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**ASSESSING THE GLOBAL
IMPACT OF THE BEHAVIOURAL
SCIENCES ON PUBLIC POLICY**

SEPTEMBER 2014

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**NUDGING ALL OVER
THE WORLD**

E·S·R·C
ECONOMIC
& SOCIAL
RESEARCH
COUNCIL

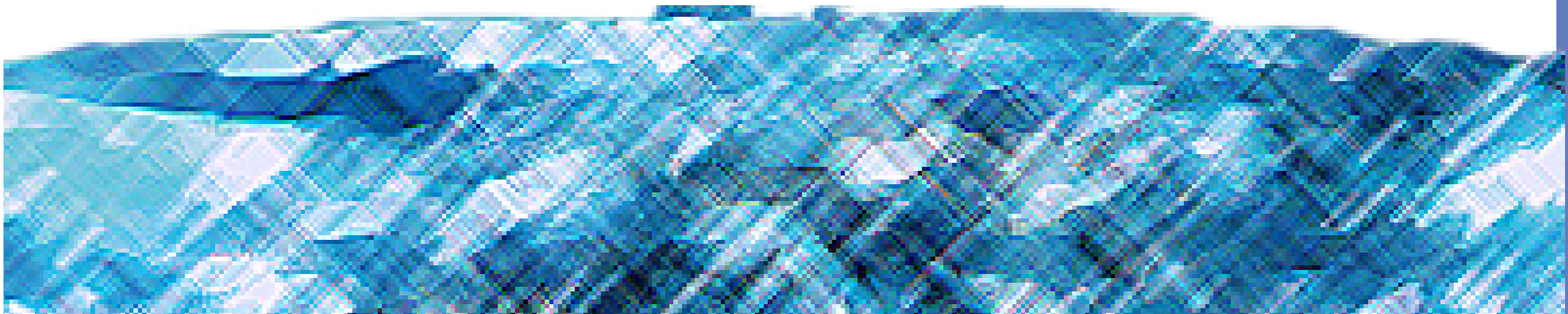
This report is the first of its kind. It provides a global overview of the emerging influence of the behavioural sciences (and nudging practices) on the design and implementation of public policy. While previous research (see Ly and Soman 2013) has reported on the influence of the behavioural sciences (such as behavioural economics, behavioural psychology, and neuroscience) on the activities of governments in different places around the world, none has provided a systematic global survey. Reflecting on public policy initiatives in 196 countries, the report considers where nudge-type policies have developed and the particular forms they have taken. This report was developed as part of a Economic and Social Research Council (UK) (ESRC) project entitled Negotiating Neuroliberalism: Changing Behaviours, Values and Beliefs. It was funded as part of the ESRC's Transforming Social Science programme.

For more Information about this report and the broader project of which it is a part you can contact:

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You can also visit the project blog at:

<http://changingbehaviours.wordpress.com/>



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The behavioural sciences are clearly having a global impact on public policy initiatives. According to our study, **136 states** have seen the new behavioural sciences have some affect on aspects of public policy delivery in some part of their territory. Our research also reveals that 51 states have developed centrally directed policy initiatives that have been influenced by the new behavioural sciences.



The global spread of the new behavioural sciences raises important questions about the techniques and targets of these new policies. This report outlines these questions and suggests important areas for future research.

KEY TERMS

HERE ARE SOME DEFINITIONS OF KEY TERMS WE USE THROUGHOUT THIS REPORT

A NUDGE:

'any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives' (Thaler and Sunstein, 2008: 6).

BEHAVIOURAL ECONOMICS:

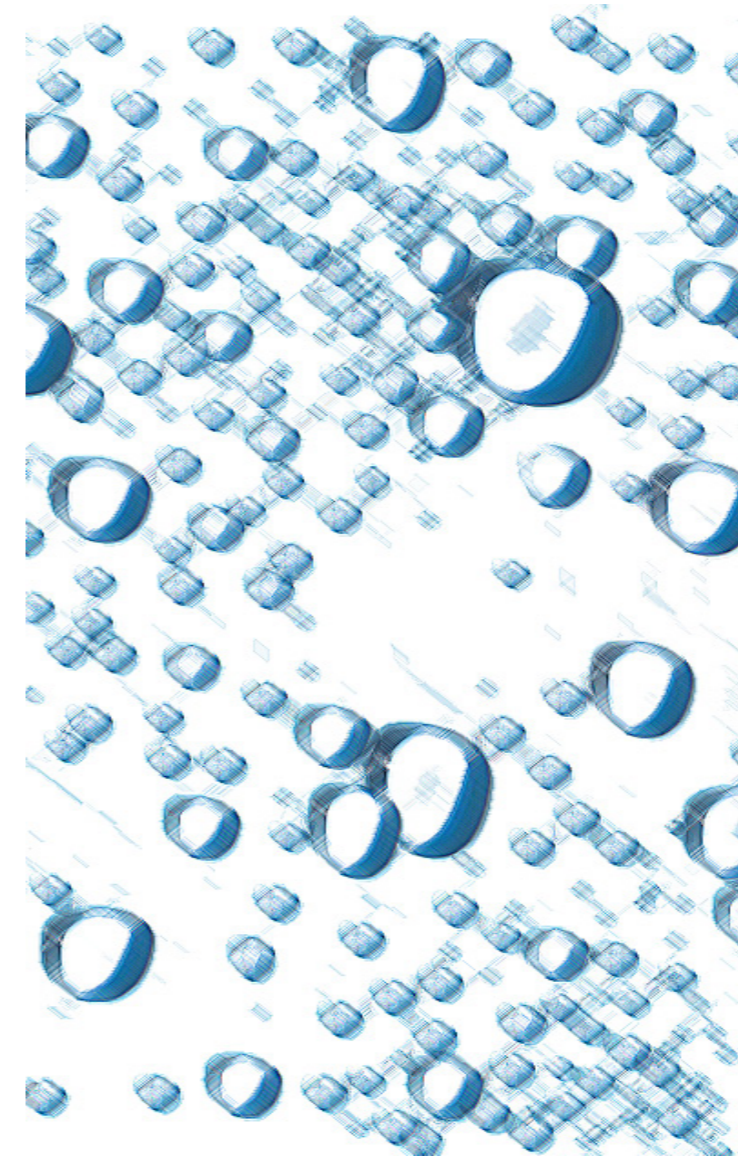
A branch of economics which applies the insights of psychology to economic decision-making. Behavioural Economics is most closely associated with the pioneering work of Daniel Kahneman and Amos Tversky and their attempts to reveal the patterns that connect irrational forms of human conduct. (see Kahneman et al 1982; Kahneman, 2012).

BEHAVIOUR CHANGE:

A phrase used to refer to the transformation of human action. When used in general parlance the nature of the behaviour, how it could be changed, and the duration/extent of the change remain unspecified. Since the late 1980s this term has developed a more specific meaning within the field of public policy. In the design and implementation of public policy, behaviour-changing policies are generally understood to be those policies that recognize that transforming the actions of individuals is crucial to the success of any form of government intervention. Since the late 1990s behaviour change policies have become synonymous within more sophisticated understandings of the nature of human behaviour. These policies are particularly concerned with the unconscious, automatic, and emotionally oriented drivers of human action. Related policies suggest that the changing of behaviour should not only be pursued through incentives, education, and prohibition, but through the use of more emotionally-oriented interventions, including subconscious nudges, peer-to-peer persuasion, and social marketing among other things.

BEHAVIOURAL PSYCHOLOGY:

A branch of psychology which prioritizes the study of observable human behaviour, as opposed to the unobservable processes of the mind. Sometimes referred to as behaviourism, this branch of psychology is closely associated with the work of B.F. Skinner and the idea that human action is conditioned by the consequences of previous patterns of behaviour (see Skinner, 1972).



SOCIAL MARKETING:

A approach to changing behaviour that uses the insights and practices of commercial marketing in order to pursue public policy goals (such as healthy eating and environmental protection). Social marketing was first popularized in the 1980s is a range of health promotion campaigns (see McKenzie-Mohr, 1999).

INTUITIVE JUDGMENT THEORY:

A branch of behavioural economics which focuses on the role of intuition within human decision-making. Most closely associated with the work of Daniel Kahneman and Amos Tversky, Intuitive Judgment Theory argues that there are a series of heuristics (short-cuts) and biases that consistently shape human behaviour.

1. EXECUTIVE SUMMARY

It is often assumed that nudge initiatives, and the broader set of behaviour changing policies they are associated with, are predominantly Western phenomena. The countries where people tend to think the behavioural sciences have had the greatest impact on public policy constitute a familiar list: the UK, France, the USA, Australia, Denmark, Canada, the Netherlands. When we think about the global spread of nudge, it tends to be assumed that its ideas and practices have been gradually radiating out from these centres of policy innovation to other parts of the world where they have been keenly embraced.

This report recounts the results of a global scoping study of the rising impacts of the behavioural sciences on public policy design and execution. The results of this survey go against many of the things we assume about the globalization of nudge. Here are some of the headline findings:



1. NUDGE IS MORE GLOBAL THAN YOU EXPECT. According to our survey, we estimate that nudge-type policies are much more prevalent than you might think. We found that 51 countries have central state-led policy initiatives that have been influenced by the new behavioural sciences. In addition, we found evidence of public initiatives that had been influenced by the new behavioural sciences (but were not centrally orchestrated) in a total of 135 states and Taiwan (out of a total of 196 possible states).



image: Source: Wiki- Commons

2. NUDGE-TYPE INITIATIVES ARE PREVALANT IN LESS ECONOMICALLY DEVELOPED COUNTRIES.

In LEDCs policies informed by new behavioural insights are proving vital in the fight against the spread of HIV/AIDS, diarrhoea, and Malaria. When it comes to the fight against HIV/AIDS in LEDCs, it is possible to discern the deployment of policies that reflect the insights of the new behavioural sciences long before they became popular in

3. THE GLOBAL SPREAD OF THE NEW BEHAVIOURAL SCIENCES IS BEING FACILITATED BY NON-GOVERNMENTAL INTERNATIONAL ORGANIZATIONS.

Our study reveals that while certain states are taking the lead in applying the insights of behavioural sciences to public policy design, the international spread of nudge-type policies is also being facilitated by a series of influential non-governmental organizations. Of particular interest in this context is the emerging role of multinational corporations (such as Unilever) in promoting forms of behaviour change that are usually associated with public bodies.

4. THE INSIGHTS OF THE NEW BEHAVIOURAL SCIENCES ARE BEING APPLIED TO PUBLIC POLICY IN VERY DIFFERENT WAYS IN DIFFERENT PLACES THROUGHOUT THE WORLD.

Variations are apparent in the psychological targets of these policies (with some focusing on emotional responses, while others seek to re-rationalise human behaviour); levels of disclosure and consent; degrees of public debate and scrutiny; and the extent to which related policies foster enhanced forms of psychological learning and public understanding of the nature of human behaviour.



Source:
Creative
Commons

2. THE BEHAVIOURIAL SCIENCES AND PUBLIC POLICY.

2.1. CHANGING UNDERSTANDINGS OF HUMAN BEHAVIOUR.

The last 20 years have been witness to the growing influence of the behavioural sciences on the design and implementation of a range of public policies (see Jones et al. 2013; Lunn 2014; Shafir 2013). The behavioural sciences we are referring to here include psychology, behavioural economics, sociology and various branches of the neurosciences. Collectively, these sciences have offered public policy-makers more nuanced accounts of the nature of human behaviour (and how it may be changed) than are found in traditional accounts of rationality.



Image left:
Source: Wiki-
Common, Saxon
State Library

Image right:
Source: Edward,
Wiki-Commons

The behavioural sciences have enabled policy-makers to move beyond narrowly conceived understandings of human decision-making that assume considered and rational responses (see page 12) to the choices we are confronted with. Those designing policy can now draw on research that reveals the role of emotion, social context, automatic response, mental shortcuts, and intuition within human behaviour.

RATIONAL: PERTAINING TO THE APPLICATION OF REASON.

In general parlance, the term rational is used to denote a normative (moral) position (compared to “morally dubious” irrational actions), and also to specify a more particular set of behavioural practices. In terms of behaviour, the rational has come to be associated with processes of measured deliberation and reflection on the likely outcomes of certain courses of actions. In more narrow economic terms, rational actions are associated with those in which personal utility and self-interest are prioritised. In moral terms, rational action is often deemed as good because it militates against emotional responses to situations (expressed in terms of fear, anger, pleasure and joy), and the associated practices that are considered arbitrary and potentially damaging. Putting these conventional, and quite specific, understandings of the rational to one side, it is perhaps best to think of rational actions as forms of behaviour for which we can give a reason (the “application of reason” is then understood not as a set of logical procedures, but as the ability to actually give a reason for action).

Understood in these terms, rational decision-making is disconnected from its moral association with deliberative self-interest, and can be seen as any form of action for which an explanation can be given. Reasoned explanations for action can, of course, be the product of reflection, calculation, and attempts to secure personal interests, but they can also be the result of emotional responses (including empathy, care for others, and a felt sense of the situation). Understanding the rational in this way has two primary advantages. First, it means that the rational need not be associated with a narrow, and potentially divisive, economic understanding of human motivation. Second, it enables us to recognize that humans have the capacity for great emotional intelligence, which is often produced at the interface of deliberation, gut reactions, and the negotiation of a variety of everyday situations.

2.2. NUDGE AND THE WIDER BEHAVIOUR CHANGE POLICY FAMILY.

One of the most prominent ways in which the behavioural sciences have shaped public policy has been through the principles of Nudge. The notion of nudge was developed by Richard Thaler and Cass Sunstein who popularised behavioural economics in their 2008 book *Nudge: Improving Decisions About Health, Wealth and Happiness*. The idea of nudging people into new patterns of behaviour is based on the insight of behavioural economists that people routinely behave in non-rational ways. Our behaviours can plunge us into debt, make us unhealthy and damage the environment. It is also based on work within behavioural psychology and cognitive design, which suggest that it is possible to reshape the environments within which people make decisions in a way that

makes it easier for them to adopt financial, health and environmental behaviours that are in their own best interests. Nudge has become popular because it suggests that it may be possible to address a range of social problems at minimal cost while also preserving people’s personal freedoms. In this report we are interested in nudging policies, but we are also concerned with a range of behavioural interventions which while not being referred to as nudges share many of their characteristics. We like to refer to these forms of behavioural interventions as part of the wider family of nudge-type policies. Some of these interventions (such as social marketing) actually predate nudge in their use and application.



Source: Author

A Nudge: ‘any aspect of the choice architecture that alters people’s behaviour in a predictable way without forbidding any options or significantly changing their economic incentives’ (Thaler and Sunstein, 2008: 6). Supermarkets have long been associated with the application of nudges to consumption in the way that they design the layout of their premises.

Box 1 (below) outlines the varied sciences and philosophies that lie behind the wider nudge family of behavioural policies.

Collectively, these sciences and philosophies have been reshaping public policy in significant ways. It is, however, rare to see any one of these traditions reshaping public policy in isolation. What is more common is for combinations of ideas associated with the sciences of behaviour to be brought together in order to address different public policy challenges.

Behavioural Economics
 Behavioural Psychology
 Social Marketing
 Intuitive Judgment Theory
 Social Influence Theory
 Theories of Affect
 Time Preference Theories
 User Centred Design
 Cognitive Design
 Engineering Psychology
 Material Psychology
 Neuroeconomics
 Visual Perception Theory
 Neuropsychology Preference Theory
 Psychographics
 Social Cognitive Theory
 Ethology

Box 1. Key ideas behind new behavioural approaches to public policy design (shaded according to significance: the darker the blue the greater the influence of the ideas).

Three things essentially unite these sciences and philosophies of behaviour: 1) they all suggest that human behaviour is not only the product of autonomous individual decision-making; 2) they recognize the role of social/cultural norms (however rational or irrational they are) in influencing human behaviour; 3) they recognize the role that our surrounding environments and choice architectures play in shaping conduct.

Figure 1 (below) illustrates the broad range of policy techniques that have emerged in response to new understandings of the nature of human behaviour. We find it useful to organise these different policy initiatives around three clusters of activities, which often overlap.

The first cluster of initiatives centre on the importance of salient forms of communication. Traditional forms of public policy tended to focus on the presentation of rational arguments to encourage behavioural shifts. Recent policy developments recognize that when pursuing behaviour change the way in which information is framed is as important as the actual information given.

The US software company Opower has, for example, been working with energy companies in order to provide customers with data on the amount of energy they use, and how a household's energy consumption compares with that of their neighbours. This simple shift in the way in which energy use data is presented to customers means that it becomes far more salient. Evaluation of the Opower initiative reveals that it resulted in average energy savings of 2-3% (Behavioural Insights Team 2011: 19)



Figure 1 Range of policy techniques associated with behaviour change initiatives

The second cluster of policy initiatives concern socio-cultural norms. Research has shown that, in the absence of alternative information, when making a decision humans will often follow the behaviours that they see being practiced by others. The social and cultural framing of our actions operates at a series of levels and can be seen in relation to assumptions about personal hygiene and cleanliness (see Shove, 2010) (how regularly we shower and bathe), or when we select the most listened to tracks on iTunes and Spotify. An interesting example of the use of socio-cultural norms within behaviour changing policies is provided by the Programme Saniya initiative in Burkino Faso. Programme Saniya focuses on improving personal hygiene and in particular promoting hand washing among mothers.

The interesting thing about the programme is that it recognizes that mothers were not really persuaded to wash their hands on the basis of rational accounts of germ-theory and associated accounts of the spread of disease. Instead the programme recognizes that mothers place much greater value on the aesthetic aspects of hand washing and the forms of social respect and acceptance which can be derived from such aesthetics. Rather than trying to educate mothers about the science of hand washing, Programme Saniya simply used the cultural value that was placed on the aesthetics of hygiene as a basis for promoting behaviour change.



Hand cleaning station, Toronto General Hospital [Source: Creative Commons].

The third and final set of policy initiatives concern issues of design. Design plays a crucial role in shaping human behaviour. At one level design can relate to the shape and nature of our physical surroundings. It can also, however, relate to the layout of the forms and software that we are routinely expected to engage with. Contemporary behaviour change policies that focus on questions of design can be seen in the UK in the context of the redesign of school canteens. This redesign process is being used as a basis for promoting healthier eating. Rather than simply educating young people about the benefits of eating more healthily, many schools now seek to make it easier for pupils to see and choose to eat fruit and vegetables within food halls.

At another level, however, design-led behaviour change can be much

more subtle. A common example of more subtle forms and design-led policies concern the resetting of defaults. Put simply, administrative defaults relate to the course of action that will be pursued if nothing actively changes. So for a long time it has not been automatically assumed that people want to join company pension schemes or donate their organs. In many countries around the world these defaults are now being reset. The resetting of defaults concerning company pensions and organ donation does not mean that people have to join a pension scheme or donate their organs. It simply means that if they do not want to participate in these schemes then they will have to withdraw (at no cost to themselves). Interestingly, it is clear that the resetting of defaults often involves establishing a new set of socio-cultural norms: in this instance that joining pension schemes and donating organs is the normal thing to do.



Source: Author

3. METHODS

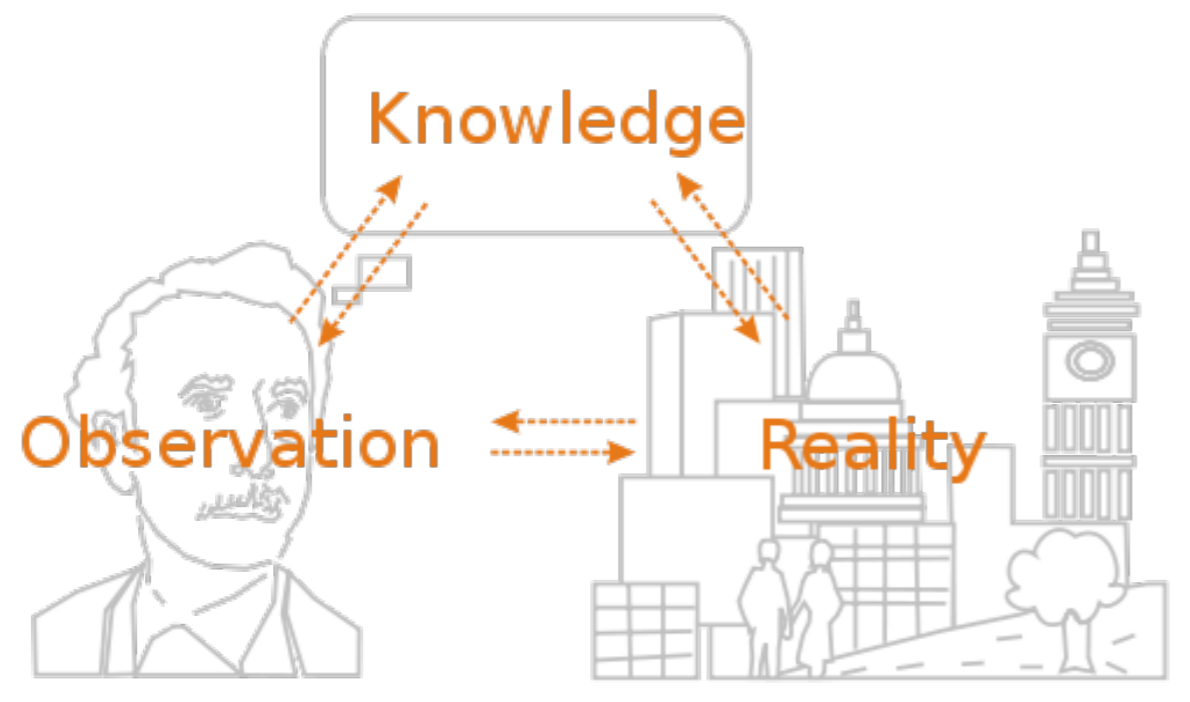
3.1. RESEARCH QUESTIONS:

Focusing on the kinds of policy initiatives outlined in the previous section of this report, this project sought to answer two main questions:

- a. Which countries are now subject to the application of the insights of the new behavioural sciences in the design and implementation of public policy?
- b. Which countries now have centrally orchestrated forms of nudge-type policies?

It was envisaged that responding to these two questions would shed light on two further analytical questions:

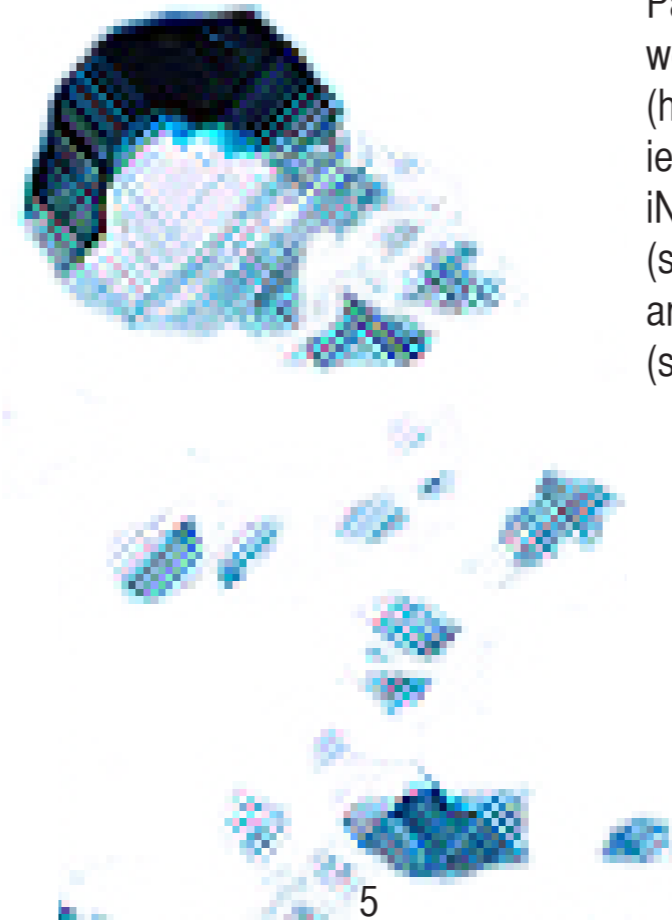
- c. What is driving the global spread of nudge-type policies?
- d. What are the evident differences in the ways in which the insights of the new behavioural sciences are being applied to the design of public policies in different countries throughout the world?



3.2. RESEARCH METHODS:

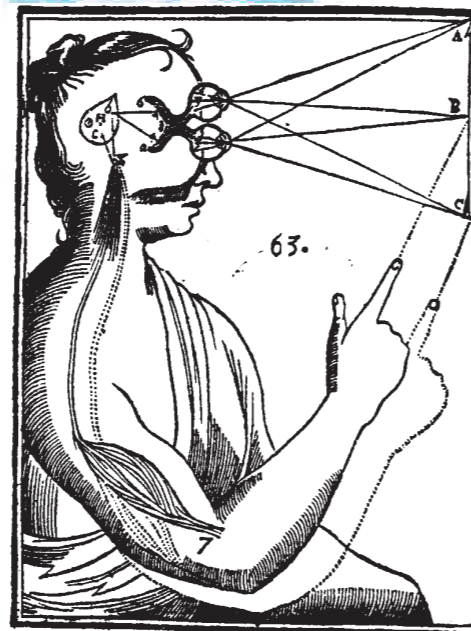
The information presented in this report was compiled over a 7 week period (running from 2/9/13 to the 17/10/13). Thus, this report is best conceived of as a global snapshot. This part of the research project was based exclusively on available online resources. It utilized the policy techniques identified in Figure 1 (see page 8) as proxies that indicated the impact of the new behavioural sciences on public policy design and implementation. Using these policy proxies, research initially focused on existing databases and blogs which reflect on the application of nudge-type policies.

Particularly helpful resources in this context were Mark Egaat's Nudge Database (http://economicspsychologypolicy.blogspot.ie/2013/03/nudge-database_3441.html); the iNudgeyou portal (see: <http://www.inudgeyou.com/>); and the Nudge Blog (see: <http://nudges.org/>).



Building of these existing online resources, we then carried out a systematic online search for evidence of the policy proxies in 195 independent states (and Taiwan). In conducting this research we ran selected searches on Google that combined the independent state's name with two search strings: the first including the phrase "nudge" the second "behaviour change." Utilizing these search strings, we identified related policy initiatives in the selected states. We limited our search to the first two pages of Google (approximately the first 20 entries). The available online documentation associated with these policy initiatives was then searched to see if it contained evidence of the application of our identified policy proxies. While evidence of just one of our policy proxies ensured that a state was flagged as showing evidence of the impact of the new behavioural sciences, we collected evidence of multiple related policy initiatives if they were present. On the basis of this methodology, it is important to recognize that this study does not provide a definitive list of where the new behavioural

sciences are and are not informing the development of public policy. It is highly likely that there are many states which are now deploying nudge-type policies that our study did not identify (this is largely because related policies simply did not show-up in our web-based research). We also recognize that our inability to be able to recognize/translate the policy proxies used in this report into all of the languages used in all the states studied limits the scope of our report. Our survey is thus meant to serve as a minimum baseline indicator of where the new behavioural sciences have had an impact on public policy, and to use this baseline to consider the nature of this impact.



4. NUDGE IN GLOBAL CONTEXT

4.1. INTRODUCTION

In this section we provide a brief overview of the results of our global scoping study. In addition to describing our results, we also offer some reflection on the geographical patterns that are associated with the global impact of the behavioural sciences on public policy. While these reflections are naturally constrained by the fact that this study is not a definitive geographical account (but rather a best estimate), we still feel that they can offer some insights into the processes that are driving the global spread of the behavioural sciences.

This section is structured around the four research questions that were set out in the previous section:

1. Which countries are now subject to the application of the insights of the new behavioural sciences in the design and implementation of public policy?
2. Which countries now have centrally orchestrated forms of nudge-type policies?
3. What is driving the global spread of nudge-type policies?
4. What are the evident differences in the ways in which the insights of the new behavioural sciences are being applied to the design of public policies in different countries throughout the world?

Source:
WikiCommons
after
Descartes:
The World
and Other
Writings.

4.2. WHICH COUNTRIES ARE NOW SUBJECT TO THE APPLICATION OF THE INSIGHTS OF THE NEW BEHAVIOURAL SCIENCES IN THE DESIGN AND IMPLEMENTATION OF PUBLIC POLICY?

Figure 2 (below) shows all of the independent states (and Taiwan) where we have found some evidence of the impact of the new behavioural sciences on the design and/or implementation of public policy. As this figure demonstrates, the behavioural sciences are clearly having a global impact on public policy initiatives. According to our study, 135 independent states (and

Taiwan) have seen the new behavioural sciences have some impact on aspects of public policy delivery in some part of their territory. This number represents 69% of all states. Given that this study is meant to provide a minimum baseline, it is highly likely that well over 70% of independent states have seen the application of new behavioural insights within their public policy sector.

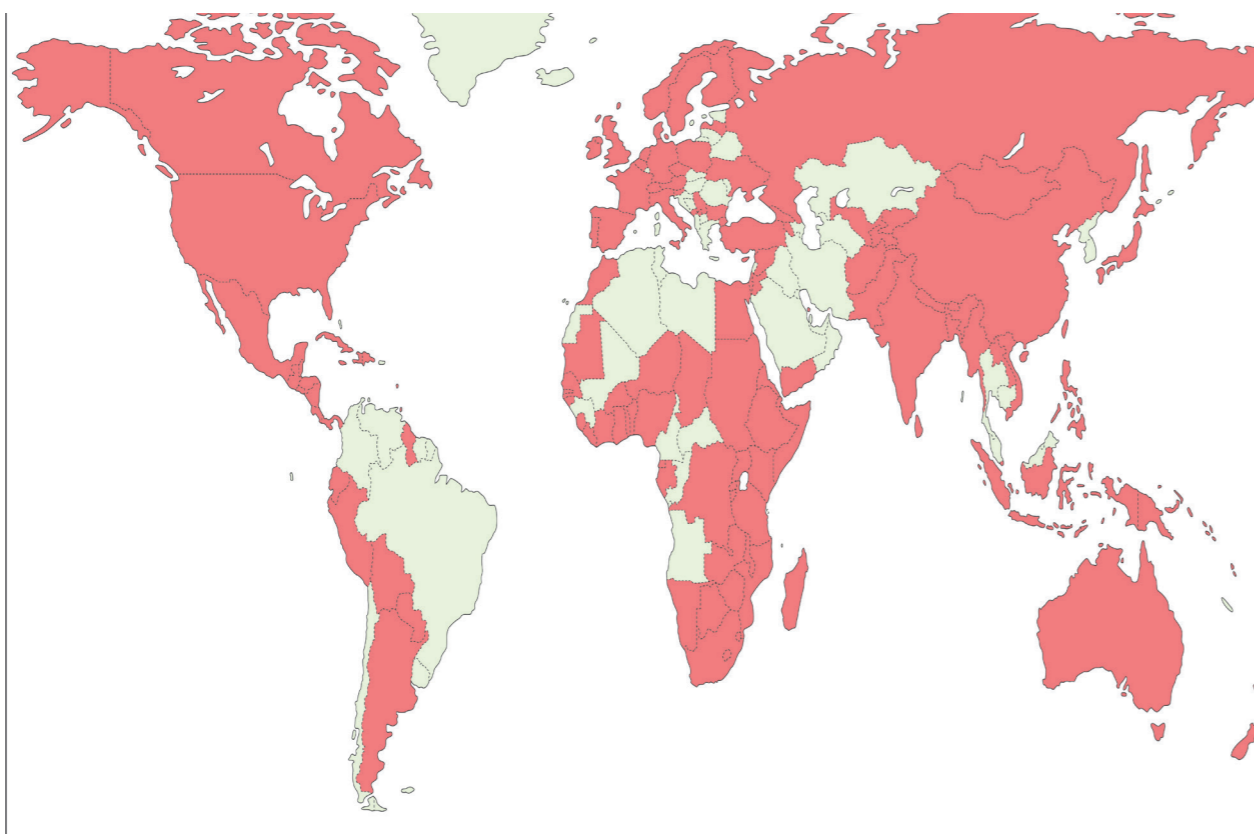


Figure 2. Independent states (shaded red) where evidence was found of the impact of the new behavioural sciences on the design and/or implementation of public policy

What figure 2 does not reveal is the great diversity of policy areas to which the behavioural sciences are now being applied. They are now being used to shape policy areas as diverse as tax payments, hand washing/personal hygiene, HIV/AIDS prevention, vaccination programmes, charitable giving, malaria prevention, nutrition promotion, healthy pregnancy initiatives, fertilizer use, youth empowerment, breast feeding promotion, pension savings, police force reform, automated bank saving, preventing violence in schools, energy conservation, loan repayments, and organ donation, among many others. Figure 2 also does not convey the relative stage of development of the policy regimes that have been informed by the new behavioural sciences.

In relation to HIV/AIDS prevention initiatives in Africa, the behavioural sciences appear to have been informing the policies of government and international NGOs for several decades. In Botswana, for example, the Behaviour Change and Communications Interventions initiatives, which seek to address the problems of HIV/AIDS and other sexually transmitted diseases, dates back to 1989. At the other end of the spectrum is Israel. Israel has just seen a bill submitted that promotes changing the country's organ donation process to an opt-out (as opposed to opt-in) system. Although the bill has not yet been passed, Israel has been highlighted in our survey because the insights of the behavioural sciences are clearly beginning to influence the public policy debate there.



The insights of the new behavioural sciences are now being used to promote the uptake of vaccination programmes

4.3. WHICH COUNTRIES NOW HAVE CENTRALLY ORCHESTRATED FORMS OF NUDGE-TYPE POLICIES?

Of the 135 countries that have seen public policy development influenced by the new behavioural sciences, our survey revealed that 51 had developed centrally directed policy initiatives bearing the characteristic policy proxies of the behavioural sciences (over one quarter of the world's independent states) (see Figure 3). Examples of centrally orchestrated policies range from the aforementioned systems of opt-out organ donation, to automatic pension enrolment and pre-filled tax forms. Centrally orchestrated policy systems are significant because they are uniformly applied to resident populations within a state (as opposed to simply being part of more local behavioural interventions led by NGOs and/or local governments).

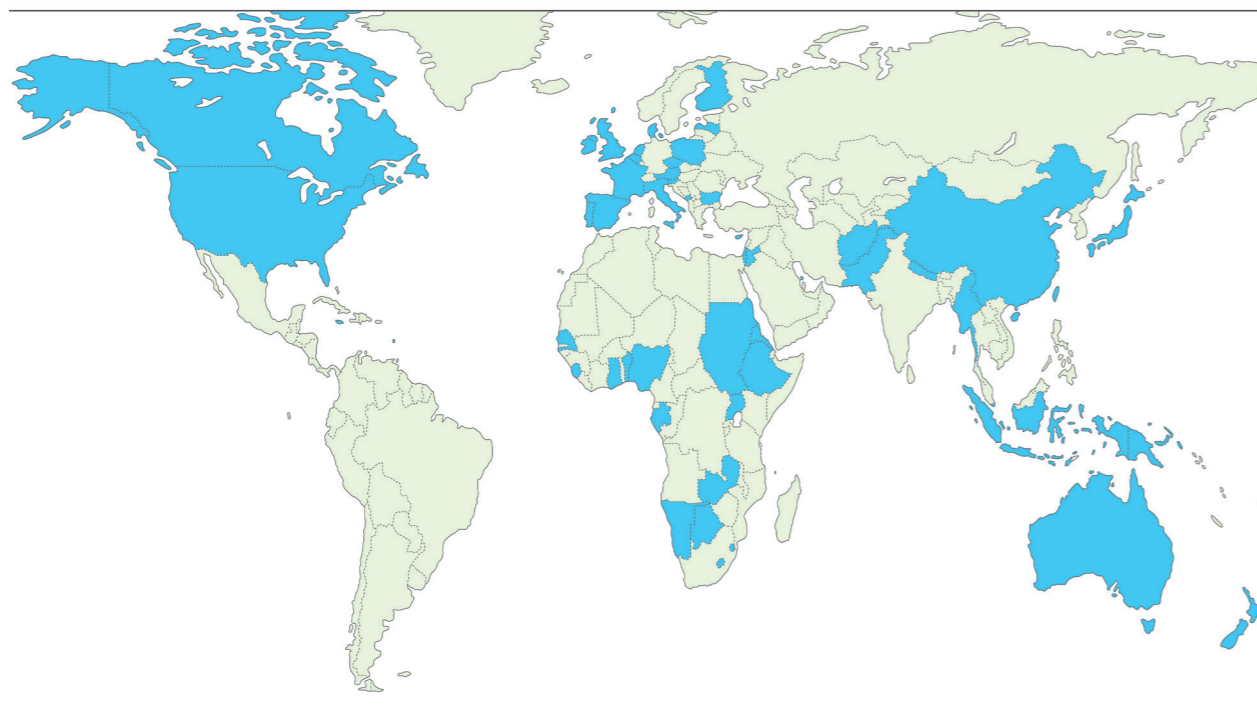
As national level initiatives they have often been subject to much more public debate and scrutiny and their adoption consequently reflects a significant commitment to the insights of the new behavioural sciences on the part of the state in question.

There are considerable differences in the ways in which central governments have promoted the use of new behavioural sciences. In many of the states represented in Figure 3 governments have simply promoted the use of behavioural sciences in one particular policy area. In China, for example, the department of health has been promoting the use of social marketing in its HIV/AIDS prevention programme.

In other countries, such as Belgium, we see the application of new behavioural insights across a number of policy areas (in this case organ donation, energy use and tax payment initiatives). A further set of states, including The Netherlands, Australia, France, the UK and the USA, have seen more strategic attempts to integrate new behavioural insights across many relevant policy sectors. In the USA, for example, the Obama Administration appointed the nudge-advocate Cass Sunstein to head its Office of Information and Regulatory Affairs (OIRA) (see Sunstein, 2013). Given that the OIRA has oversight right across the Federal Government, Sunstein was able to apply the insights from behavioural economics and psychology to a range of policy areas. In the UK, the Coalition government established the Behavioural Insights Team.

This team has applied new behavioural insights to national policies relating to energy conservation, charitable giving, financial fraud and public health (see <https://www.gov.uk/government/organisations/behavioural-insights-team>). The perceived success of the Behavioural Insights Team has led the Obama Administration to form its own so-called "nudge squad". In France, the government's Centre d'analyse strategique has been drawing on the principles of nudge to inform the development of energy policy. In Australia the Public Service Commission has been promoting the value of soft paternalism within a range of policy areas.

Figure 3. Independent state (shaded blue) with centrally orchestrated nudge-type policy initiatives



The UK government's Behavioural Insights Team has been coordinating the application of new behavioural insights within British public policy. The idea of a National coordinating hub for behaviour change policy development is becoming increasingly popular (Source: Creative Commons).

4.4. WHAT IS DRIVING THE GLOBAL SPREAD OF NUDGE-TYPE POLICIES?

If we first of all consider where nudge-type policies appear to have least impact, it is possible to identify some clear geopolitical regions. South (but not central) America, parts of eastern Europe and large portions of the Middle East are all characterized by an apparent absence of nudge-type public policies (although we do recognize that the languages used in these regions may have resulted in our survey failing to identify relevant policy initiatives).

In trying to understand the processes that are driving the global spread of nudge-type policies, it is helpful to reflect on the evident geography of this globalization process. Figure 4. represents the independent states which have centrally orchestrated behaviour change programmes (shaded blue) and those states which have witnessed a more ad hoc adoption of nudge-type policies (shaded red).

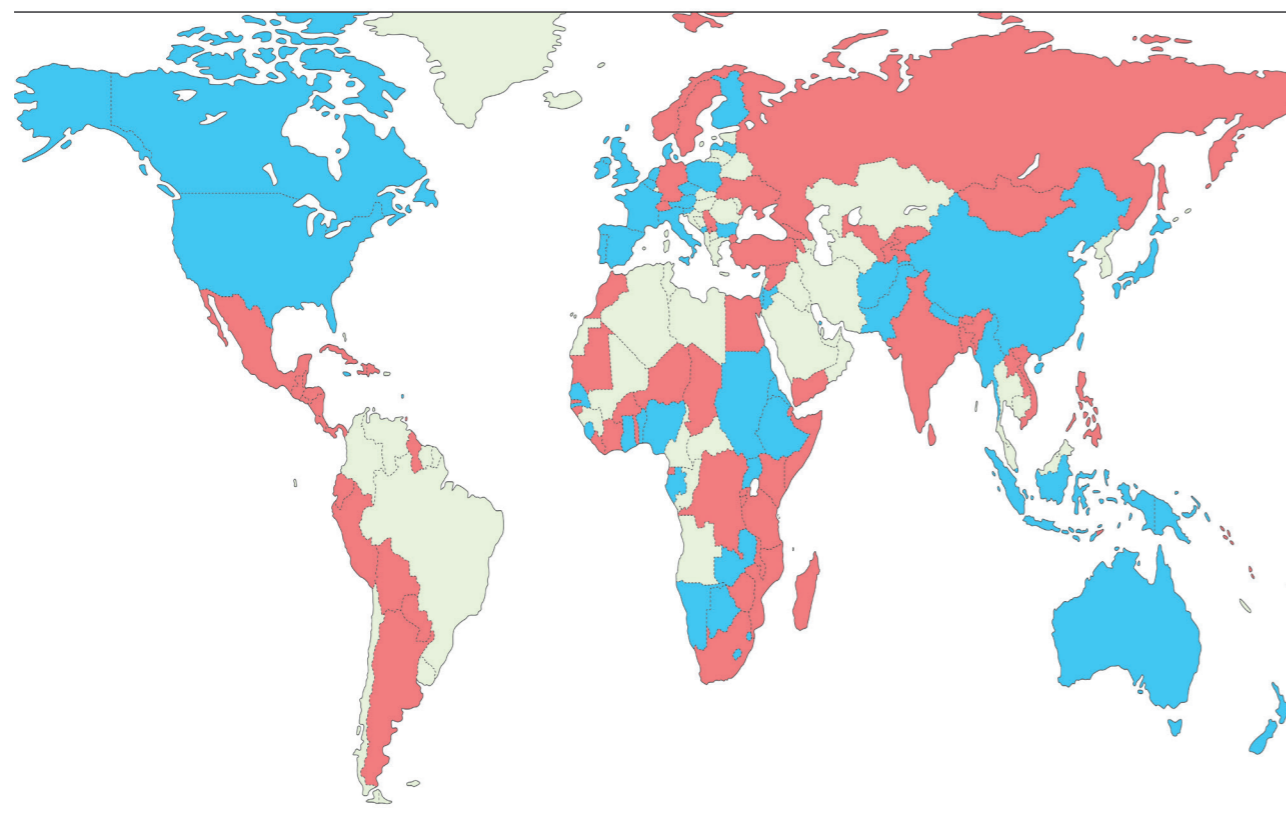


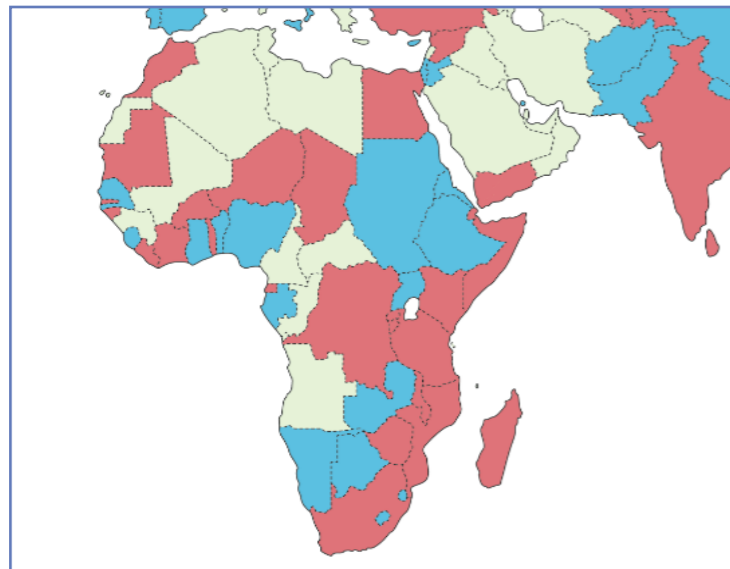
Figure 4. The independent states which have centrally orchestrated behaviour change programmes (shaded blue) and those states in which there has been a more ad hoc adoption of nudge-type policies (shaded red)

At present we can only speculate about why certain regions appear to be impervious to the impacts of the behavioural sciences. We could actually be looking at a series of false negatives, and the regions in question have adopted nudge-type policies that our methodology has simply not picked up. There could, however, be something more systematic at play, with the political cultures in these regions offering resistance to the uptake of nudge-type behavioural policies. An important question for future research in this area is to ask whether the more authoritarian political traditions in Eastern Europe have acted as bulwarks against the softer forms of paternalism promoted by nudge-type policies (although this would not explain the presence of such policies in China and Russia). To these ends, it is important to consider whether the insights of behavioural sciences are most applicable to the development of policies in liberal political systems. It is also important to consider the extent to which the new behavioural sciences could contribute to the development of less authoritarian forms of political intervention in certain regions of the world. Interesting questions can also be raised about the partial uptake of nudge-type policies in South America.

Understanding why certain regions appear to have emerged as heartlands of nudge-type policies is also an important consideration. The impact of the behavioural sciences on policy design and implementation is clearly strongest in North America, Western Europe, and Australasia. At a general level, nudge-type policies have clearly taken hold in the English speaking states whose academies first developed the behavioural theories on which they are based. In more specific terms, there have been particular acts of policy transfer that have contributed to the concentration of nudge-type initiatives in certain places. So, Richard Thaler acted as a form of consultant to the UK government when it was in the process of developing the apparatus of its behavioural state. The resultant Behavioural Insights Team has inspired the US government to develop its own nudge squad and has advised the government of New South Wales in Australia. In terms of Europe, it is clear that the European Commission is playing an important role in the promotion of the behavioural sciences within its member states (the European Commission recently produced a report entitled *Applying Behavioural Sciences to EU Policy-making*, Van Bavel, 2013).



The prominent role now being played by the behavioural sciences in African public policy can be attributed to a range of processes. It appears that many of the most pressing public policy agendas in Africa (in particular preventing the spread of HIV/AIDS, promoting improved hygiene practices, and combating the spread of malaria) relate to everyday domestic practices and habits. As we have already noted, the new behavioural sciences are particularly adept at developing effective, and politically acceptable, ways of changing the types of household behaviours that conventional government policies have often failed to reach.



The presence of Nudge-Type policies in Africa. Those states shaded red show some evidence of such policies. Those shaded blue have instigated the central orchestration of related policy initiatives. programmes.

Although some nudge-type policies are actually endogenous to Africa, it is important to recognize the important role that international development organizations have played in promoting the new behavioural sciences on the continent. International organizations such as USAID, AusAID, UNICEF, the World Health Organization, and the United Nations Population Fund have all been instrumental in this context (see Box 2).

- UNESCO
- United Nations Development Programme
- Unilever
- World Diabetes Foundation
- Hiam Health
- International Labour Office
- Secretariat of the Pacific Community
- Tools of Change (Canada)
- Behaviour Works (Australia)
- Euro Health Group
- NSMC (National Social Marketing Centre)
- Sustainable Brands
- Innovations Lab (Kosovo)
- Centre for Communications Programmes
- Change Hub
- Change Labs
- Communication Initiative Network
- Canyon Ranch Institute
- OECD
- A Little Bit of Hope
- Sanitation and Water For All Partnership
- University Research Co
- Text For Change
- World Economic Forum (Agenda Council on Neuroscience and Behaviour).
- Global Action Plan
- National Social Marketing Centre - UK (NSMC)
- World Wildlife Fund

- BEHAVE
- SNV
- Hygiene Central
- UNICEF
- International Medical Core
- C-Change
- Global Fund
- Danish Nudging Network (I Nudge You)
- World Bank
- Japanese Social Development Fund
- USAID
- Manoff Group
- URC
- Deutsche Bank
- Population Services International (PSI)
- Carribbean HIV/AIDS Alliance
- Health Ministry (Indonesia)
- Japanese Ministry of the Environment
- USAID
- AusAID
- Red Cross
- United Nations Population Fund
- Greenudge (Norway)
- PATH Foundation
- Carribbean HIV/AIDS Alliance
- Mindlab
- Ogilvy Change
- Behavioural Insights Team (UK)

In addition to illustrating the key development agencies that have been advocates of nudge-type policies, Box 2 also highlights two other types of international organization that have been behind the global spread of the new behavioural sciences. First, are a series of international NGOs, charities, para-governmental agencies and consultancies, such as the NSMC, the WWF and Change Labs. While charities have long been associated with the promotion of positive forms of behaviour change, it is interesting to see that major marketing consultancies

are now promoting similar aims. This eclectic group of organizations is not only promoting the use of the new behavioural sciences in local and national governments, but they also offer behaviour change expertise that is used to support the programmes of major development agencies. Second is a series of multinational corporations which are embracing the principles of behaviour change as part of their emerging Corporate Social Responsibility programmes.

Corporations have, of course, always been in the business of behaviour change. Convincing consumers of the need to buy their new product or services, or persuading them to shift to their particular brand, is what corporate marketing is all about.

It is interesting to note that the behavioural insights of the corporate world (including the importance of segmentation, product placement, narrative, reciprocity, inertia, and habit) have been central to the public sector's newly emerging behaviour change initiatives.

What appears to be changing is that now the private sector is learning how to promote what are routinely referred to as "sustainable" or "positive" behaviours (which essentially involve encouraging/enabling consumers to lead more healthy, financially responsible, and environmentally benign lives). It is in this context that large corporations such as Unilever are now becoming active in promoting the use of new behavioural insights within the pursuit of public policy goals. Given the financial power and global reach of these corporations, it is clear that they are key drivers within the globalization of the behavioural sciences.

It is important to reflect upon why corporations are becoming so involved in positive behaviour change interventions and what the implications of this process are. Conventional wisdom suggests that corporations promote positive behaviour change in order to improve their public image and ultimately enhance their bottom line. Our research, however, suggests that the corporate promotion of behaviour change is about establishing a non-commercial relationship with their consumers (of caring non-exploitation), which helps to cement forms of commercial brand loyalty. While the corporate promotion of responsible social behaviours should be encouraged, the emerging role of corporations in the field of public policy does raise some interesting ethical questions. Precisely where the line between positive and commercially-oriented forms of behaviour change (or indeed between social marketing and plain marketing) lies is often difficult to discern, but nonetheless needs to be rigorously policed.

4.5 . WHAT ARE THE EVIDENT DIFFERENCES IN THE WAYS IN WHICH THE INSIGHTS OF THE NEW BEHAVIOURAL SCIENCES ARE BEING APPLIED TO THE DESIGN OF PUBLIC POLICIES IN DIFFERENT COUNTRIES THROUGHOUT THE WORLD?

In many respects this is the most difficult question our research has attempted to answer. The difficulty in answering this question relates to the complex challenges of attempting to develop comparative generalizations that span the 135 states where we have found evidence of the public impact of the new behavioural sciences. Understanding the variations that exist between states would be difficult enough, but it is clear from our study that individual states themselves are often witness to very different applications of new behavioural insights.

In light of these challenges, we find it helpful to address this question not on the basis of state-by-state comparison, but through a more general set of reflections on the spectrum of policies that were uncovered in the process of completing this report. Figure 5 provides a helpful framework within which to locate and categorize nudge-type policies. This framework was developed in previous research we have carried out on behaviour change policies in the UK (see Jones et al 2013).

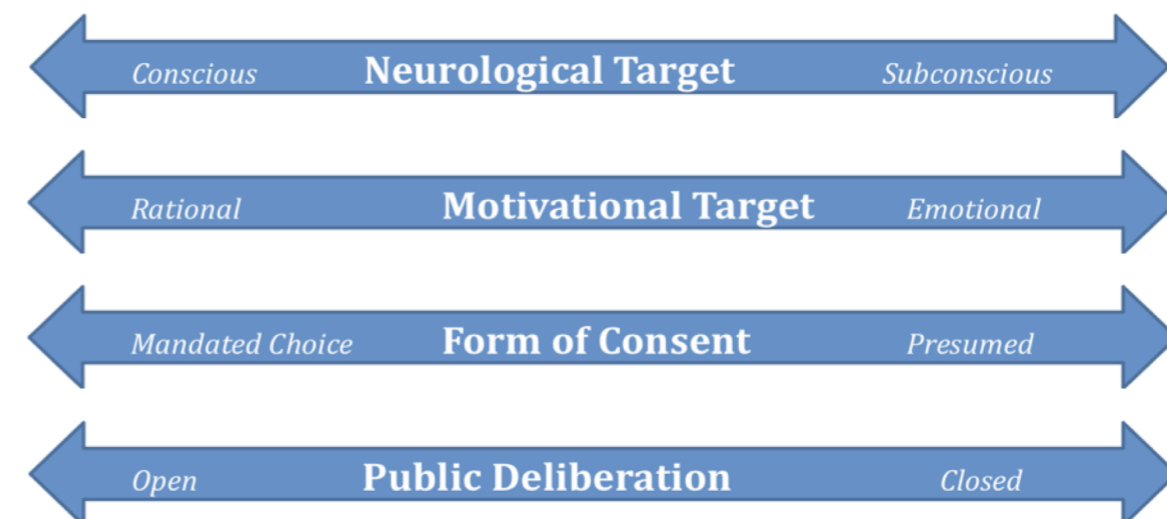


Figure 5. A policy spectrum of nudge-type policies (after Jones et al, 2013)

It is helpful to reflect on each sector of this spectrum in turn. In relation to the issues of Neurological Target it is interesting to note that new behaviour change policies target very different aspects of human behaviour. Some policies (the ones that are actually most closely associated with nudge policies) tend to target unconscious aspects of human behaviour. Certain community based sanitation initiatives in LEDCs, for example, have sought to redesign toilets to make it much more difficult to spread disease and much easier to maintain effective hand washing practices. While such initiatives are often supported by educational campaigns, in and of themselves they tend to rely on the unconscious interaction between a subject and their environment. Other behaviour change policies target more conscious and deliberate forms of behaviour. In many countries, for example, energy companies are making it much easier for people to access information on their energy practices (in the hope that such feedback will prompt greater energy

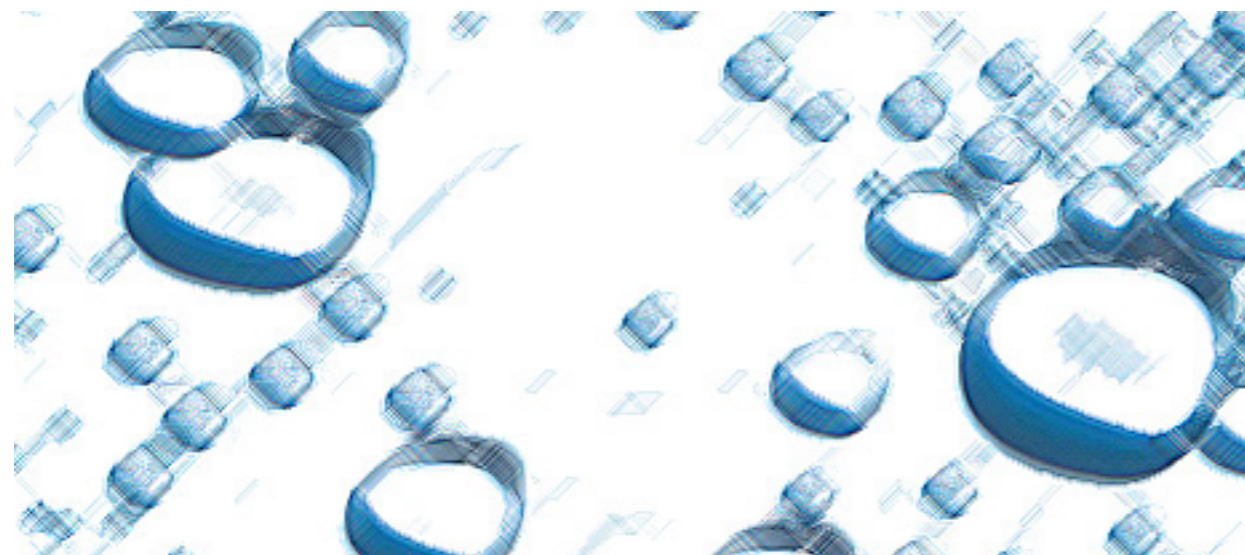
conservation measures). Many organizations throughout the world are also using mobile technologies as mediums of knowledge transfer and prompts to behaviour. Banks in Peru and the Philippines now send out regular text messages to customers who wish to be prompted into saving more effectively, while in Africa the Text to Change initiative uses mobile phone prompts in order to encourage people to make better health choices and receive regular medical check-ups and immunizations.

In reality, however, it is often very difficult to identify behaviour change policies that only target conscious or unconscious actions. Behaviour changing policies often involve a mixed approach. The same is true when it comes to the targeting of rational and more emotional forms of behavioral prompt (see Box 2). Certain behavioural policies attempt to make it easier to make a rationalized decision by, for example, making complex financial information about debt repayments or pension

enrolment much easier to understand. Other behavioural policies focus on the emotional dimensions of decision-making. UNESCO, for example, use art and theatre productions as a way of combating sexually transmitted disease. The use of art and narrative is designed to generate an emotional connection with the target population that will motivate behaviour change. Perhaps the most common behavioural policy we encountered at a global scale was the use of peer education and peer-to-peer pressure. Peer-based approaches to behaviour change recognize that human behaviour is framed by certain social and cultural norms. Humans are much less likely to change their behaviour if this change goes against socio-cultural norms, and are much more likely to change their behaviour if it means they can conform with the behaviours they see around them. Peer-based behavioural policies use local community members and social networks to promote behavioural shifts. The interesting thing about peer-based behavioural policy is that it targets both the rational (through the supply of advice and educational information) and more emotional (through the use of salient messengers) components of human decision-making.

The forms of consent that are associated with behaviour changing policies vary greatly across the policies that we have encountered.

Many nudge-type policies, particularly those associated with the automatic enrolment of people onto organ donor registers and company pension schemes, adopt a presumed consent approach to behaviour change. Presumed consent is based on the assumption that people want to donate their organs and join a company pension scheme, but for whatever reason simply never get around to doing so. To address this behavioural anomaly, presumed consent policies simply reset the default position and place people on donor registers and pension schemes automatically. Presumed consent policies, while often controversial, do not, of course, prevent people from choosing not to consent to the behaviour in question, they simply change the default position. At the other end of the spectrum, mandated choice policies seek to prompt behaviours not by resetting the default but by making it easier for people to make certain decisions. In the UK, for example, when applying for a new (or renewed) driving license, people are required to choose whether they would like to join the UK Organ Donor Register. This tick box exercise is a useful psychological prompt to action, but also makes it much easier to register for organ donation.



A final way in which it is possible to differentiate between emerging behaviour change policies relates to the degree of public deliberation that surrounds the intervention. Given the often unconscious targets of nudge-type policy, public deliberation is an important mechanism in and through which people are made aware of new behavioural policies and have an opportunity to oppose the implementation of such initiatives. When looked at in global perspective, it appears that there is often relatively little meaningful public deliberation surrounding new behavioural policies. Where public deliberation does exist it tends to occur in two main contexts.

First, public deliberation occurs when there are significant forms of central orchestration in the application of behavioural science to public policy. In the UK, for example, there has been significant media coverage and related debate concerning the operation of the Behavioural Insights Team. Leaked emails concerning the proposed formation of a Federal “Nudge Squad” in the USA, has resulted in renewed public scrutiny into the nature and purpose of nudge-type policies (largely instigated by the right-wing media). Meanwhile in Australia, the New South Wales Government’s consultation with the UK’s Behavioural Insights Team has attracted significant media coverage and accusations of “toxic policy imports.”

The second set of circumstance under which public deliberation tends to arise is when the policy in question is particularly controversial and/or requires some form of legal or constitutional change to enable its implementation. The recent adoption of a “deemed consent” organ donation in Wales, for example, has generated public deliberation due both to its controversial nature and the fact that the new policy required a Bill to be passed through the Welsh Assembly. In the case of New York Mayor Bloomberg’s attempt to reset the default size for the sale of sugary soft drinks in the city, significant public debate has followed the legal challenges that the soft drinks industry have lodged against the constitutionality of the ban.

Regardless of the presence or absence of public deliberation, it is clear that when nudge-type policies are debated it tends to be on an issue-by-issue basis, and not in relation to the broader implications of the application of the behavioural sciences to public policy. Discussions of presumed consent organ donation focus on the rights and wrongs of such presumptions and the dangers of state-based organ seizure.

Discussions of soda cup sizes focus on the right of city government to interfere within the consumption practices and preferences of citizens. What is clearly missing in such

deliberations is a more balanced discussion of the emerging role on the behavioural sciences within public life. Perhaps the nearest thing to such a balanced discussion came in 2010 when the UK’s House of Lords convened a special committee to discuss behaviour changing policies. Drawing on experts from across the social and psychological sciences, this committee sought to make a balanced assessment of the effectiveness of nudge-type policies (House of Lords, 2011). Even this inquiry, however, did not explore fully the opportunities and dangers that are associated with the use of the behavioural sciences within public policy delivery.

A final dimension of the new behaviour changing policies we have surveyed as part of this report is largely conspicuous by its absence. It is becoming increasingly apparent that the insights of the new behavioural sciences can be used to enable people to better understand the nature of their own decision-making and develop associated forms of psychological Capital. It is clear that greater social awareness of the varied rational and emotional drivers of human behaviour could provide a basis for enhanced forms of behavioural mastery and personal development. At present, however, it appears that the majority of new behavioural policies see policy-makers and executives utilizing new

behavioural insights in order to orchestrate aggregate forms of behaviour change. Such policy initiatives obviously do little to psychologically empower the people who are subject to them. Interesting examples of initiatives that seek to use the insights of the new behavioural sciences to develop psychological capital are provided in the work of the RSA’s Social Brain Project (see Rowson, 2011; Rowson et al, 2012; Grist 2010). The Social Brain Project has consistently emphasized the importance of making people more aware of the nature of their behaviour (a form of “neurological reflexivity”) as a basis for developing more empowering and effective forms of behavioural intervention. This is something we are exploring through the application of Mindfulness Training alongside education about behaviour change theory (see Lilley, 2013).

CONCLUSION BEHAVIOUR CHANGE 2.0

This report has charted the increasingly global influence of the behavioural sciences on the development and implementation of public policy. Although this report can only offer a snapshot of the global spread of nudge-type policies, it does confirm the global significance of the new behavioural sciences. Our research has shown that a minimum of 136 states show evidence of the impact of the new behavioural sciences on some aspect of their public policy apparatus. This report has also revealed that 51 states have developed some form of centrally orchestrated system for the application of new behavioural insights to public policy design.

Our research has also revealed some geographical patterns in the deployment of the new behavioural sciences. While Africa, Western Europe, North America, and Australasia are clearly hubs for nudge-type policies, it appears that the Middle East, Eastern Europe, and South America have not embraced the new behavioural sciences as readily.

The research has also revealed the great diversity of policy-types that have emerged under the influence of the behavioural sciences. There

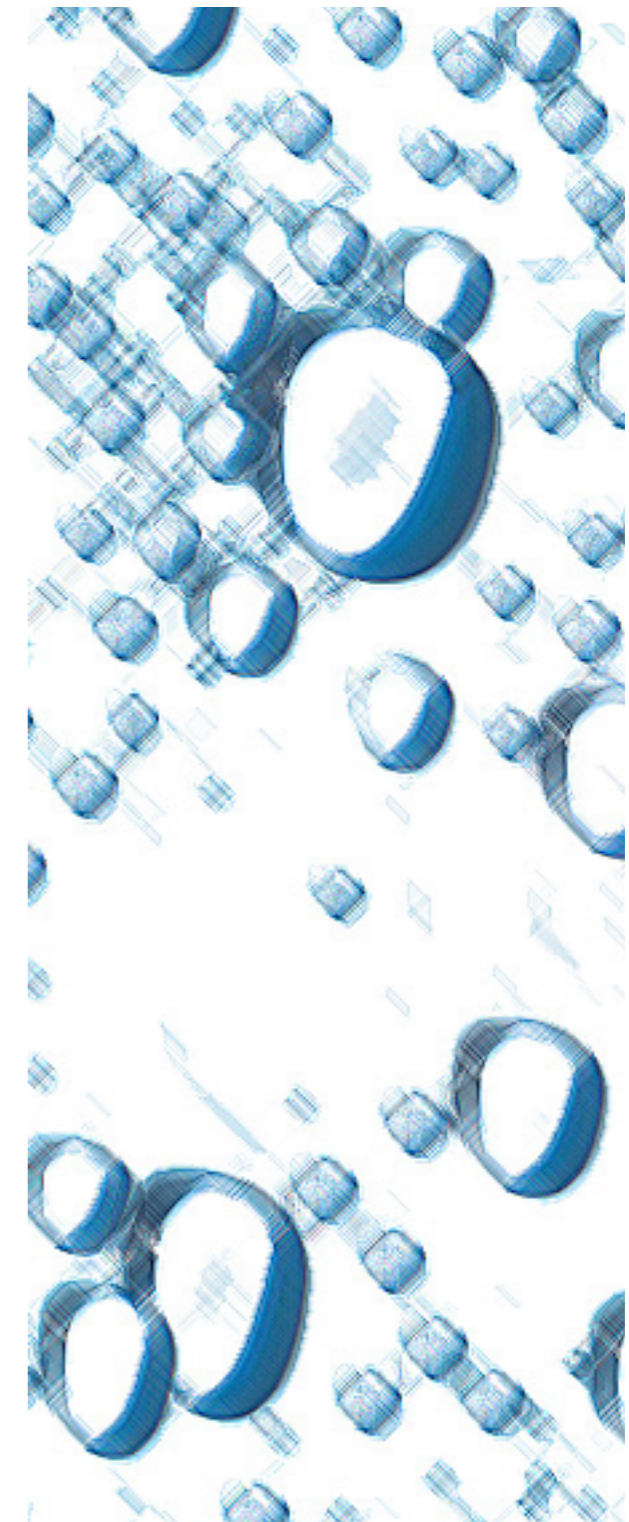
is a tendency for related policies to target both the conscious and unconscious aspects of human action. While policies display different approaches to consent, it is clear that these policies are rarely subject to significant forms of public deliberation.

In many ways this report has charted the emergence of Behaviour Change policies 1.0. These policies reflect the first, often experimental, attempts to apply the insights of the new behavioural sciences to a range of public policy challenges. Over the coming years it is likely that a series of more sophisticated and carefully orchestrated policies will emerge. We feel that it is important that as Behaviour Change 1.0 moves to Behaviour Change 2.0 that the insights of the new behavioural sciences are not only used to promote top-down systems of behavioural government, but also to encourage the development of behavioural empowerment and psychological capital at a grassroots level.

DEFINING PSYCHOLOGICAL CAPITAL:

The idea of psychological capital is relatively new. The term is most closely associated with the theory of 'positive psychological capital'. Theories of positive psychological capital first emerged towards the end of the twentieth century and sought to extend the traditional focus of psychology from a concern with mental illness to one of mental wellness. It was the management specialist Fred Luthans who first codified the principles of positive psychological capital. In a management context psychological capital is associated with the development of key personal attributes including confidence, optimism, perseverance, and resilience, which collectively contribute to improved workplace performance. In broader terms, psychological capital can be understood as a form of enhanced psychological understanding of self and others. Understood in these terms, psychological capital occupies a space between human capital (a set of capacities that are associated with a person) and social capital (a set of capacities that are generated through the formation of inter-personal networks and alliances). At an individual level, the development of psychological capital is associated with a better understanding of, and control over, the thoughts and emotions that shape behaviours. At a

broader social level, the development of psychological capital is related to: 1) a better understanding of the role of others in shaping our feelings and actions, and 2) a renewed sense of appreciation of, and compassion towards, the psychological drivers behind the actions of others.



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AN ESRC RESEARCH PROJECT

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