research it has been long accepted that surveys are affected by culture through phenomena such as acquiescence bias or extreme response styles, cultural differences have far deeper implications for marketing and market research.

In particular, as behavioural economics is being adopted across the industry, researchers across the world are applying insights from decision-making psychology in a range of cultural contexts. Culture affects decision making in many ways so it is fundamentally important to understand how behavioural phenomena such as endowment effect might work differently in different cultures because this will consequently affect how we apply the ideas from behavioural science into practice.

However, most of the academic research on decision making has been conducted almost exclusively in Western countries and especially in the US (Arnett, 2008): 96% of samples in psychological studies come from countries with only 12% of the world's population (Western industrialised countries, specifically North America, Europe, Australia and Israel). Two thirds of this 12% comes from the US, which means that a randomly selected American is 300 times more likely to be a research participant than is a randomly selected person from outside of the West (ibid).

These countries are commonly referred to as WEIRD (Western, Industrialised, Educated, Rich and Democratic), which makes them vastly unrepresentative as a sample in psychological research (Henrich, Heine & Norenzayan, 2010). Using findings from research based on a narrow slice of humanity suggests that we are implicitly assuming that these cognitive biases are universal and function largely in similar ways in different cultures. However, a recent review (Henrich et al 2010) of experimental findings from behavioural sciences in a range of cultures found substantial variability in results in some of the most basic psychological domains: visual perception, fairness, spatial reasoning, moral reasoning, thinking styles and self-concepts.

Moreover, their findings suggest that standard subjects in psychological studies are actually an outlier compared to the rest of the human species, and that to truly understand humanity, we need to sample a broader selection of cultures. As Medin and Bang (2008) speculate:

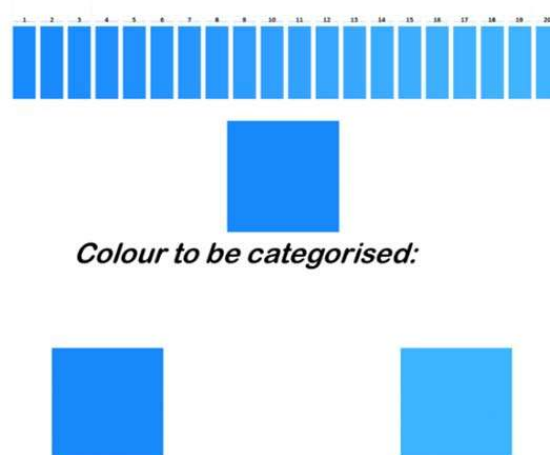
Psychology may be the least international of all the social sciences and it certainly is more parochial than any of the natural sciences. Therefore, there is plenty of reason to think that a different point of origin would have led to a different current state of the art. – To what extent do our current understandings of our field depend on the gender, ethnicity, SES, political leanings and cultural identification of the scientists who are conducting psychological research?

While cross-cultural research into decision making is still limited (Choi, Choi & Norenzayan, 2004; Levinson & Peng, 2007), the emerging evidence suggests that behavioural economics as a field will hugely benefit from it – partly because observed differences can help unpack the deeper foundations of behaviour. If a psychological phenomenon such as the endowment effect works differently or to a lesser degree in another cultural context, researchers can start to ask why that might be – and consequently discover the boundary conditions that govern that particular effect.

Given the emphasis of many cognitive decision making theories on the impact of *immediate context* such as framing or priming, it should be surprising how little the *broader cultural context* is taken into account. While social psychology has a wealth of knowledge on how cultural context affects us, theories in cognitive psychology rarely consider culture as a factor due to implicit assumptions about the universality of cognitive processes: in other words, what we think about may vary, but how we think is always the same.

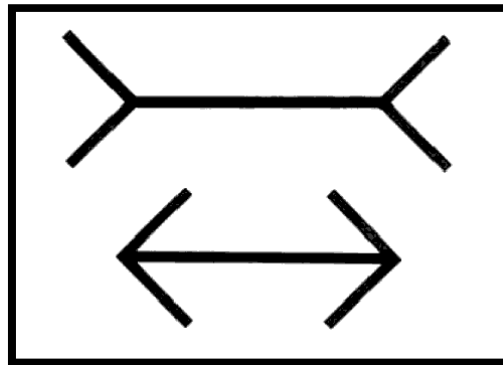
However, even fundamental cognitive functions such as how we perceive colour or simple optical illusions can significantly differ based on the cultural context you've grown up in. While it might seem reasonable to assume that people all over the world perceive something as basic as colour similarly, researchers have found that colour categorisation can vary considerably depending on language (Regier & Kay, 2009; Roberson, 2005): in other words, actual *cognitive categories for colour* are tightly tied to the linguistic terms used to describe them. For example, members of the Himba tribe cannot distinguish between green and blue (Roberson & Hanley, 2007), whereas other research has shown that Russian speakers' compulsory differentiation between lighter and darker blue (figure 2) enables them to identify and categorise colours faster compared to English speakers (Winawer et al, 2007).

FIGURE 2. EXPERIMENTAL TASK USED BY WINAWER ET AL. (2007) WHERE RESPONDENTS CATEGORISE A COLOUR INTO EITHER "SINYI" (DARK BLUE) OR "GOLUBOY" (LIGHT BLUE)



While it may seem more likely that colour categorisation should be linked to culture, many people would suspect that tasks requiring even more basic cognitive processes would not vary across different populations around the world (Fodor, 1983). However, perception of seemingly simple optical illusions have been shown to vary across cultures and even age groups. The Müller-Lyer arrows (figure 3) is an optical illusion where the line in the top arrow appears longer than the bottom one, despite both being the same length. However, research (Segall et al, 1966; Berry, 1971) has showed that illusion is strongest for American undergraduates and almost entirely disappears for those from the San forager tribe in the Kalahari desert – for them, it is not an illusion at all as they are able to see the two lines as being equal length. In addition, the results of the American undergraduates are significantly different from all the other 15 societies surveyed.

FIGURE 3. MÜLLER-LYER ILLUSION



If even a cognitive process as simple as visual perception can vary significantly across different cultural contexts, what does that suggest for more complex psychological processes? While we do not know for certain if and how they vary, without scientific research we cannot assume that they operate similarly. Furthermore, American undergraduates, on whom large swathes of psychological theory is based, are potentially at the extreme end of the distribution and therefore significantly different from other populations. Finally, studies like these show how cross-cultural research can help illuminate the underlying psychological processes and give us a deeper understanding of those phenomena.

Fifty shades of irrationality

Despite the evidence of this variation among populations in psychology, there is still limited research into cross-cultural differences and the impact of cultural context in judgment and decision making psychology (Levinson & Peng, 2007). However, a wider trend to allocate more attention to understanding the nuances of the findings we have so far has been emerging at the conferences and in journals of this field in the past couple of years. Indeed, as professor of behavioural economics Dan Ariely (InDecision, 2014) puts it:

The biggest challenge for our field in the next 10 years would be to understand the generality of the findings we have. We have lots of findings and different aspects and we have assumed for a long time that they would just carry over in different contexts and different occasions.

Of course, when we talk about the theory of mind or psychology, the context doesn't have to be part of the theory, but as we get access to more people and more cultures, I think we'll have to have a more nuanced understanding of our theories and we will have to learn to adjust them based on other intervening factors that might come from culture for example.

We have been ignoring culture too much. It has less to do with the theory and more to do with application: as we try to apply things and try to change human behavior, we will need to understand those nuances to a larger degree.

Other researchers, like world-renown social psychologist Hazel Markus from Stanford University, go even further and suggest that “every behavioural economics effect we know is WEIRD” (Markus, 2014). We know that economic, social and linguistic environments strongly shape people's behaviour, motivations and preferences: for example, a study investigating time discounting (i.e. whether we value immediate rewards more than those in the future) found that differences at country level related to wealth and education as well as cultural factors such as individualism, the importance of tradition and whether time was conceptualised as linear or cyclical (Wang et al, 2011). So why has culture received so little attention in judgment and decision making psychology?

Large parts of existing cross-cultural research in judgment and decision making have been driven by atheoretical empiricism which has mostly created scattered findings without clear unifying frameworks. Such integrative frameworks have long existed in social psychology but are still lacking in this field. Additionally, a field-wide focus on heuristics and biases as well as the academic publication system has meant that scientists have focused on discovering their own “effect” instead of engaging in cross-cultural comparisons. As mentioned before, there have also been strong universalist assumptions among decision researchers that cognitive process and content are independent of each other (Levinson & Peng, 2007): in other words, the beliefs and values may vary between people in different cultural contexts but the underlying cognitive processes are the same. Even the thus far observed differences have been taken as variations in the parameters of a single theory instead of something that should be explained with different theories about the underlying dynamics of decision making in different cultures (Choi et al, 2004). Finally, from a practical perspective, cross-cultural research is complex and requires more financial and institutional resources (financial and institutional) than running

laboratory experiments with college students which can be discouraging for academics whose careers often depend on the volume of publications – something that is easier to produce with within one country.

Most of the existing cross-cultural research is in specific sub-areas of behavioural economics such as overconfidence (for a review, see Yates, Lee, Sieck, Choi, & Price, 2002), probability judgment (e.g. Lau and Ranyard, 1999; Wright & Phillips, 1980) and risk perception (e.g. McDaniels & Gregory, 1991; Kleinhesselink & Rosa, 1991; Hsee & Weber, 1999; Weber and Hsee, 1999). However, findings in one area do not necessarily transfer to another or help predict other phenomena, which limits the practical implications of the existing research. The scattered findings and lack of unifying theoretical framework also make it more difficult for practitioners to apply even the limited theory so far. Not only that, but the lack of an overarching, guiding framework makes even more challenging for practitioners to attempt to adapt more general theories of behavioural economics in different cultural contexts. So what can we do about this?

The increasing interest of the commercial world in behavioural economics puts pressure on practitioners to apply the findings currently available within the literature and proceed with the same implicit, universalist assumption that cognitive psychologists have had: that while cognitive content may vary, cognitive processes are still the same. However, while we wait for decision science to catch up, an alternative way of understanding the impact of cultural context on how behavioural phenomena work differently in different countries is to look at some measurable differences between cultures which do affect how a person's cognition works while they make decisions.

Defining culture

When speaking about culture, we often refer to aspects such as values, social norms, beliefs and traditions. However, despite long-standing debates within academia, there is no single commonly accepted definition: instead, researchers focus on certain aspects of culture depending on the phenomena they are investigating. Nevertheless, before we can fully explore the impact of culture on decision making, we need to define it.

While a practitioner might typically define a culture as a society or country, another way could be to see it as the “shared way in which individuals interpret what goes on around them” (Rohner, 1984). We can refer to people having a particular cultural orientation – a tendency to interpret their environment in a way that is consistent with a specific dimension of culture. These interpretations of behaviour have their roots in socialisation processes of the cultural context an individual grew up in, and their main role is to make social systems comprehensible because shared values and beliefs make it more likely that behaviours are interpreted in a similar way by members of the same social system.

There are several underlying processes that may cause these differences. Firstly, there are differences in socio-ecological and economical environments that influence the structure of a society. For example, from an ecological perspective a warm, sunny climate may encourage more socialising outside the home whereas the cold climate of northern Europe discourages spending time outside the home most of the year. Secondly, societies differ in the norms they develop – partly borne out of the ecological environment but also through ideas prevalent in each society. History and religion play a part in shaping these norms, as do institutional aspects such as legal rights and political climate – as we will see later on. However, a full discussion of these factors and their impact on behaviour is beyond the scope of this paper.

Finally, the way we think about ourselves and the ways in that we act are the result of life-long adaptations shaped to largely by cultural influences, and reconstructed through continuing experience: different child rearing patterns result in different types of self-concepts which, in turn, have wide-ranging influences on other areas of behaviour (Kâğıtçıbaşı, 1996). For example, some cultures engage more in close body contact with small children (e.g. how babies are typically carried in certain African cultures) and in others face-to-face interaction with child-directed language is more common (more common in Western contexts).

Irrationally surprising

So far, there have been a number of interesting findings in the cross-cultural research on decision making that have surprised researchers and spurred more work in the area. However, as mentioned earlier, much of this work has remained as scattered findings without a unifying framework. Nevertheless these studies shine a light on just how counterintuitively some of the well-known behavioural economics effects can work in different cultural contexts.

Overconfidence and probability judgment

One of the most popular cross-cultural research areas in decision making psychology has been probability judgment and overconfidence – a bias that has been seen as yet another example of human irrationality. Sparked by counterintuitive findings, a stream of researchers has explored differences between cultures in how confident they are in their estimates of probability. An example of a question in this kind of experiment would be to ask participants which one is longer, the Panama Canal or the Suez Canal, and estimate a percentage of how confident they are that their answer is correct. In

these types of tests, answers are typically miscalibrated to be more confident than the level of knowledge would warrant. What the researchers found was that East Asian participants were actually more overconfident than the British (Wright & Phillips, 1980; Wright, Phillips, Whalley, Choo, Ng, Tan & Wisudha, 1978), and that their estimates of correct answers were more extreme. Subsequent researchers have suggested that the roots of the phenomenon might lie in linguistic differences in probabilistic estimates (Lau & Raynard, 1999): for example, in Chinese the lexicon for expressing probability is smaller compared to English. These findings are at odds with cultural stereotypes as well as other research on self-esteem, all of which would predict that Asians are more overconfident than Westerners. Interestingly, across a number of studies, Japanese were found to be more similar to the American, when compared to Taiwanese, Chinese, Indian and Korean. Later on, researchers (Tweed & Lehman, 2002) have suggested that the differences originate in different school systems: whereas Western and Japanese classrooms actively encourage critical thinking and a consideration of pros and cons, other schooling systems (such as the Chinese) traditionally values effortful, respectful and absorptive learning and discourages the “cognitive habit” of evaluating disconfirming evidence.

Risk aversion

Another area of research that has provided counterintuitive findings is on risk aversion. For example, most people would assume, based on cultural stereotypes, that Americans are more adventurous and risk seeking than Chinese – yet research suggests that the converse is actually true (Weber & Hsee, 1999). In a series of experiments of different financial scenarios, Chinese participants were much more likely to choose riskier options than Americans. As an explanation, the researchers offered a “cushion hypothesis”: Chinese participants have wider social support networks which allow them to feel more comfortable in taking financial risks – the bigger and better their networks were, the riskier decisions they made. However, as is often the case with behavioural science research, the devil is in the details: while compelling, these findings do not generalise into other areas such as medical or academic decisions where Chinese are more likely to conform to the stereotype.

Hindsight bias

Hindsight bias refers to individuals’ tendency to believe that they could have predicted the actual outcome of events even in the face of contradictory outcomes – in other words, the “I-knew-it-all-along” phenomenon. Researchers (Choi & Nisbett, 2000) asked Korean and U.S. American participants to predict the helping behaviour of a religious individual placed under a time pressure. People from both groups predicted that the religious individual would offer help to an individual in need regardless of the constraints they were under (e.g. being late for an important meeting). However, after they had learned that the individual did not behave in the way they had expected, Koreans showed less surprise than the American participants. The researchers suggested that this was because Koreans are more likely to reason in holistically and therefore perceive the world consisting of complex, interactional relationships. This perception enables them to adjust their predictions when faced with contradiction and, subsequently, they are less surprised.

Sunk cost effect

Sunk cost effect is a commonly observed fallacy in behavioural economics where goods or opportunities are valued not according to their future benefits but according to the resources previously consumed to acquire them (Arkes & Blumer, 1984). More colloquially it is known as “throwing good money after bad” by, for example, continuing to invest in a project after it has become apparent it is no longer financially profitable, simply because one has already invested so much in it. The original studies that discovered the effect were conducted on American college students and most of the work since then has been conducted in either the United States or Europe. Curious to understand how well this effect would hold in different cultural contexts, we ran a study in 11 countries with experimental vignettes from the original studies by Arkes and Blumer (ibid) that were slightly adapted to fit a more diverse range of circumstances²⁾ – an example of the vignettes can be seen in figure 4.

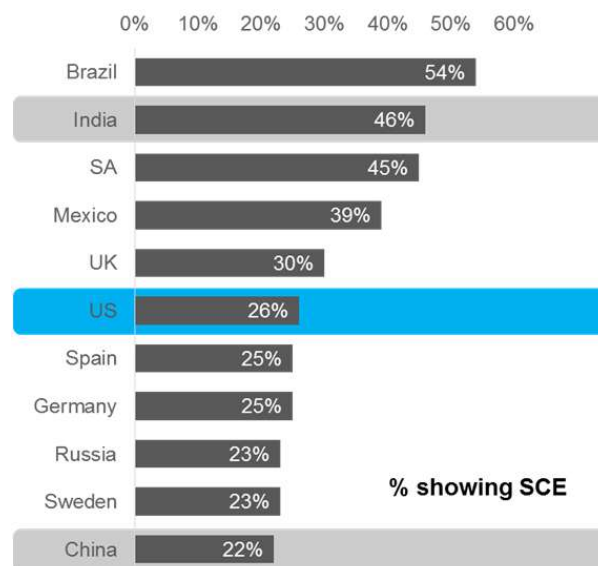
FIGURE 4. EXPERIMENTAL TASK MEASURING THE SUNK COST EFFECT

Assume that you have spent \$36 on a ticket for a concert by artist X.
Several weeks later you buy a \$18 ticket to a concert by artist Y. You think you will enjoy the concert by Y more than the concert by artist X. As you are putting your just-purchased ticket for Y's concert in your wallet, you notice that both concerts are on the same night! It's too late to sell either ticket, and you cannot return either one.
The tickets are not transferable so you cannot sell one. You must use one ticket and not the other.
Which concert will you attend?



Choosing to go to the concert by artist X suggests, according to the original theory, an irrational tendency to be swayed by the money spent on that alternative even though the other option would be more enjoyable. The results were rather surprising: firstly the overall result suggested that the “irrational” sunk cost fallacy was actually much prevalent than the original study suggested which could be explained by, for example, a different sample (not undergraduates but panel data) or that in the past three decades more people have learned about the effect itself. However, what was more interesting were the clear differences between countries (figure 5): India, Brazil, Mexico and South Africa all scored more highly for a tendency to fall for the sunk cost effect while China was found to be much more “rational” and choosing the artist that they personally liked more.

FIGURE 5. STRENGTH OF THE SUNK COST EFFECT IN 11 COUNTRIES



Caldwell & Halonen, 2012

No measured psychological dimension clearly explains the findings, although there is a weak link with GDP and a strong link with investment per capita. Complementary data from the project suggested that the differences might be due to different attitudes to money, investments, waste and loss aversion.

These studies suggest that while it is clear that marked differences exist between different cultures, a lot of research is still needed to test various behavioural effects in different cultural contexts to establish how well they hold. While some studies like the sunk cost effect research might raise more questions than it answers, ultimately cross-cultural research has the potential to help science unravel some of the processes underlying these phenomena.

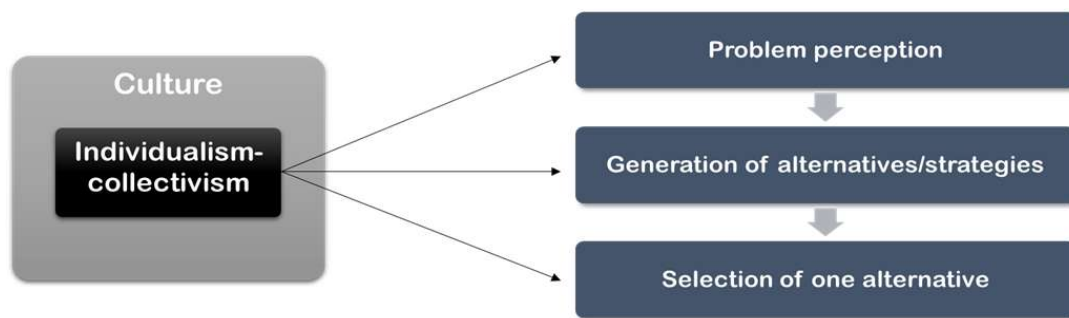
STOCKING THE TOOLBOX: WHAT FRAMEWORKS CAN WE USE?

Given the limited knowledge we have so far on how different behavioural economics effects work in different cultural contexts, our best option is to look at existing theoretical frameworks from social psychology and use them as a basis for creating hypotheses to test in commercial work. In this section, we will look at some frameworks that have been linked to certain behavioural effects and can be used to speculate more broadly about the psychological processes underlying these phenomena.

How cultural dimensions affect decision making

Most decision making is actually problem solving, where the decision maker perceives and assesses different aspects of the problem (figure 6). Culture exerts an influence over this process through the expectations and values that are represented in the individual's mind, acting as guiding principles to inform us of what kind of decision making strategy they should follow and why (Guess, 2004).

FIGURE 6. CULTURAL INFLUENCES ON DECISION MAKING

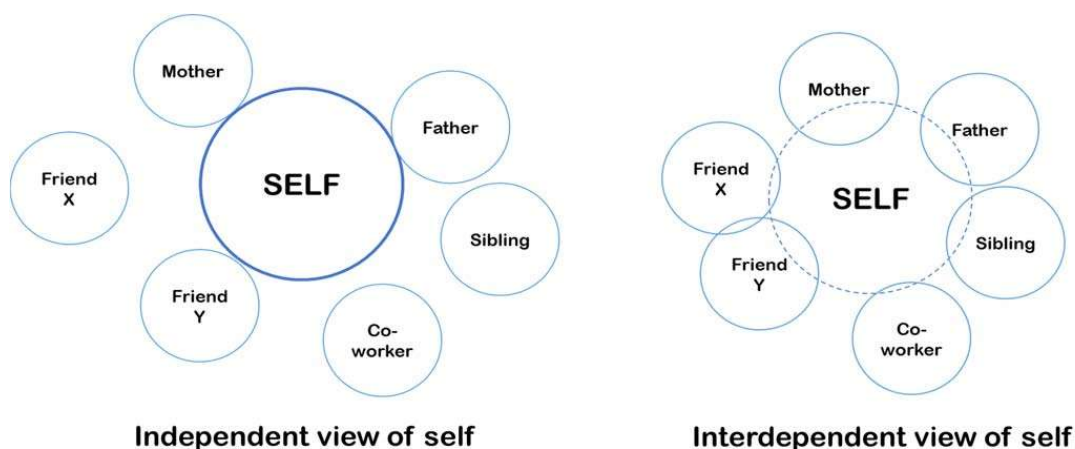


Through various dimensions such as individualism and collectivism (discussed in the next section), culture affects how an individual perceives and defines a certain problem they want to solve, in what way they generate alternatives and strategies to solve the problem as well as the number of options they create; and finally which alternative they choose.

Framework 1: Individualism and collectivism

Individualism and collectivism are the most widely used dimensions for comparing cultural contexts (Gudykunst & Ting-Toomey, 1988), often based on the well-known work in organisational behaviour by Geert Hofstede (1980). While they are often presented as a binary comparison, individualism and collectivism are better seen as a continuum with cultural contexts placing towards either end. In *individualistic cultures*, people are more likely to prefer relationships that are *independent* of others with personal goals superceding those of their ingroups (e.g family and friends) – in *collectivistic cultures*, the opposite is true with people preferring *interdependent* relationships where their goals are to some extent subordinate to those of their ingroup. (Hofstede, 1980; Triandis, 1989). The main difference between the two poles of this continuum is the extent to which people define themselves in relation to others (Markus & Kitayama, 1991): is the self autonomous and unique (*independent self*), or fundamentally embedded into a larger social network (*interdependent self*)?

FIGURE 7. CONCEPTUAL REPRESENTATIONS OF DIFFERENT VIEWS OF THE SELF



Markus & Kitayama, 1991

Western psychology is grounded in the idea of individualism which presupposes that an individual is an autonomous entity with a distinctive set of attributes ('enthusiastic', 'friendly', 'ambitious') and that these internal attributes are the main driver of one's behaviour. Being distinctive and unique is perceived as positive, although one's attributes should be expressed consistently across different situations because behaviour that changes with the situation is seen as slightly hypocritical or false. Expressing private opinions and self-actualisation are very important, along with having personal time, freedom of choice, a challenging career as well as adventurous and varied leisure time. This type of independent self-construal is typical of highly individualistic countries such as the UK, United States, Canada and Australia.

On the other hand, collectivistic countries such as those in the East, as well as Africa and much of South America, tend to encourage and nurture more interdependent views of the self. In these cultural contexts, people tend to describe themselves through their relationships with others ('I am a good daughter' or 'I am a hard-working student') because behaviour is strongly influenced by the social requirements of different settings. In such settings, individuals continually scan the environment for cues to guide them for how to behave and their actions are driven by the need to respond accurately to those who are important to them. Consequently, they may behave inconsistently in different social situations.

However, this inconsistency is viewed as a positive because it signals receptiveness to external cues and an ability to adapt to the social environment. In these contexts, an individual's identity is strongly tied to and defined by group memberships and the social network one belongs to, and there's a preference for harmony over variety and adventure – avoiding loss of face is more important. People see themselves as fundamentally interdependent with one another – separating the self from others and the environment is near impossible. Social contexts frame the meanings for individual behaviour: it's the consequence of being responsive to others, not driven by internal attributes and desires.

In addition to these dimensions, researchers have subsequently added a *horizontal-vertical axis* (Singelis, Triandis, Bhawuk, & Gelfand, 1995; Triandis & Gelfand, 1998) that includes a measure of how much equality (*horizontal*) or hierarchy (*vertical*) are valued in a society. This distinction originally emerged from realisations that American and British individualism manifest very differently to that of the Nordic countries, and that the collectivism in Japan or Korea differs from the type of collectivism one might encounter at an Israeli kibbutz. For example, while in *vertical individualist societies* (such as US, UK or France), people are focused on enhancing their individual status and differentiating themselves from others through competition whereas people in *horizontal individualist societies* (such as Sweden, Norway or Australia) see themselves more as equal status to others and focus on expressing one's uniqueness, capability and self-reliance. In *vertical collectivist societies* (such as Japan, Korea and India), people are concerned about fulfilling obligations to others as well as enhancing the status of their ingroups (e.g. family, friends) in competition with outgroups even if it involves giving up their own personal goals. Finally, in *horizontal collectivist societies* (exemplified historically by the Israeli kibbutz), people's focus is on sociability and interdependence with others in an egalitarian context (Erez & Earley, 1987).

What this added distinction highlights is that the societies that have traditionally been chosen to represent individualism and collectivism (e.g. US, UK, Japan, Korea) are almost exclusively vertically oriented which means much of what we know about consumer behaviour in individualistic and collectivistic countries merely represents vertical forms of these cultural syndromes and therefore may not be generalised to horizontally oriented societies. For example, conformity in product choice (Kim & Markus, 1999) may simply be a tendency that is specific to vertically collectivistic societies where deference to authority and in-group desires is stronger. Again, much more research is still needed to fully map out to what extent and how what we know so far about consumer behaviour applies in these different cultural contexts.

Framework 2: Self as a lens

At the core of what we have seen so far about cultural differences is how self-concepts act as a lens: how we see ourselves shapes how we see the world. As a form of everyday priming, our social environment tells us who we are and who we should be and continuously shapes the self through interactions with others in our culture. At the same time, the self acts as a guide in navigating the world by organising information, directing our attention to information the self perceives as important, shaping our motivations and intentions as well as influencing our emotional experiences. However, different social environments result in different models of the self so it is worth exploring further how the self-concepts we have already discovered might affect decision making.

People in different cultures have dramatically different views of the self, others and the interdependence of the two and these views can strongly influence the nature of individual experience of the world including cognition, emotion and motivation (Markus & Kitayama, 1991). Many Asian cultures have distinct conceptions of individuality that emphasize the fundamental relatedness of individuals to each other: attending to others, fitting in and living in harmonious interdependence with others is crucially important to them. On the other hand, American culture neither assumes nor values this type of explicit connectedness among individuals: instead, people seek to maintain their independence from others by attending to the self and by expressing their unique inner attributes. For example, Westerners are far more likely to understand themselves through their internal psychological characteristics (e.g. personality traits and attitudes) whereas many non-Western populations are more likely to understand themselves in terms of roles and relationships (Kuhn & McPartland, 1954; Oyserman et al, 2002; Heine, 2008). What this stream of research suggests is that, as early anthropologists suggested, the Western self is, "a rather peculiar idea within the context of the world cultures" (Geertz, 1974). But why should that matter for behavioural economics or adapting it to different cultural contexts?

Understanding different views of the self matter because there are numerous psychological patterns associated with them: for example, people with independent self concepts are more likely to exhibit positively biased views of themselves, elevated valuations of personal choice and an increased motivation for standing out rather than fitting in. Each of these represents significant consequences for applying behavioural economics across cultures.

Positive self-views

One of the assumptions underlying many behavioural economics phenomena is that people want to maintain a positive view of themselves through a number of self-serving biases such as rating themselves to be above average. However, a body of research has discovered that this kind of bias is much more prevalent in Western populations than in non-Western

ones (e.g. Heine & Hamamura, 2007): in fact, in some East Asian cultural contexts the self-serving biases have not been detected at all or have been reversed.

Personal choice

Much of behavioural economics is concerned with how people make choices and particularly the role of agency when making them (Kahneman & Tversky, 2000; Schwartz, 2004). However, there is a lot of variation across cultures in how much people value choice: for example, a study comparing European-American and Asian-American children found that the former perform better if they had made some choices regarding the task whereas the latter were more motivated by the task if a trusted other (e.g. their mother) had made the same choices for them (Iyengar & Lepper, 1999). In fact, a large scale study spanning more than 40 countries discovered that feelings of choice are much higher in Western countries compared to non-Western countries which suggests that perceptions of personal choice are experienced less often and are of less concern to people in non-Western countries (Inglehart et al, 1998).

Motivation to conform

Research exploring conformity motivations across populations in Oceania, the Middle East, South America, Africa, South America, East Asia, Europe, and the U.S has revealed that people in Western cultural contexts are less likely to conform to the majority view than elsewhere (Bond & Smith 1996). Other research has subsequently found that e.g. in experimental settings Koreans prefer more common objects while Americans prefer more unusual ones (Kim & Markus, 1999).

These differences have an impact commonly known the behavioural economics phenomena which we will explore in the next section. But before that, we need to look at some additional differences that affect how people process information.

Framework 3: Tunnel vision vs. wide angle lens

These different ways of seeing yourself also affect the way we think through adapting to different social environments that require differing perceptual and cognitive skills. For example, the heightened role of social relationships for individuals with interdependent self-construals have given rise to more context dependency and holistic reasoning as opposed to the analytic and object-focused style linked to independent self-construals. This bi-polar distinction, often conceptualised through a comparison between Western and Eastern cultures,³⁾ characterises these differences in perspective as those of 'tunnel vision' and 'wide angle lens'. Put simply, in the West we are more used to viewing our lives through a limited focus whereas in the East people are more used to looking at the bigger picture. From this basic principle, a number of variables or corollaries have been identified which support this core duality at the level of individual psychology.

A number of studies, focused on mapping out the cognitive differences between East Asians (Chinese, Japanese, Korean) and Westerners (American, Canadian, Western European), suggest that the former tend to think holistically: the heightened awareness of social relations also extends to a deeper acceptance of complexity and multiple possible causal factors when it comes to decision making, whereas the analytical way of thinking, of the latter, favours linearity and more direct causal relations (Peng & Nisbett 1999).

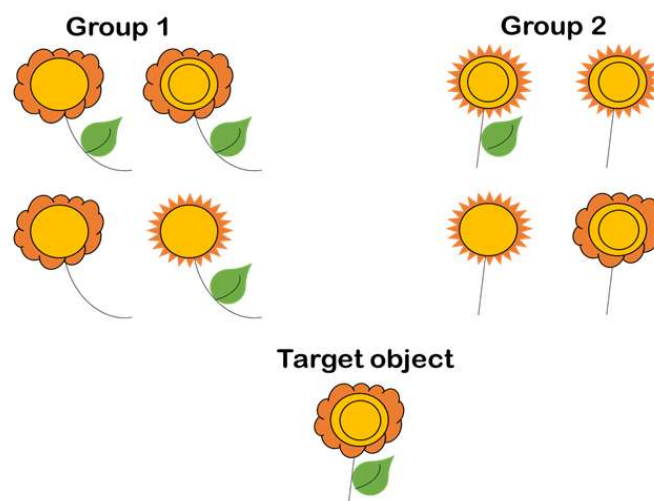
These different modes of reasoning affect decision making through information search: what is perceived as relevant, where the information can be found and how it will be combined. For example, these differences influence how we process advertising: analytic thinking style could be compared a tunnel vision where we pay more attention to the most salient objects in any visuals, whereas holistic style is more akin to a wide-angle lens that focuses more on the bigger picture and observing relationships between objects and the background (Nisbett et al. 2001). Holistic mode of reasoning assumes that everything is connected and so, compared to Westerners, holistic thinkers tend to consider more information to explain an event. The different modes of reasoning also influence the type of information that is evaluated: culture determines what is important and consequently directs attention to those pieces of information that are deemed as such. For example, in a visual task, Japanese are more likely to pay attention to the field (i.e. relationships between objects and the background) whereas Americans focus on more salient objects (Masuda & Nisbett, 2001). Finally, these differences affect how people combine the information they have gathered, especially in the case of dealing with conflicting information. Compared to Westerners, East Asians prefer to avoid contradictory information: this is due to a desire for harmony in their social relations which is transferred to a tendency of conflict avoidance in other areas of thinking. For example, when confronted with two pieces of conflicting information, Chinese are more likely to make a compromise instead of carefully scrutinizing each one.

Cultural psychologists have suggested that these systematic cultural differences in the way people perceive reality is connected to ancient philosophy: East Asians, for example, have been shown to focus attributions more upon the context than objects, to see the world as more in flux, and to view the world in more holistic patterns compared to Westerners. Such findings can be connected to the holistic approach of ancient Chinese philosophy. In contrast, Westerners have been shown to focus attributions more upon objects than context, to see the world as more orderly than in flux, and to view the

world in more linear patterns compared to East Asians and these analytic patterns can be connected to ancient Greek philosophy (Nisbett, 2010). Additionally, some researchers suggest that these differences stem from differences in eco-cultural frameworks (Berry, 1980): survival in different types of environment calls for differing perceptual and cognitive skills and that socialisation into more relational roles is what promotes more context dependency and holistic thinking.

These differences in reasoning style also influence how we categorise objects: in the West, we tend to be more focused on objects whereas in the East the emphasis is on context. While we are used to grouping things into categories based on rules and shared features, in the East category membership depends on relational and contextual criteria. For example, in a study where people were asked which two out of three entities (man, woman and child) belonged together, the West people feel it's more natural to group the adults whereas in the East, people were more likely to group woman and child because the former takes care of the latter. One way of testing your own mode of categorising is to look at the picture below: which group do you feel the target object belongs to?

FIGURE 8. FROM NISBETT & MIYAMOTO 2005 - WHICH GROUP DOES THE TARGET OBJECT BELONG TO?



Markus & Kitayama, 1991

All the flowers in group 2 share the same stem as the target object, whereas the flowers in group 1 share a large number of features with the target, although no one feature is shared by all of them. In other words, whereas the group 2 shares a unidimensional rule with the target, holistically speaking group 1 is more similar to the target flower. European Americans much more often perceived similarities based on the unidimensional rule whereas East Asians more frequently perceived similarities based on holistic judgments of family resemblance. In other words, holistic mode of reasoning involves an orientation to the context or field as a whole and a preference for explaining events based on the relationships whereas analytic mode involves a detachment of objects from the context, a focus on their attributes as well as a preference for using categorical rules to explain and predict behaviour. The first system of thought is associative and focuses on similarity and contiguity (i.e., whether two stimuli share perceptual resemblances) while the other system is based on abstract, symbolic representational systems that rely more heavily on rules. For example, Chinese have been found to be more likely to group together objects that share a functional (pencil-notebook) or contextual (sky-sunshine) relationship whereas Americans group together objects if they belong to a category defined by a simple rule (notebook-magazine) (Ji et al, 2004).

On a more practical level, this difference in categorisation has potential practical implications for company structures (corporate vs. product brands) and marketing strategy such as brand extensions (Monga & John, 2007): while it might seem strange for a cosmetics brand to branch out to food products, if you perceive the core category of the brand to be 'beauty' instead of 'cosmetics', functional food becomes just another way to achieve the same purpose – beauty.

However, it is important to note that both systems are available in all normal adults, the everyday priming of different environments, experiences, and cultural routines tends to encourage reliance on one system at the expense of another which then gives rise to population-level differences. For example, independent self-construal primes in the environment enable analytic processing, whereas interdependent primes encourage holistic processing (Oyserman & Lee, 2008). While the main research focus has been on country-level comparisons, even geographic regions (e.g. Hokkaido and mainland Japan or north vs. south Italy) can vary in the prevalence of independent or interdependent self-construals (Varnum et al, 2008).

Framework 4: Comparing cultures through a taxonomy of values

Despite the amount of research done on cross-cultural differences, there are few comprehensive classifications – how, then, can we use this scientific knowledge in practice if there is no research on the specific country we are interested in? One practical way to approach this would be to use country-level studies as a proxy for creating hypotheses of what other research might apply in each cultural context in order to compare cultures. Values are a key element of cultural orientations so a framework that maps out societies on different dimensions of the predominant values can be a very useful guideline for us as researchers.

A good starting point is the extensive research conducted by Hofstede (e.g. Hofstede, 1980) on organisational values across a wide range of countries globally. While other frameworks are also used within cross-cultural psychology, Hofstede's dimensions are the best known categorisation of cultural differences outside academia. Even though Hofstede's research was about organisational behaviour and therefore is not linked to phenomena discussed in behavioural economics (and, indeed, not directly linked in most cross-cultural studies on decision making), the findings can be a useful guideline for thinking about what is important in a society. An easy starting point is to use his website to compare countries:⁴⁾ for example, if you are thinking about whether and to what extent a specific BE effect might apply in the country of interest, you can compare it to the US if that is where the original psychological research was conducted.⁵⁾

Hofstede mapped out nations on four dimensions⁶⁾ and described the cultural manifestations of a country being high or low on each of them. Each of these dimensions can be related to equivalent concepts in the more individual psychological theories:

- *Individualism* is the society level equivalent of independent self-views: the focus is on looking after yourself or your immediate family only. However, individualism is also linked to wealth with wealthier countries tending to be more individualistic: some researchers have suggested a shift in cultural values in countries like China but it is too early to conclude whether the change will eventually be a substantial one.
- *High power distance* is linked to interdependent self-views and vertical collectivism: there is greater acceptance of authority and hierarchy is seen as normal part of life. Status is particularly important as a means of demonstrating position, and older people are revered.
- *Uncertainty avoidance* is related to the level of threat people experience in the face of uncertainty and to what extent they want to avoid ambiguity. Despite the common misconception, uncertainty avoidance is not the same as risk avoidance – in fact, individuals in high uncertainty avoidance cultures may sometimes even take more risks as a means to avoid ambiguity! To cope with uncertainty, these societies have tended to create structure to life by means of formality and adherence to rules governing behaviour. Experts are held in high esteem and there is a stronger interest in, for example, the process of how a product works as opposed to the results its usage will bring.
- *Masculinity* is linked to individual status and achievement, and as such to vertical individualism. Dominant values centre on achievement and success – being a winner is highly positive and there is a higher tendency of consumption for the purpose of showing off. Personal status is an important consumption motive.

Another useful country level categorisation is a recent 33-country study investigating the “degree to which social norms are pervasive, clearly defined and reliably imposed” (Gelfand et al, 2011). Tight societies (e.g. Germany, India, Pakistan, Malaysia and Turkey) have strong norms and a low tolerance of deviant behaviour whereas loose societies (e.g. Estonia, Hungary, Greece, Netherlands and New Zealand) have weak norms and a high tolerance of deviant behaviour. UK and US place somewhere in the middle with the US closer to the latter. These differences could significantly affect practical applications of BE theories that hinge on leveraging social norms. However, this is a very recent strand of research so decision making psychology studies built on this classification may not emerge for some years.

SHARPENING OUR TOOLS: HOW DO WE LOCALISE BEHAVIOURAL ECONOMICS?

Most of the current knowledge about marketing phenomena (and therefore our research methods) has been built on the idea of a Western idea of an independent self: how we see e.g. persuasion, customer satisfaction and loyalty as well as activity such as brand extensions rely on academic research from Western contexts. We have based our techniques on the assumption that understanding personal preferences is the key to achieving and predicting desired marketing outcomes. In addition to this, most of the discussion around behavioural economics in the public sphere and therefore our general understanding of it is also based on research from Western contexts. However, to apply BE efficiently in different cultural contexts, we need to be aware of all the factors that could influence decision making – it is all too easy to forget that what surrounds you is only normal because it is what you know.

How, then, do the theories we have seen affect decision making? Self-concepts have wide-ranging consequences for behavioural phenomena such as self-serving biases (e.g. cognitive dissonance), the impact of social norms through a desire to fit in or stand out, the desire to diversify (e.g. the diversification bias) through a valuation of personal choice (e.g.

endowment effect). More fundamentally, the different modes of reasoning influence information gathering and processing which then affects the power of context effects such as framing. While the impact of social norms has been discussed in the previous sections, examples of other ways in which self-concepts can influence decision making are discussed below.

Self-serving biases

Cognitive dissonance is one of the fundamental concepts in psychology: if you see your behaviour reflecting your true self, which is ideally consistent across time and circumstances, holding conflicting ideas will make you feel uncomfortable. However, if you instead assume that your preferences merely reflect the current social circumstances and can therefore change from one moment to the next, conflicting ideas will not pose a threat to your identity, which means the concept of cognitive dissonance exerts much less power on consumers in e.g. East Asian cultures (Heine & Lehman, 1997). As cognitive dissonance, often seen as irrational, is commonly used in marketing communications so understanding the extent to which it is prevalent in the cultural context is crucial to using it effectively.

Desire to diversify

In Western cultures, choice is seen as an act of self-expression: uniqueness is desirable and choices are a way to communicate that to others (Kim & Drolet, 2003), so we vary our choices in an attempt to gain a sense of “specialness”. This is known as diversification bias where we seek variety in both what and how we choose which may sometimes lead to seemingly irrational behaviour (Read & Loewenstein, 1995). However, the majority of the research on this effect has been conducted in the US where personal choice is one of the key cultural values. When choice is an act of self-expression, it becomes fundamentally important, and the psychological impact of either lack of choice or failed choice is larger, which leads to strategies like variety-seeking. However, in collectivistic cultures choice is often an interpersonal task which means the success or failure of making a choice that portrays oneself in the most positive light is not as big a concern. Perhaps unsurprisingly, recent research has shown that the diversification bias is weaker in these cultural contexts (Kim & Drolet, 2003).

Valuation of personal choice

The valuation of personal choice affects another well-known behavioural economics concept: the endowment effect, where simply owning an object enhances its perceived worth, and owners value objects substantially (and irrationally) more than potential buyers do. Owning an object activates an association between it and the self and with the Western focus on self-enhancement, this association automatically boosts the object's value. Therefore, the strength of the endowment effect is influenced by the degree to which self-enhancement is culturally valued, with recent research suggesting that the effect is indeed stronger in a Western context (Maddux et al, 2010).

Framing effects

Different reasoning styles lead to differences in information processing and, as such, influence the extent to which framing effects (Tversky & Kahneman, 1981) work. The analytic-holistic model of reasoning predicts that framing should have a stronger influence on those who are more likely to process information holistically as they tend to consider the contextual clues more than analytic thinkers (McElroy, & Seta, 2003). While there is still limited research into the cross-cultural variability, some research already suggests that this is indeed the case (Wang, 1996). A practical example of a framing effect is the extent to which price is seen to signal quality: in cultural contexts where interdependent self-views and holistic processing are prevalent, price is seen as a much stronger proxy for quality (Lalwani & Shavitt, 2013), and therefore a stronger influence on consumers' purchase decisions.

SUMMARY

Understanding the potential cultural influences on thought is crucial for everyone attempting to accurately describe and predict consumers' decision making. Mental shortcuts such as heuristics could be seen as different “logics” that guide people's decision making: while some of them might seem illogical to an observer (e.g. us as marketers), they often make sense to the consumer – our job, then, is to discover these logics and use that understanding to create better experiences for consumers.

Behavioural economics can provide us with powerful tools to make sense of these logics but we need to have a much more refined sense of the specific characteristics of each cultural context and its impact on consumer decision making to ensure effective applications. We need to remember that what might look globally irrational could actually be locally rational: for example, overvaluing today over tomorrow might be logical in Argentina or other contexts where tomorrow is more uncertain.

However, much of what we know about consumer behaviour is based on theories that originate in Western countries: while these theories are assumed to be applicable to people across the world, in reality the psychological set up they are based on is strongly influenced by culture. In order to accurately predict consumer decision making, we need to

understand the range of cultural influences on thought. Cross-cultural research in behavioural economics is still in its infancy and no “off-the-shelf” solutions exist yet.

Although we know a lot about human decision making, much of our knowledge is largely limited to one specific, WEIRD context. While it was legitimate to base the original research on such samples in order to establish whether certain phenomena can be found on humans at all, now our job is to “localise” behavioral economics by translating it into the consumer’s specific decision making context. The emergence of behavioural economics has sometimes been branded as a departure from the error of rationality. However, while we continue on the path of understanding human decision making more deeply, we should not entrench a new mistake: universality.

FOOTNOTES

1. For a list of heuristics that result from each constraint, please see Caldwell & Halonen (2014).
2. For example, the original study included a scenario about a ski trip to neighbouring US states – a scenario that would not be relevant in other countries. We therefore adapted it to concert tickets as it seemed like a behaviour that people engaged in all of the countries sampled.
3. The majority of studies on this topic have been two-country studies focused on comparing the US with one Asian country (e.g. Japan, Korea or China). This is mainly because these countries have been seen to represent opposite ends of this dimension so focusing on them is more likely to show a noticeable difference if one indeed exists.
4. A profile of each country can be found on his website (<http://geert-hofstede.com>), which also offers an option for comparing up to three countries against each other. For this reason, only an outline of the dimensions is provided here.
5. It’s important to note that Hofstede’s dimensions are measured at a nation level which means that the scores represent national averages that have been controlled for cultural biases in how people respond to surveys, and as such they do not necessarily apply to all individuals within a country.
6. Subsequently more dimensions have been added.

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