



Nudging Around The World

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1. Introduction

With the recent publications of *Nudge: Improving Decisions about Health, Wealth, and Happiness* and *Simpler: The Future of Government* by Richard Thaler and Cass Sunstein, policymakers are examining how behavioural insights can be incorporated into policy design. Policy design has been largely influenced by traditional economics where individuals are viewed as rational decision-makers, cognitively sophisticated enough to process all relevant information and are not swayed by emotion. But decades of research in behavioural economics have shown that human beings are not rational decision-makers. Research has also shown that, intended or not, the way choices and information presented in a given context affects a person's decision-making process. This insight allows policymakers to carefully consider the way choices and information are presented and help steer people towards better choices. Thaler and Sunstein use the term "choice architecture" to refer to the act of creating environments that guides individuals towards better choices. They also use the term "nudge" to refer to "any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic consequences"¹.

Consider the experiment with the United States Federal Application for Federal Student Aid (i.e. FAFSA). The FAFSA application process is long and overly complex but must be completed to access many state and institutional grants. A team of researchers partnered with H&R Block, a North American tax filing company, to test the effects of simplifying the grant application process on college enrolment. To simplify the process, the team created software that automatically filled up to two-thirds of the FAFSA form using information from the student's or from the student's family tax returns. Once the form was completed, the team offered to submit the FAFSA form on their behalf.²

Traditional economics would assume that all grant applicants are rational decision-makers who have limitless amount of attention cognitive ability to navigate the application process. Consequently, simplifying the application process would make little difference to grant applications or college enrolment. However, behavioural economics would argue that the application process could be a significant factor. The application process, if too complicated, would result in cognitive overload leading some to give up on the application process. The results of the test were quite significant. Families with high school seniors or recent graduates who received help on the FAFSA form were 40% more likely to submit a FAFSA application³ and were also 33% more likely to receive a Pell Grant – a major needs-based federal grant.⁴ Furthermore, high school seniors and recent high school graduates who received help with the FAFSA form were also 25%-30% more likely to enroll in college⁵. Consequently, the US government has made an effort to streamline the FAFSA application process in addition to providing



more funding for college grants⁶.

Behavioural economics is quickly becoming a complement to the standard theory of economics and is helping policymakers create more effective policies and social welfare programs. It also provides policymakers with additional tools like nudges and choice architecture, which can often complement traditional policy tools such as regulation.

The goal of the present report is to:

- Compare and contrast tools in behavioural economics with other approaches to behaviour change.
- Present some guidelines on how to choose the appropriate tools for policy and welfare.
- Summarize the use of behavioural economics initiatives by jurisdictions across the globe.

2. Current Tools for Influencing Behaviour Change

Consider an individual who currently chooses option A, but option B is the more desirable outcome. There are three current approaches for getting the person to shift from A to B:

Tool 1: Regulation and Restrictions

Restrictions, bans, compliance rules, and similar forms of regulation impose behavioural limitations that individuals or corporations are expected to comply with. Regulation is useful if the consequences of not following them are harmful and pose a high risk to society. It is also useful when there are third party effects – where the consequences are not absorbed by the individual or corporation engaging in the behaviour, but are absorbed by those around them⁷. In addition, regulation sets clear protocols and expectations of what is required from individuals and corporations and serves as reference point or benchmark for behaviour. A disadvantage to such policy tools is the cost of compliance, as adequate enforcement must be put in place to ensure regulatory standards are met. Regulation also takes significant time to create and amend, may induce resistance and can be a burden to the government system if they are overly complex. In the world of business, restrictions could be imposed simply by making Option A unavailable.

Tool 2: Incentives

Taxes, fines, subsidies and grants are all examples of economic incentives. Taxes and fines are negative influences and discourage undesirable behaviour, while subsidies and



grants act as positive influences. Incentives are important and can work well if individuals routinely weigh the costs and benefits of their actions. In the business world, incentives are delivered through price and non-price promotions.

With negative incentives such as taxes and fines, the explicit assumption is that they work to deter undesirable behaviour. In many cases, taxes and fines are effective at discouraging behaviour. However, in some cases, taxes may unintentionally give an individual “license” to engage in certain behaviour. In other cases, taxes and penalties might not be psychologically painful enough to result in the desired change.

Tool 3: Information, Education and Persuasion

Information and education programs are commonly used in personal healthcare and savings programs to enhance learning and individual knowledge. Once the individual has the relevant information, it is assumed that individuals will incorporate this knowledge into their decision-making process and make informed decisions. One of the goals of financial literacy programs for example, is to arm individuals with enough knowledge to make informed decisions regarding savings and retirement. With this knowledge, it is assumed that individuals will be motivated enough to create and follow through with a savings and retirement plan.

Persuasion is frequently used in advertising to influence purchasing decisions. By appealing to one’s needs or desires, businesses seek to convince consumers to buy their particular service or product over their competitor’s. In government, communications programs that appeal to one’s moral or civic responsibilities can be used to persuade individuals to make better choices for themselves or for the betterment of society.

Nudging and choice architecture is now a fourth alternative.

Tool 4: Nudges and Choice Architecture

Instead of placing restrictions or changing economic incentives, nudges influence behaviour by changing how choices are presented in the environment. While a significant change in economic outcome or incentives is not considered a nudge, a nudge may serve to highlight an economic incentive.

Nudges are a relatively new tool but are becoming a part of the policymaker’s toolkit as they have been shown to significantly impact behaviour. In some cases, nudges may be easier to implement than regulation or economic incentives. For example, to reduce pollution and gasoline consumption, policymakers could consider implementing solutions



that raise the cost of gasoline prices. However, drivers are highly opposed to such price changes and it would be difficult for politicians to pass such policies without receiving some criticism from their constituents. Using a nudge may be more palatable and still produce significant results. While nudges are effective at changing behaviour, their effectiveness heavily depends on the context. Consequently, it is important to take an evidence-based approach to designing nudges. Government bodies should have access to, or create a database that documents various nudging strategies and the conditions under which those strategies worked or did not work.

3. Choosing the Appropriate Policy Tools

Several factors need to be considered by a policymaker when determining which set of policy tools to apply:

1. **Whether enforcement is feasible and cost-effective.** This is particularly relevant when using regulation and incentives as policy tools. Policymakers should consider whether enforcement is possible and how much enforcement is needed to ensure the intended outcome of a policy is achieved. Using a combination of policy tools, such as regulation and choice architecture may help to increase compliance.
2. **Whether freedom of choice is important.** As mentioned, businesses could eliminate option A and make option B the only choice. From a social welfare perspective, this may be the appropriate action to take if option B enhances an individual's standard of living or if choosing option A leads to serious consequences for society or the individual. The policymaker should also consider whether eliminating choices results in a negative or unpopular response from the community or from government parties.
3. **The possible response from the market.** Policymakers working in domains such as financial services and consumer protection should consider how businesses will respond to their policies. Many policies are aimed at helping individuals make better decisions for themselves. But businesses may not benefit from such policies and can implement their own interventions and promotions to override policy goals. Policymakers should keep in mind that both the marketplaces' and the individual's incentives should be aligned with their policy goals. Consider how US regulators sought to help individuals incur less overdraft charges. In 2009, it is estimated that \$20 billion dollars was spent on overdraft fees related to occasional ATM and debit card transactions⁸. It is also estimated



that the poorest banking customers pay about 90% of all overdraft fees⁹. In 2010, regulators required financial institutions to default customers into a fee structure where overdraft services on occasional ATM and debit card transactions would not be allowed¹⁰. Instead, customers would need to opt-in for such services. Overall, the new regulations had little effect on reducing overdraft charges as financial institutions have constant access to the consumer and can aggressively promote overdraft services. Additional regulation was in place to restrict how overdraft services were presented to the consumer, but financial institutions were able to work within these rules to persuade consumers to opt-in to using occasional overdraft services.

4. **The potential outcomes of the policy.** While any intervention is typically designed with much thought having been paid to the immediate consequences of the intervention, it is also important for policymakers to think about secondary and longer term effects. Interventions could have two kinds of unanticipated effects. On the negative side, there is a lot of recent research on the so-called licensing effect that shows encouraging a positive behaviour change in one domain might trigger subsequent negative behaviours in either related or unrelated domains¹¹. For instance, a recent study suggests that interventions that result in less water consumption can also get households to consume more electricity.¹² On the flip side, interventions could also have unanticipated positive consequences. For example, the TREAD legislation in the United States mandated car manufacturers to disclose rollover risk data. While there is little evidence to suggest that consumers actually use this data in making vehicle choices, the fact that they are being disclosed has resulted in an incentive for manufacturers to produce safer cars.¹³ Likewise, legislation that requires restaurants to post hygiene certificates has actually increased the level of hygiene¹⁴. Experts in behavioural sciences and previous experiment data can help policymakers determine what are some of the likely outcomes and choose the right policy tools accordingly. There is also the question of whether a policy will have long-lasting effects and whether its effectiveness will remain if the policy is removed. While this may be difficult to predict beforehand, policymakers should keep this in mind when designing policies.

Taking these factors into consideration, the table below provides some guidance for when different policy tools are useful and when choice architecture can act as a complement to enhance these tools:



Regulation (Bans, compliance rules, mandates)	
Useful when	• Behaviour has consequences that are a high risk to society or takes advantage of others (<i>e.g. crime, intentional fraud, pollution</i>) or against society's values or ethics (<i>e.g. racial discrimination, freedom of speech</i>) • Third-party effects are present and the consequences of the behaviour are not entirely absorbed by the individual or corporation. • Establishing standards that enhances standard of living or protects individuals (<i>e.g. minimum wage requirements, product safety</i>). • Enforcement is feasible and cost-effective.
Avoid When	• Regulation is perceived as overly restrictive or intrusive. • Individuals would likely respond with defiance or by undermining regulation.
When Choice Architecture Can Help	• Enforcement is in place but may not be working effectively. Choice architecture may help increase compliance.
Economic Incentives (Taxes, Penalties, Grants, Subsidies)	
Useful when	• Behaviour is motivated by costs and benefits and hyperbolic discounting does not take effect (benefits are felt upfront). • Incentives are salient to the individual. • Market is in-line with the incentives and does not work against them. (<i>e.g. Subsidies for energy efficient products are in direct competition with cheaper products. "Green" taxes on computers must work against marketing efforts to sell the latest and greatest products</i>).
Avoid When	• Behaviour is motivated by fairness, altruism, or social norms (<i>e.g. organ donations</i>). • Taxes and penalties create a "license" to engage in behaviour.
When Choice Architecture Can Help	• Behaviour is affected by cognitive influences (<i>loss aversion, status quo etc.</i>). Choice architecture can help highlight incentives or reduce particular barriers to accessing incentives.



Information and Persuasion	
Useful when	• Combined with other policy tools. • Encourages learning and can improve decision-making skills over time.
Avoid When	• Information is presented in a complex manner. • Message conflicts with what is being presented in the media or by other influencers such as peers.
When Choice Architecture Can Help	• When information is overly complex, choice architecture can help improve information processing using nudge techniques such as salience and simplification.
Nudges and Choice Architecture (Defaults, Simplification, Opt-in vs. Opt-Out)	
Useful when	• Freedom of choice is important and individual preferences vary. • Economic incentives or penalties are not appropriate. • Behaviour is affected by cognitive influences and individuals struggle with turning intentions into action. • Increasing alignment with current regulations or incentives.
Avoid When	• Context can be changed by businesses or other institutions in the marketplace.¹⁵ Additional regulation may be needed to set boundaries for market behaviour. Or, incentives may need to be changed to improve alignment with policy goals. • Intended outcome of the nudge may go against individual intentions¹⁶.

Table 1. A General Guide to Choosing Policy Tools

3.1 Mapping Policy Tools Against the Decision-Making Process

Using a combination of tools may be necessary to achieve the broader goals of an initiative as each tool addresses different issues. Creating a decision map will help identify the role each policy tool plays and identify potential barriers or bottlenecks. For example, the figure below is a decision map for an individual who is considering attending college. The decision map lists out the critical actions that need to be taken, the possible bottlenecks, and how different policy tools address different bottlenecks. (For a more comprehensive review of decision maps and bottlenecks, please review our previous report – [A Practitioner’s Guide to Nudging](#)).

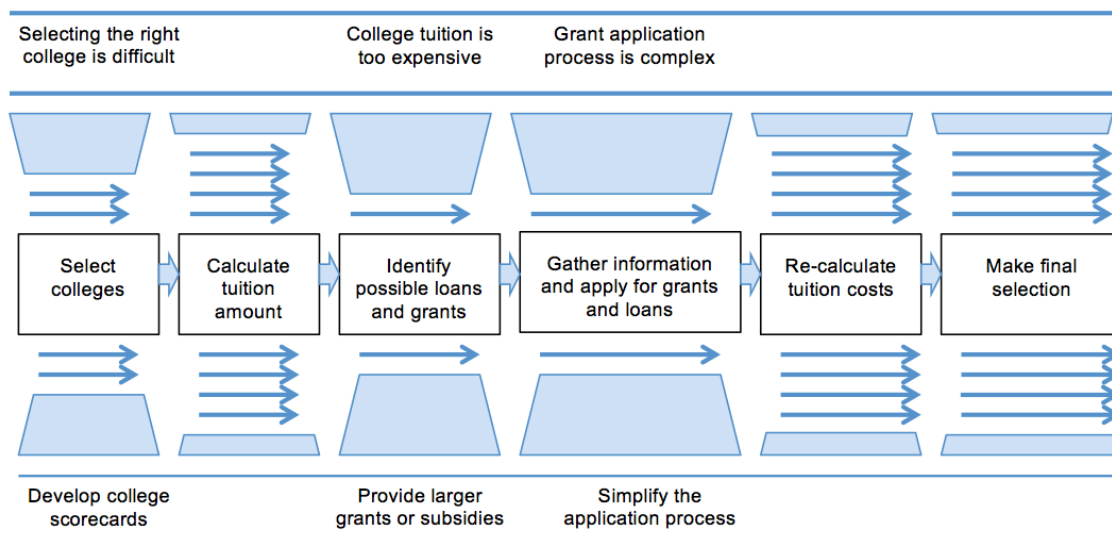


Figure 1. A Decision Map For Individuals Considering College Enrolment

3.2 Designing and Experimenting with Behavioural Interventions

Testing nudge interventions is crucial as it is difficult to predict the outcome beforehand. Randomized controlled trials (RCTs) in the field are one of the best methods of testing nudge interventions and is being used by the United States and United Kingdom. When designing and selecting nudge projects, it is important to that the project be structured so that nudges are adequately tested. We recommend that nudge projects be designed such that:

- There is a short duration between the nudge intervention and when the resultant effects occur.
- The outcome being tested is well defined and easily measurable. Examples of easy-to-measure outcomes include a) dollar savings, b) whether a household has a retirement plan or not, or c) whether an individual opts to get an annual health checkup or flu shot taken. On the other hand, examples of difficult-to-measure outcomes include attitude towards organ donation, the intention to open a bank account, or dollars donated to a charity.
- The nudge is tested in a fairly stable environment where existing environmental factors can be held constant and no new factors are introduced. As a result, a causal relationship between the intervention and the outcome can be established.



When RCTs are not available due to issues such as budget constraints or privacy concerns, controlled lab experiments can help test interventions as well. Quasi-experiments can also be used if RCTs are not suitable. Some governments have also used public feedback to shape behavioural interventions. It is also recommended that policymakers measure the effect of the intervention after it is implemented and adapt policies as needed.

4. A Summary of Behavioural Economics Initiatives from Around The World

UK

The UK government has centralized their initiatives with the formation of the Behavioural Insights Team (also called the “Nudge Unit”). The Nudge Unit is a standalone government unit that works with businesses, NGOs, and other government departments to develop and test nudge interventions. Formed in 2010, the team has conducted numerous experiments in areas such as energy usage, debt and fraud, and charitable giving. Through their published reports and seminars, the team has helped educate and disseminate knowledge throughout the UK government on behavioural economics and its application in public policy. Since its formation, the team has achieved much success with the team identifying various behavioural interventions that would result in a cost savings of over £300 million, and has exceeded its objective of achieving a 10-fold return on the cost of the team¹⁷. Due to its success, the New South Wales and Australian government have commissioned the team to assist them in applying behavioural economics to their public policies¹⁸. Currently, the UK government is planning to privatize the Nudge Unit, which will add commercial capacity and investment to the team and the potential to generate revenue for the government and taxpayers¹⁹.

In addition to the Nudge Unit, various departments including the Department for Environment, Food and Rural Affairs (DEFRA), Department of Energy and Climate Change (DECC), and the Department of Health (DH) have their own behavioural economics initiatives and have contributed to the Government’s knowledge of this field²⁰. Also, the Behavioural Science in Government Network is also being developed to improve knowledge sharing across the UK government.²¹

Recognizing that the current models used for policymaking require updating, the UK government has mandated that policymakers engage in professional development to ensure they are up to date on the latest policy tools, including behavioural science²².



US

Between 2009-2012, Cass Sunstein, currently a professor at the Harvard Law School and co-author of *Nudge: Improving Decisions About Health, Wealth, and Happiness*, was appointed the administrator of the Office of Information and Regulatory Affairs (OIRA). During his appointment, Sunstein spearheaded many nudge initiatives including the Smart Disclosure initiative and the redesign of the USDA Food Pyramid and the Fuel Economy label.

Following the success of the Behavioural Insights Team, the US government has formed the Social and Behavioural Science Team who will be working with various government agencies to test and implement behavioural interventions. Currently, the team is working on initiatives in the areas of childhood education (among low-income families), health compliance, and domestic violence. The formation of the team is part of a broader initiative to improve government efficiency and performance using evidence and innovation.²³ Government agencies are also being advised to consider applying behavioural insights to help improve policy outcomes and lower operational costs²⁴. Other efforts to incorporate behavioural economics into policy are dispersed across various government departments. Most notably, the USDA established the Cornell Center for Behavioral Economics in Child Nutrition Program with the goal of leading and disseminating research in behavioural economics and child nutrition²⁵. The Department of Energy is also seeking to establish its own behavioural science team²⁶. The Federal Trade Commission also uses behavioural economics in its policy analysis and has participated in various behavioural economics workshops and conferences.

Denmark

At the moment, Denmark does not have a centralized unit for behavioural economics but several departments are part of the Danish Nudging Network. The Danish Nudging Network is comprised of researchers, practitioners, and policymakers who are interested in using behavioural science in public policymaking²⁷. The Network is also a part of iNudgeYou, a non-profit organization that conducts research and organizes workshops and courses in behavioural economics.

Other Countries

It should be noted that agencies in Singapore, the European Union, Canada, and other countries are also incorporating nudges and behavioural economics into their policies and welfare programs. Appendix 1 outlines several policies and welfare programs from various countries that demonstrate the use of choice architecture and other policy tools. The European Union for example, has used behavioural economics to design some of



their consumer policies while Singapore has used it to design the CPF Longevity Insurance Plan. New Zealand incorporated behavioural economics into KiwiSaver – their voluntary savings plan, and the Ministry of Economic Development has also published a report discussing the role of behavioural economics in policymaking²⁸.

4. Conclusion

Choice architecture and nudging are still relatively fledgling approaches to behaviour change, especially in the world of policy and welfare. However, the results demonstrated by early adopters like the UK have shown much promise. Furthermore, general insights from behavioural economics are being used in several countries to design traditional policy tools like regulation. While choice architecture is not a panacea, it is a policy tool that can be implemented at a low cost yet provide significant results. As governments continue to deal with increasing resource constraints, nudging might become an increasingly popular and effective toolkit.



APPENDICES



Policy Case Studies

Helping The Unemployed Return To Work

Country: United Kingdom

Policy Tools: Choice Architecture

Assisting unemployed workers in their return to the workforce is an important social welfare issue. Several policy tools are commonly used to address the issues surrounding unemployment including providing resume services, short-term unemployment benefits, and access to job training. Choice architecture could provide additional tools to aid the process. Working with Jobcentre Plus in Loughton, Essex, the Behavioural Insights Team ran a six-month randomized controlled trial to test several nudge interventions.

Three interventions were introduced:

1. Ensuring that individuals talk about going back to work on the first day.
2. Adding commitment devices to help jobseekers focus on planning for job activities they will do in the future rather than focusing on job activities they have done in the past.
3. Using expressive writing and strengths identification to help build resilience and improve psychological wellbeing.

The results of the trial showed significant improvement, as job seekers participating in the new process were 15-20% more likely to be off unemployment benefits after 13 weeks than those who did not ²⁹. Due to the success of the program, larger trials are being conducted in Essex and in the Northeast area of the UK.

Opower - Using Social Norms To Reduce Energy Usage

Country: United States

Policy Tools: Information, Choice Architecture

Opower is a software company working with utility companies to provide customers with information about their energy usage. The company sends out home energy reports that provide energy conservation tips and information about each household's energy usage. Opower worked with academic researchers to conduct large-scale randomized controlled experiments to test the power of social norms in energy conservation. In addition to providing tips and household energy information, the reports compared each household's energy to that of other households in the area.



Researchers found that the home energy reports reduced energy consumption in the average household by over 2%.³⁰ The cost of the intervention averaged about 2.5 cents per kilowatt-hour and compared favorably to other energy efficiency programs that have costs ranging from 1.6 cents per kilowatt-hour to 6.4 cents per kilowatt-hour³¹.

Helping Retail Investors Understand Financial Products
Country: Europe (European Commission)
Policy Tools: Regulation, Choice Architecture

Mutual funds, investment-based life insurance products, and structured term deposits, are all examples of Packaged Retail Investment Products (PRIPs), which are commonly sold to retail investors. In the European Union, it is estimated that the total market worth of PRIPs is up to 10 trillion Euros³². PRIPs can be difficult to understand and could result in suboptimal investment choices for the retail investor. The information provided for these products is lengthy and complex and make it difficult for the investor to compare features across investment products.

To understand the issues surrounding the problem, the European Commission conducted a behavioural study around consumers' financial decision-making process. The research team behind the study reviewed the current research surrounding financial decision-making and also conducted several online and lab experiments in several Member states³³. Their results confirmed that investors indeed struggled with their investment choices. The study also showed that simplifying financial product information could significantly help investors make better decisions in a non-advised retail investment environment³⁴.

Following the study, European Commission proposed the creation of Key Information Documents (KID) for PRIPs. These documents would be short, easy to read, and would answer key investment questions such as: What are the costs of the investment? Is it possible to lose money? What are the risks involved with this investment?³⁵ The documents will be used in all member states, allowing investors to compare investment products offered in various parts of Europe. Simplifying financial information is a step in the right direction but other issues still need to be investigated. In the behavioural study, 58% of retail investors stated that their investment decisions were influenced by a financial advisor³⁶. Further research needs to be done to help investors make better financial decisions in such environments.



CPF Lifelong Income for the Elderly (CPF LIFE)

Country: Singapore

Policy Tools: Regulation, Choice Architecture

The Central Provident Fund (CPF) pension fund is part of Singapore's social security system and provides retirement income for working citizens. The pension fund operates on the assumption that citizens will live to the age of 85. However, life expectancies have risen and it is estimated that one in two Singaporeans will live past the age of 85³⁷. As a result, the CPF Lifelong Income for the Elderly (CPF LIFE) program was created to provide income for those who live past the age of 85. The program is mandatory for individuals who are 55 in 2013 and have a minimum savings of \$40,000 in their retirement account by age 55, or \$60,000 when they reach 63 years of age³⁸.

The design of the program was tasked to the National Longevity Insurance Committee (NLIC) committee and incorporated ideas and feedback from the public. Some of the concerns that were identified prior to the launch were addressed using behavioural concepts:

1. **Simplification and Defaults:** NLIC initially proposed 12 different annuity plans for the public to a good amount of choice and flexibility. However, the public felt that the various plans were difficult to understand. Instead, the government reduced the offering to four plans, with one of the four plans selected as the default.³⁹ Currently, the government offers two income plans - a Standard and a Basic Plan, which differs in beneficiary and payout amounts. The Standard Plan, which has a higher payout amount, was set as the default.⁴⁰
2. **Framing:** The income program was originally named the CPF Longevity Insurance Scheme and the public related the term "insurance" with death. They did not understand that the program provided income during their lifetime rather than at their death. The government renamed the program CPF Lifelong Income for the Elderly (or CPF LIFE)⁴¹ as it was a better representation of the program's goals.

The introduction of CPF Life was met with broad public support and with minimal adverse reactions. The Singaporean government recognizes that the program is a work-in-progress and expects to change the program as needed.⁴²



Increasing Tax Repayment Rates Country: United Kingdom Policy Tools: Choice Architecture
In the United Kingdom, it is estimated that fraud costs the economy about £38.4 billion per year.⁴³ In particular, about 10% of people do not pay their self-assessed taxes on time.⁴⁴ The Behavioural Insights Team partnered with HM Revenue and Customs to conduct a series of trials to test the effectiveness of various messages on self-assessed tax repayments. The trials revealed that tax letters stating that the majority of individuals pay their taxes on time and the importance of paying taxes, resulted in a 15% increase in tax repayments compared to the control group letters.⁴⁵ If these tax letters were sent out to self-assessed tax debtors, it is estimated that about £30 million of extra revenue could be generated for the government.⁴⁶
Lazy Town – Encouraging Kids to Eat Healthier Country: Iceland, United Kingdom (in progress) Policy Tools: Information and Persuasion, Choice Architecture
Lazy Town is an Icelandic TV show that motivates children to exercise and eat healthier. Leveraging on its popularity, the show has launched several health initiatives in partnership with the Icelandic government to encourage healthier eating and exercise. In one initiative with a large supermarket chain, fruits and vegetables were labeled “Sports Candy” – the name Lazy Town uses for fruits and vegetables. The simple change in naming led to a 22% increase in sales for the supermarket⁴⁷. Lazy Town became mainstream in 1996 and since then, child obesity rates have decreased among 9-year old children in Iceland.⁴⁸ Following Lazy Town’s success, the Behavioural Insights Team and the Department of Health have developed a partnership with Lazy Town and is looking to develop similar initiatives in the United Kingdom. The initiative will also incorporate behavioural insights and will be rolled out nationwide.⁴⁹



REFERENCES

¹ Thaler, R., & Sunstein C. (2008). *Nudge: Improving Decisions about Health, Wealth, and Happiness*. USA: Penguin Books.

² Bettinger E.P., Long B.T., Oreopoulos P., & Sanbonmatsu L. (2009). *The Role of Simplification and Information in College Decisions: Results from the H&R Block FAFSA Experiment*. NBER Working Paper No. 15361. Retrieved from <http://www.nber.org/papers/w15361>.

³ Ibid, p.16.

⁴ Ibid. p.19.

⁵ Ibid. p.3.

⁶ United States. Executive Office Of the President & National Economic Council. (September 2009). *Simplifying Student Aid: The Case for an Easier, Faster, and More Accurate FAFSA*. Retrieved from http://www.whitehouse.gov/assets/documents/FAFSA_Report.pdf.

⁷ Council on Foreign Relations. (10 July 2013). Regulation, Behavior, and Paternalism. Retrieved from <http://www.cfr.org/economics/regulation-behavior-paternalism/p31076>.

⁸ Willis, L. (2012). When Nudges Fail: Slippery Defaults. *University of Chicago Law Review* (forthcoming). Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2142989. Retrieved August 16, 2013

⁹ Ibid. p.14.

¹⁰ Ibid. p.16.

¹¹ Robitaille, N., Mazar, N., & Mitchell, A. (2013). *Removing Individuals' License to Misbehave*. Working paper. University of Toronto.

¹² Tiefenbeck, V., Staake, T., Roth, K., & Sachs, O. (2013) For better or for worse? Empirical evidence of moral licensing in a behavioral energy conservation campaign.



Energy Policy. 57:160–171.

¹³ Fung, A., Graham, M., & Weil, D. (July 2008). *Full disclosure: The Politics and Promise of Transparency Policies*. Cambridge: Cambridge University Press.

¹⁴ Jin, G., & Leslie, P. (2003). The effect of information on product quality: Evidence from restaurant hygiene grade cards. *The Quarterly Journal of Economics*, 118(2): 409–451.

¹⁵ Barr, M.S., Mullainathan, S., & Shafir, E. (October 2008), Behaviorally Informed Financial Services Regulation. *New America Foundation*. Retrieved from http://www.newamerica.net/files/na_f_behavioral_v5.pdf.

¹⁶ Bronchetti, E.T., Dee, T.S., Huffman, D.B., & Magenheimer, E. (December 2012). A Nudge Isn't Always Enough. *Centre for Retirement Research at Boston College*. Retrieved from http://crr.bc.edu/wp-content/uploads/2012/12/IB_12-21-508.pdf.

¹⁷ United Kingdom. Behavioural Insights Team. (20 September 2012). *Behavioural Insights Team Annual Update 2011-2012*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/83719/Behavioural-Insights-Team-Annual-Update-2011-12_0.pdf.

¹⁸ Ibid. p.1.

¹⁹ United Kingdom. Cabinet Office and Efficiency & Reform Group. (1 May 2013). *Government launches competition to find a commercial partner for the Behavioural Insights Team*. Retrieved from <https://www.gov.uk/government/news/government-launches-competition-to-find-a-commercial-partner-for-the-behavioural-insights-team>.

²⁰ United Kingdom. House of Lords, Science and Technology Select Committee. (19 July 2011). *Behaviour Change Report*. Retrieved from <http://www.publications.parliament.uk/pa/ld201012/ldselect/ldsctech/179/179.pdf>.

²¹ Ibid. p.30.

²² United Kingdom. HM Government. (June 2012). *The Civil Service Reform Plan*. Retrieved from <http://resources.civilservice.gov.uk/wp-content/uploads/2012/06/Civil-Service-Reform-Plan-acc-final.pdf>.



²³ Thaler, R. (24 August 2013). Public Policies, Made to Fit People. *The New York Times*. Retrieved from http://www.nytimes.com/2013/08/25/business/public-policies-made-to-fit-people.html?_r=0.

²⁴ United States. Office of Management and Budget. (26 July 2013). *Next Steps in the Evidence and Innovation Agenda*. Retrieved from <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-17.pdf>

²⁵ Guthrie, J. (18 November 2010). A Nudge in the Right Direction: USDA Sponsors Behavioral Economics Research to Promote Healthy Eating at School. *United States Department of Agriculture (blog)*. Retrieved from <http://blogs.usda.gov/2010/11/18/a-nudge-in-the-right-direction-usda-sponsors-behavioral-economics-research-to-promote-healthy-eating-at-school/>.

²⁶ H.R. 3247 (111th): To establish a social and behavioral sciences research program at the Department of Energy, and for other purposes. Retrieved from <http://www.govtrack.us/congress/bills/111/hr3247/text>.

²⁷ See <http://www.inudgeyou.com> for more information.

²⁸ See <http://www.med.govt.nz/business/better-public-services/pdf-docs-library/behavioural-analysis-for-policy.pdf>.

²⁹ United Kingdom. Cabinet Office. (12 December 2012). New BIT trial results: helping people back into work. *Behavioural Insights Team Blog*. Retrieved from <http://blogs.cabinetoffice.gov.uk/behavioural-insights-team/2012/12/14/new-bit-trial-results-helping-people-back-into-work/>.

³⁰ Allcott, H. & Mullainathan, S. Behaviour and Energy Policy. *Science*. 327:1204-1205.

³¹ Ibid. p.1204.

³² European Union. European Commission. (3 July 2012). Key Information Documents (KIDs) for packaged retail investment products - Frequently asked questions. Retrieved from [http://europa.eu/rapid/press-release MEMO-12-514_en.htm?locale=en#footnote-4](http://europa.eu/rapid/press-release_MEMO-12-514_en.htm?locale=en#footnote-4).

³³ European Union. European Commission. *Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective*. Retrieved from http://ec.europa.eu/consumers/strategy/docs/final_report_en.pdf.



³⁴ Ibid. p.10.

³⁵ European Union. European Commission. (3 July 2012). Key Information Documents (KIDs) for packaged retail investment products - Frequently asked questions. Retrieved from http://europa.eu/rapid/press-release_MEMO-12-514_en.htm?locale=en#footnote-4

³⁶ European Credit Research Institute. (n.d.) Commission launches study and consultation on retail investment products. Retrieved from <http://www.ecri.eu/new/node/217>.

³⁷ Singapore. Central Provident Fund Board. (n.d.) CPF Life. Retrieved from http://mycpf.cpf.gov.sg/Members/Gen-Info/CPF_LIFE/CPF_LIFE.htm

³⁸ Singapore. Ministry of Manpower. (n.d.). Central Provident Fund. Retrieved from <http://www.mom.gov.sg/employment-practices/employment-rights-conditions/cpf/Pages/default.aspx>.

³⁹ Low, D, ed. (2011). *Behavioural Economics and Policy Design: Examples From Singapore*. Singapore: World Scientific Publishing.

⁴⁰ Singapore. Central Provident Fund Board. (n.d.) CPF Life. Retrieved from http://mycpf.cpf.gov.sg/Members/Gen-Info/CPF_LIFE/CPF_LIFE.htm

⁴¹ Low, p.152.

⁴² Singapore. Challenge Magazine. (n.d.). CPF LIFE: A Successful Non-Event. Retrieved from http://www.challenge.gov.sg/magazines/archive/2008_11/feature1.html.

⁴³ United Kingdom. Cabinet Office. Behavioural Insights Team. (September 2011). *Behavioural Insights Team Annual Update 2010-2011*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60537/Behaviour-Change-Insight-Team-Annual-Update_acc.pdf.

⁴⁴ Ibid. p.16.

⁴⁵ Ibid.

⁴⁶ Ibid.



⁴⁷ United Kingdom. Cabinet Office. Behavioural Insights Team. (31 December 2010). *Applying Behavioural Insights to Health*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60524/403936_BehaviouralInsight_acc.pdf.

⁴⁸ Ibid. p.15.

⁴⁹ Ibid.