

ISAS Insights

No. 446 – 31 July 2017

Institute of South Asian Studies
National University of Singapore
29 Heng Mui Keng Terrace
#08-06 (Block B)
Singapore 119620
Tel: (65) 6516 4239 Fax: (65) 6776 7505
www.isas.nus.edu.sg
http://southasiandiaspora.org



Nudges: Small Behavioural Changes can Enhance Well-being

Nudges are a low-cost intervention that works towards inducing individuals to make voluntary choices which can potentially enhance individual and collective well-being. The paper follows up on this assertion with some empirical examples from India, among other places. We do not always act rationally. However our ‘irrational’ behaviour is often predictable. This predictability allows policymakers to induce desired, albeit voluntary, behavioural changes, or nudge without constraining choices. This paper discusses the analytical underpinnings of nudges and provides a brief survey of actual nudges deployed by policymakers across the world. The concluding part makes a case for the use of nudges to complement policy initiatives in India.

Dipinder S Randhawa¹

Introduction

Economic models and policy formulation are predicated on the assumption of ‘homo economicus’ (economic man) – that people are rational, selfish and always act in their self-

¹ Dr Dipinder S Randhawa is a Senior Research Fellow at the Institute of South Asian Studies (ISAS), an autonomous research institute at the National University of Singapore. He can be contacted at isasdsr@nus.edu.sg. He would like to thank Loizos Heracleous for an initial conversation on this theme, and Glenn Nosworthy for his helpful comments. The author bears full responsibility for the facts cited and opinions expressed in this paper.

interest, and will behave in accord with predictions of theory. Much of policy design draws upon the same assumptions. In some situations, this bears out. In many developing economies, the incentive of free mid-day meals have a catalytic effect on getting children to attend school, helping improve nutrition standards and school attendance among poor children. Lowering tax rates in economies with high tax rates generally results in higher compliance and tax revenues. However, there are many instances, including those that are part of our daily routines and germane to our well-being, when the decisions we make may not be in our own best interests. Choices about what to eat, hygiene practices, paying bills and taxes on time, how much to save and postponing timely medical diagnostic tests are areas where we often make decisions that are not in our best interests. Can policy be designed to induce people to make small changes in their behaviour or choices that will raise their welfare?

Behavioural economics draws upon the observation that economic models often fail to predict how people make decisions that run counter to their self-interest. In reality, people often over-react to new information, delay decision-making and select options in the order presented. The roots of these decisions are in psychological biases that cause people to make choices that may not be in their best interests. This inconsistency is predictable, enabling marketers to exploit flaws in decision-making, for example, susceptibility to advertisements on smoking (now banned in many countries), junk food, the lure of branding and the perceptions created of ‘standing out’ in a crowd through purchase of designer brands.

The nudge theory draws upon this behavioural inconsistency to test how small changes in the choices presented to people and induce them to make better decisions.² Thaler and Sunstein define a nudge as *“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. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates. Putting fruit at eye level counts as a nudge. Banning junk food does not.”*³

Thaler and Sunstein envision policymakers (the government) as “choice architects” that, through well designed nudges, can *“steer individuals away from numerous unconscious and irrational decisions that stem from a whole host of psychological, social, cognitive, and*

² The nudge theory draws upon the work of Richard Thaler and Cass Sunstein (2008). “Nudge: Improving Decisions about Health, Wealth, and Happiness”, Yale University Press.

³ Ibid.

emotional factors, towards smarter decisions that enhance their welfare."⁴ Delaying the payment of bills, binge drinking and postponing decisions about financial planning are examples of behaviour that may benefit from nudges. They see nudges as a manifestation of 'libertarian paternalism' because, unlike the use of taxes or outright bans, which entail compulsion, nudges can be ignored, preserving freedom of choice. Central to the construction of nudges is the belief in rational, informed policymakers being able to nudge individuals towards the best choice.

How are Nudges Different from Marketing?

The ideas underlying nudges are not new. The foundations of marketing lie in deploying behavioural science to shape behaviour. Marketing focusses on inducing people to consume goods and services that may not be in the individual's best interests, and, often, harmful. Marketing is focussed on profit maximisation. Thaler and Sunstein contend that, "*The key point here is that for all their virtues, markets often give companies a strong incentive to cater to (and profit from) human frailties, rather than to try to eradicate them or to minimize their effects.*"⁵ Implicit in this perspective is the assumption that we are often out-witted by the lure of marketing efforts. Proponents of the nudge theory see themselves as the antithesis of those advertisers and marketers who are perceived as enticing individuals towards decisions that may reduce their well-being, for example, consumption of junk food and carbonated drinks, or luring individuals into diet plans drawing upon questionable science.

Origins in Public Policy

The earliest advocate of the institutionalised use of nudge theory in designing public policy was Prime Minister David Cameron's government in the United Kingdom in 2010. The 'Behavioural Insights Team', also known as the 'Nudge Unit', took on a rapidly expanding portfolio of projects. By 2014, when it was partly privatised, it had adopted more than 100 projects, including some overseas. Aside from London, it has offices in New York and Sydney.

⁴ Ibid.

⁵ Ibid.

In 2015, United States (US) President Barack Obama issued an executive order urging government departments to adopt/integrate behavioural economics in the design of public policy.⁶ Singapore was one of the early adopters of nudges in policy formulation. The governments in the Australia, Canada, Denmark, Israel and the Netherlands have launched the equivalent of nudge units.

Mullainathan and Shafir's work strengthens the case for nudges.⁷ They contend that poverty has a debilitating effect on decision-making ability. The imperative of coping with persistent scarcities impairs decision-making abilities, resulting in poor decisions and even worse outcomes. A study on Indian sugar farmers revealed that decisions made prior to harvest, when the farmers were desperately short of cash, were much poorer than decision made after the harvested crop was sold.⁸ Poverty impairs decision-making skills. In such situations, a nudge may push people in the right direction. This reasoning is predicated on three strong assumptions: i) The government can objectively determine what is the 'right direction'; ii) The government is more capable than the individual in making decisions; and iii) the government always acts on behalf of the individuals.

Nudges in Developed Economies

We have a rapidly growing roster of successful applications of the nudge theory. Organ donation is a difficult decision for most people, even if, in principle, they are receptive to the idea. In many European countries, when obtaining a driving license, applicants are expected to make a choice at the time of issuance of their driving license, about organ donation upon death. Regardless of cultural background (Northern, Southern or Central Europe) or faith (Protestant or Catholic), in such situations, an overwhelming majority opt for the default option. Dan Ariely contends the complexity of these decisions induces people to just opt for the default option.⁹ Similar behaviour is observed when people make financial decisions. One of the earliest successes of the Nudge Unit was changing the default option on workplace pensions

⁶ <https://obamawhitehouse.archives.gov/the-press-office/2015/09/15/executive-order-using-behavioral-science-insights-better-serve-american>.

⁷ "Scarcity: Why Having Too Little Means So Much", Sendhil Mullainathan, and Eldar Shafir. Time Books, Henry Holt & Company LLC, New York, NY (2013).

⁸ "Poverty Impedes Cognitive Function" Anandi Mani, Sendhil Mullainathan, Eldar Shafir, Jiaying Zhao. Science, 30 August 2013: Vol. 341, Issue 6149, pp 976-980.

⁹ Ibid.

scheme to an ‘opt in’ with an option to ‘opt out’. Changing the default option resulted in a substantially higher proportion of employees registering for the pension scheme. Minor changes in letters to those lagging in paying vehicle taxes yielded encouraging results.¹⁰ Adding a single line, such as ‘Pay your tax or lose your car’ or adding a photograph of the car, led to a substantial increase in the number of people paying their dues – the letter doubled while the photograph tripled compliance rates.

In France, renaming geometry as drawing led to a substantial improvement in the girls’ performance, while boys performed better if it was called geometry.¹¹ Similar results have been observed in the US with Mathematics – cultural stereotypes suggest that the girls fare poorly compared to boys, while international evidence points to the opposite results.

Singapore is among the pioneers in the application of the nudge theory. In 2010, the Ministry of Environment had launched a public campaign on simple precautions to prevent the spread of dengue. A Behavioural Insights and Design Unit at the Ministry of Manpower was established to improve the design and delivery of policies and programmes.¹² An experiment of sending pink notices to employers defaulting on payment of levies on foreign domestic workers yielded significant improvements in recoveries of outstanding dues. Singapore Power, the national utilities company, has had similar experience with sending pink notices on late payments. Adding a graph to indicate how much utilities the household consumes relative to its neighbours seems to have raised consciousness on the wastage of water. On public transport, cartoons urging riders to move to the middle of the train or the back of the bus reminds commuters of the inconvenience caused to other commuters by crowding near the door. The London Underground displays similar cartoons. The easy visibility of such cartoons to all travellers is a ready reminder to them. However, cartoons that can be seen privately, for example, in public toilets or message urging decisions about insurance have been less successful. Nudging is decentralised in Singapore, with each ministry deciding on its own policy.¹³

¹⁰ Example from ‘Nudge, nudge, think, think’, *The Economist*, 24 March 2012.

¹¹ *Ibid.*

¹² Challenge (2012).

¹³ “Behavioural Economics and Policy Design – Examples from Singapore”, (2012), Ed. Donald Low, Civil Services College and World Scientific.

Nudging in Developing Economies

The World Bank is increasingly deploying insights from behavioural economics into the design of policies as diverse as child nutrition, maternal health sanitation or access to public services. The 2015 annual World Development Report on the theme of “Mind, Society and Behavior” brought evidence-based behaviour research into policy formulation and the Bank’s anti-poverty programme. The report hones down on three markers characterising our daily thinking:¹⁴ i) In everyday thinking, people rely more on intuition than careful analysis; ii) We draw upon concepts and tools shaped by our prior experiences and culture; and iii) Social emotions and social norms motivate much of what we do.¹⁵

These insights help us understand why certain social and behavioural practices persist while others change rapidly. Interventions, including through nudges, can improve decision-making in fields as diverse as hygiene and sanitation, nutrition, climate change, microfinance and education. Small changes in context can have significant consequences on behaviour, for example, inducing children in a school in Bangladesh to diligently wash their hands by placing wash-basins with colourful motifs in a prominent visible location, or how choices are presented (often the default or the first in the list is adopted).¹⁶ Finding out what is effective requires validation through field experiments.

An offer of free vaccination for worms encountered a low pick-up rate among parents until lentils, which are widely consumed, were offered free as an incentive.¹⁷ In South Africa, there was a false belief among teenage girls that unprotected sex with older men reduced the chances of infection with the HIV virus. A simple computer game of risk helped dispel that notion and raised the awareness of infection.¹⁸ A project in Bhubaneswar in the state of Odisha in India

¹⁴ “World Development Report 2015: Mind, Behavior and Society”, (2015), World Bank.

¹⁵ Ibid.

¹⁶ “Behavior Change without Behavior Change Communication: Nudging Handwashing among Primary School Students in Bangladesh”, (2016), R Drejbels, A Kroeger, K Hossain, M Venkatesh, P K Ram, International Journal of Environmental Research into Public Health, 14 January 2016;13(1).

¹⁷ “Health Behavior in Developing Countries” Pascaline Dupas, Annual Review of Economics, Vol. 3 (September 2011).

¹⁸ <https://www.theguardian.com/global-development-professionals-network/2016/mar/04/world-bank-nudging-attitudes-health-hygiene> ‘How the World Bank is ‘nudging’ attitudes towards health and hygiene’ The Guardian, 4 March 2016.

on waste management in India, yielded interesting insights into how use of waste disposal facilities differed with changes in context and associated perceptions of hygiene.¹⁹

In India, a randomised control trial amongst a cohort of low-caste and high-caste boys revealed both cohorts were equally good at solving puzzles when caste identities were not revealed.²⁰ However, when identities were known, a significant ‘caste gap’ in performance emerged. When the caste was revealed, the performance of the boys from lower-castes dipped. The performance of higher-caste boys also fell in a group comprising solely high-caste boys. The lessons for educators are stark, yet challenging. This phenomenon is termed as ‘stereotype threat’ and highlights how performance can be affected by factors unrelated to ability. It may underline the role of stereotypes and the importance of role models in countering the vicious cycle of stereotypes and performance.

At Schipol Airport, Amsterdam, the etching of a fly in the men’s urinals reduced spillage by 80 per cent, resulting in significantly cleaner men’s toilets.²¹ This was one of the attributes and careful thinking that led the JFK Airport to grant the redevelopment contract for Terminal 4 to the management of Schipol Airport.

Yellow lines at subway train stations nudge passengers to keep a safe distance from oncoming trains and also prevent a surge of passengers towards the doors. Yellow is seen as a colour connoting caution. Aside from providing safety, designated bicycle lanes on roads nudge people to healthier lifestyles by making bicycle riding safer and easier.

Nudge in India

In 2016, National Institution for Transforming India (also called NITI Aayog), the Indian government’s think-tank, agreed to partner the Bill and Melinda Gates Foundation to establish a behavioural economics unit (nudge unit) that would offer advice on injecting insights to

¹⁹ <https://research.chicagobooth.edu/sei/about-sei/news/2017/20170501-jing-gsip-blog>.

²⁰ “Discrimination, Social Identity, and Durable Inequalities” Karla Hoff and Priyanka Pandey. *American Economic Review*, Vol. 96, No. 2, May 2006; “Making up people – The effect of identity on performance in a modernizing society”, Karla Hoff and Priyanka Pandey. *Journal of Development Economics*, 2014, Vol. 106, Issue C.

²¹ <https://nudges.wordpress.com/the-amsterdam-urinals/>.

nudge. behaviour towards desired ends and help enhance policy effectiveness. In a sprawling heterogeneous country like India, this endeavour would need to be decentralised to the ministries and the states. There is considerable potential for injecting behavioural considerations into the Indian government's flagship programmes, the Swachh Bharat Abhiyaan (Clean India Programme), Digital India, the Prime Minister's Jan Dhan Yojana (Financial Inclusion Programme) and Skill India.

This effort would entail considerable fieldwork, including having randomised control trials, conducting interviews with researchers, placing officials in the field, and working with the sizeable non-government organisation sector and other civil society actors. Nudges are already been deployed – the 'no toilet, no bride' initiative has gained popular currency though it is too early to assess its effectiveness. In the fields of public health and sanitation, there are a number of ongoing initiatives and a sizeable volume of micro research that policymakers can draw upon.

Programmes that are in accord with a social compact or engender a sense of common purpose are more likely to succeed. Travellers to India are struck by the volume of noise from automobile horns on roads. Since it is possible to encounter the entire spectrum of vehicles on wheels and multiple species aside from humans on the roads, the blowing a horn becomes imperative. However, a television campaign prior to the Commonwealth Games in New Delhi in 2010 aimed at reducing noise and informing citizens that this was not the norm overseas and was likely to leave a poor impression on visitors, led to a noticeable fall in decibel levels on New Delhi's roads. The campaign stopped once the games ended, with it, did the short period of relative quiet on New Delhi's roads.

Similarly, a campaign of cars with odd-even licence plates driving on alternate days seems to have created a social compact. The local government enlisted the help of school children to nudge drivers to observe the rules. The compliance rates were widely deemed to be higher than expected, with people cognitive of the ill-effects of the heavily pollution air in New Delhi. The orderly behaviour of citizens on the New Delhi metro is another instance of the sense of collective ownership of a public good that has aligned incentives between individual and social good.

Criticisms of the Nudge Theory

The government's incentives may not always align with those of the public. Since nudge draws upon behaviour changes, there is an intrinsic risk of manipulation of the public. Ruling governments can and do indeed use nudges to induce higher polling rates when in their interests. There is always the risk of policies being slanted in particular ideological directions – a risk that is present, and will remain regardless of the policy instrument deployed. There are serious concerns about an autocratic or even a democratically-elected government's deploying nudges to manipulate public opinion to serve its own narrow agenda. This meshes with concerns about the libertarian paternalists' own agenda. However, when carried out with empirical validation and transparency, coupled with oversight by civil society and public institutions, the nudge policy holds out the promise of a useful low-cost supplement to enhance the effectiveness of policy initiatives.

In contexts where widely-practised social norms run counter to good behaviour, such as child marriage in conservative societies, open defecation in areas where toilet facilities are not available, avoiding immunisation in the belief that it is the work of foreign agents, the treatment of marginal groups and not paying taxes or bills on time, it is particularly challenging to develop viable nudges. The onus is on researchers and policy designers to understand the roots of behaviour and accordingly tackle the underlying bias (or widely-held misperceptions) through appropriately-designed nudges.

As is the case with any behavioural finding that is being put to the test among a particular cohort, nudges too can have unintended side-effects. Continuous monitoring, through enlisting support of the participants or sample surveys is vital. It often happens that the public gets used to a new nudge and stops paying attention, and revert to old habits. People may become inured to notices on late payments and start disregarding them.

Concluding Observations

The rationale underlying nudges is simple – to induce people to make small behavioural changes that enhance individual and collective welfare. The changes may be incremental, very

few nudges are game changers, but nudges do and have enhanced policy effectiveness in a multitude of settings across the world. Small changes complement ‘big bang’ reforms, more pertinently, there are intangible benefits from a sense of ‘doing the right thing’, that enhance welfare and offer another step to bigger change. Many of the serious challenges faced by developing economies are rooted in behaviour.

Nudges can be carried out on their own or be deployed in tandem with the use of regulation, taxes and subsidies to induce desirable changes in behaviour. They (nudges) cost little; they yield benefits in terms of improved delivery of services, enhancing cost-effectiveness of policy actions, and reduce the regulatory burden and increase government transparency.²² At the most basic level, nudges call for improved communications between the government and the public at large – a benefit in itself. They take into account the behaviour of people whom the government is trying to target through policy and provide evidence for evidence-based research.

• • • • •

²² Sunstein, Cass R, “Empirically Informed Regulation”, (2011), *University of Chicago Law Review*: Vol. 78, Issue. 4.