



Australian Government
Department of the
Prime Minister and Cabinet



Richer veins for behavioural insights

An exploration of the opportunities to apply behavioural insights in public policy

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Research

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Who?

Who are we?

We are the Behavioural Economics Team of the Australian Government, or BETA. We are the Australian Government's first central unit applying behavioural economics to improve public policy, programs and processes.

We use behavioural economics, science and psychology to improve policy outcomes. Our mission is to advance the wellbeing of Australians through the application and rigorous evaluation of behavioural insights to public policy and administration.

What is behavioural economics?

Economics has traditionally assumed people always make decisions in their best interests. Behavioural economics challenges this view by providing a more realistic model of human behaviour. It recognises we are systematically biased (for example, we tend to satisfy our present self rather than planning for the future) and can make decisions that conflict with our own interests.

What are behavioural insights and how are they useful for policy design?

Behavioural insights apply behavioural economics concepts to the real world by drawing on empirically-tested results. These new tools can inform the design of government interventions to improve the welfare of citizens.

Rather than expect citizens to be optimal decision makers, drawing on behavioural insights ensures policy makers will design policies that go with the grain of human behaviour. For example, citizens may struggle to make choices in their own best interests, such as saving more money. Policy makers can apply behavioural insights that preserve freedom, but encourage a different choice—by helping citizens to set a plan to save regularly.

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Executive summary

Government behavioural insights teams have tended to apply behavioural insights using the most well-known tools in the field—small, low cost ‘nudges’ to improve communications, increase compliance and enhance the way services are delivered. These tools are applied in a wide range of policy areas. Examples include encouraging more superannuation savings, bringing forward tax payments and improving appointment attendance¹. This is the ‘low hanging fruit’ of behavioural economics. There is still untapped capacity to apply these tools and achieve wins in public policy.

This paper looks beyond these nudges to identify a smaller set of key policy areas which offer the ability to affect wider scale behavioural change. These “richer veins” are areas where behavioural insights can offer high financial and social impact. Like mining a rich vein for mineral deposits, we consider these areas to offer deep, ongoing opportunity to deliver high value. We have identified three potential areas:

1. Consumer choice (including changing market regulation, disclosure and how information is presented);
2. Financial decision-making (including understanding how people make financial decisions, financial comprehension, how defaults can be used more effectively and how people use mental accounting); and
3. Personal wellbeing (including greater use of price signals, better service delivery and preventative health measures).

To better leverage behavioural economics in these areas, governments could consider turning to “second generation nudges”. These are more ambitious behavioural interventions, targeting systemic and structural solutions.

This paper has been designed as a conversation starter and springboard on how to apply behavioural insights to public policy more strategically. While it nominates three policy areas with high potential for behavioural insights, this is not intended to be an exhaustive list.

¹ OECD (2017)

Context

Emergence of behavioural insights in public policy

Governments traditionally rely on policy tools including regulation, incentives (e.g. taxes and subsidies) and information (e.g. anti-smoking campaigns). Behavioural insights offer an opportunity to enhance these tools to deliver smarter regulation, better-designed incentives and more effective information—without limiting citizens' choices and at minimal cost.

Behavioural insights approaches are particularly successful in improving existing policies through the use of “nudges”. Nudges encourage changes in the behaviour of individuals or groups without forbidding or mandating any choice. Nudges tend to be low cost and easy to apply (and avoid), and can achieve results in a short time.

“Nudges are not mandates. Putting fruit at eye level counts as a nudge. Banning junk food does not.” Richard Thaler & Cass Sunstein ²

The low hanging fruit

The Organisation for Economic Co-operation and Development's (OECD) 2017 publication of *Behavioural Insights and Public Policy: Lessons from Around the World*³ suggests behaviourally-informed interventions have concentrated on simplifying communications, improving convenience and highlighting important factors. These tools are valuable and can be more broadly applied to ensure the behavioural economics field has enduring policy relevance.

Behaviourally-informed communication is widely applied. Now codified through the UK Behavioural Insights Team's (BIT) EAST principles—Easy, Attractive, Social, Timely—many studies have proven the effectiveness of behaviourally-informed communication.

In terms of application, using behavioural economics to improve compliance outcomes has been notably successful. Introducing payment reminders, highlighting the required actions to become compliant, reducing the hurdles to make a payment, and using norms to prompt action have been applied across a wide range of compliance initiatives.

² Thaler and Sunstein (2008)

³ OECD (2017)

Increased understanding and uptake of these techniques is likely to offer easy and low-cost ways to improve compliance and therefore policy and program outcomes.

BETA's work program has seen many wins using these same strategies, namely:

- reduced rates of antibiotic prescriptions through the use of social norms
- lower work-related expense claims by prompting tax agents to reconsider their claims
- improved compliance with reporting income support payments on time
- greater understanding of comparison information for retirement income products
- improved survey response rates through completion prompts.

Impact of behavioural economics

It is useful to reflect on the use of behavioural insights in public policy to date, in order to examine where it has been most effective. We considered the policy areas where behavioural insights have been extensively applied. We drew on the OECD's Report, *Behavioural Insights and Public Policy; Lessons from Around the World*, which contains over 100 case studies on the use of behavioural insights internationally. We also drew on our knowledge of the literature and experience working in this field.

To identify 'richer veins', we considered policy areas where the most well-known behavioural biases and heuristics systematically shape key citizens' decisions. We focused on areas which are well researched and where the field offers effective solutions on influencing behavioural change.

We considered policy areas where government is traditionally actively involved in market regulation, and how economic levers were used in these markets. This included areas where traditional economic tools are currently proving less effective in achieving desired policy outcomes. We sought out policy areas where behavioural insights appear highly complementary to traditional policy tools.

Lastly, we have deliberately focused on policy areas for which the Australian government has involvement and interest, albeit drawing very widely from studies under these topics.

We have considered 'impact' as the overarching principle to identify 'richer veins'. Under this overarching principle, we use key criteria including:

- High *relevance* of behavioural insights to offer solutions
- *Large scale problems* where traditional policy tools are being challenged
- Potential to achieve significant *financial impact*
- Potential to achieve significant *social impact*
- Potential to improve citizens' *well-being*
- Capacity to contribute to an *integrated stream of work* using both behavioural and traditional policy tools.

Richer vein 1: Consumer choice

Consumers are overloaded with information

Economic theory assumes consumers make optimal choices—they choose the cheapest product or service, subject to their preferences and a few other constraints. In the last decade, both academic journals and policy reports have investigated how consumers' preferences are affected by behavioural biases. It is increasingly accepted consumers are heavily influenced by “Supposedly Irrelevant Factors” (SIFs),⁴ as named by Richard Thaler.

In recent years, marketing has become increasingly sophisticated as a result of technology and big data. The internet has opened up markets never before available, dramatically expanding the scale and number of options across products and services. The constant flood of information leads to choice overload. People find it harder to make good choices, or get overwhelmed and stick with what they already have. Alternatively, they use heuristics to make their decisions, e.g. brands they recognise, or recommendations from friends.

Box 1: Key concepts in consumer choice

Choice overload: too many choices can occur either through choice attributes or alternatives. This has been associated with decision fatigue, sticking with the default or status quo, or deferral—avoiding making a decision at all.

Status quo bias: people prefer things to stay the same by doing nothing or sticking with a decision made previously. Their status quo may also become their default choice.

Present bias: people inflate the immediate implications of their decisions when compared with future impacts. This is linked with procrastination, which can occur because people put off decisions, even those in their best interests.

Loss aversion: encapsulated in the expression ‘losses loom larger than gains’, the pain of a loss is psychologically about twice as powerful as the pleasure of an equivalent gain. Loss aversion can result in not switching if the losses (such as the time to search) weigh more heavily than the potential financial gains.

⁴ Thaler (2016)

Economics has traditionally assumed adequate disclosure will assist consumers in making optimal choices. However, behavioural insights indicates information is not enough to protect consumers. In fact, too much information can have the opposite effect. Behavioural insights can assist in improving the way information is presented, and the timing and sequencing of information. This can improve consumer comprehension and confidence to engage in markets.

Behavioural insights can help to determine what other changes may be required to help consumers. This may require alternative regulation of information, or more fundamental changes to market functions. Minimum product/service standards, or default 'no frills' products may provide value where vulnerable consumers find it hard to make a choice at all. Services which help consumers make initial selection or switching choices can reduce the transaction costs and help overcome status quo bias. Behavioural insights can add value in markets with essential services characteristics, such as energy and telecommunications.

Improving information on energy

BETA has completed three trials in the retail market for energy around a common theme—helping people make better choices. The first trial examined ways to encourage the uptake of energy-efficient appliances by introducing a behaviourally-informed label. The second examined ways to simplify energy fact sheets. The third examined ways to incentivise consumers to switch energy plans by redesigning energy bills. BETA's best redesigned energy bill saw a 13 per cent increase in consumer confidence through simplified design and personalised savings information⁵.

Australia is not the only country encouraging behavioural change in energy markets. In the Netherlands, the Authority for Consumers and Markets (ACM) found some energy providers did not provide Dutch consumers with the relevant information they needed to understand their cooling-off period. The ACM explored how it could nudge non-compliant energy providers to increase compliance, with the aim of providing consumers with necessary information about their contracts. The ACM used a mix of social norm techniques (e.g. asking the three biggest energy providers to endorse compliance) to increase information provision compliance amongst energy providers. The social norms messages were effective, with 50 Dutch energy providers compliant after the intervention.

BETA's three trials had a positive impact on comprehension of energy information. However, the results indicate a relatively small impact on improving people's appetite to switch to a different product. In 2017, around 50 per cent of Australian consumers reported they had not switched electricity retailer or plan in the last five years. This is despite the significant cost savings many Australians could make by switching⁶.

⁵ BETA (2018)

⁶ AEMC (2017)

This highlights the provision of information alone is sometimes not enough to influence behaviour. In these circumstances, consumers may require additional support to switch, with a focus on lowering transaction costs and barriers to switching.

Working with regulators on behavioural insights

Partnering with the regulator to improve NBN comparison information

BETA examined how to make it easier for people to choose the right National Broadband Network (NBN) plan. People found it difficult to compare the offers from different NBN service providers and the existing information was inconsistent, dense and hard to read. We worked with the Australian Communications and Media Authority (ACMA) to publish a Better Practice Guide to simplify information by introducing a new fact sheet.

BETA's guide introduces a new behaviourally-informed fact sheet to make comparisons easier, including horizontal comparison, visuals and putting the most salient information upfront. Several major NBN providers are now using the key elements of the new behaviourally-informed fact sheet designed by BETA.

How can behavioural insights inform the telecommunications market?

The OECD has recently put forward an illustrative case study⁷ on the use of behavioural insights to help telecommunications consumers make better decisions. The OECD's main recommendations were:

- Information should be supported by checklists or factsheets.
- Information should be provided when consumers are making key decisions.
- Contacting customer service and making a complaint should be easy.
- Feedback about consumption patterns should be given to consumers in real time (through digital-based solutions when possible) to help them identify the most appropriate plan.
- Encourage or mandate a default "emergency plan" for consumers who do not respond to prompts about their consumption patterns, where their existing plan is not in their best interest.
- Limit choice overload.

In response to the above OECD recommendations, Colombia's Communications Regulation Commission (CRC) proposed a new consumer protection regime⁸, which took effect on 1 September 2017. This new regime required service providers to reduce contract information, which decreased average reading times from around 6 hours to 12 minutes.

⁷ OECD (2016); OECD (2017)

⁸ OECD (2016)

How can behavioural insights change e-commerce?

The latest European Commission (EC) Consumer Rights Directive represents a notable example of how regulation might be informed by evidence from behavioural economics.⁹ The Directive bans the use of pre-checked boxes for online sales. For example, this applies to airline companies when consumers buy tickets online. Under the Directive, airline companies now cannot include a travel insurance contract by default. The new regulation was informed by evidence-based behavioural literature on the power of using defaults.

The regulation fully recognises default options such as pre-checked boxes (one of the “Supposedly Irrelevant Factors”) may have significant impact on consumer choice by triggering powerful behavioural biases such as status quo bias.

Behavioural insights can help to reduce complexity and improve choice

Modern markets can overwhelm people with choice. For policy makers, this is concerning when those choices make it more difficult for people to engage and select essential services.

Behavioural insights can help make choices easier by simplifying information provision. BETA has undertaken many trials aimed at simplifying information and improving comprehension. The format of information, support by visual aids, sequencing and ordering is important to improve consumer comprehension. However, the field holds even greater promise beyond the provision of information. It offers valuable insights about strategies to make choices easier and to improve the ability of Australians to make choices in their own best interests.

Information alone is unlikely to be enough to help consumers take action in markets where other barriers to behavioural change exist. If the volume of choices and information available is very large, cognitive overload can prevent people from choosing effectively. Inertia and status quo bias may mean consumers are reluctant to seek out information. This increases the likelihood of products which do not compete on price and quality and limits competition. In these cases, a behavioural insights approach is likely to work best in conjunction with other policy tools focusing on market regulation and barriers to switching.

⁹ EC (2014)

Richer vein 2: Financial decision- making

Decisions about spending, saving and borrowing shape the lives of Australians on many levels. Evidence from behavioural economics shows people are influenced by systematic behavioural biases which may prevent them from making the best decisions.

The act of making an initial choice of financial product is difficult. In the mortgage market, consumers have increasingly turned to mortgage brokers to help, with brokers now originating more than 50 per cent of loans in the market.

Businesses can be more proactive than government in utilising this knowledge of human behaviour. Financial institutions may offer products which play on present bias, overconfidence and optimism. They may also make it harder for consumers to compare products - currently there are around 4,000 mortgage products in the Australian market¹⁰.

Using behavioural insights to influence financial decision-making could help Australians to save money and contribute to household wealth accumulation. This could consider aspects such as introducing default review points for consumers about their current products and setting out clear information standards for product disclosure.

Overall, the barriers to consumer decision-making in retail banking are high. The complexity of the market and the strong behavioural factors at play are likely to require a multifaceted approach, combining traditional policy tools with behavioural insights.

Box 2: Key concepts in financial decision-making

Mental accounting: people treat money differently, depending on factors such as the source and intended use. We tend to put “labels” on money (savings, inheritance, or holiday) and this can trigger inconsistent behaviours.

¹⁰ Productivity Commission (2018)

Box 2: Key concepts in financial decision-making

Choice overload: too many choices can occur either through choice attributes or alternatives. This has been associated with decision fatigue, sticking with the default or status quo, or deferral—avoiding making a decision at all.

Framing: the way a choice or option is presented. Framing can highlight either the positive or the negative aspects of the same decision, leading to changes in relative attractiveness.

Hassle costs (friction costs): the non-financial costs associated with choosing or switching. In banking, these include the application process and moving recurring payments to a new account.

Present bias: people inflate the immediate implications of their decisions when compared with future impacts. This is linked with procrastination, which can occur because people put off decisions, even those in their best interests.

Hyperbolic discounting: a tendency for people to choose a smaller-sooner reward over a larger-later reward as the delay occurs sooner rather than later in time.

Loss aversion: encapsulated in the expression ‘losses loom larger than gains’, the pain of a loss is psychologically about twice as powerful as the pleasure of an equivalent gain. Loss aversion can result in not switching if the losses (such as the time to search) weigh more heavily than the potential financial gains.

Pain of paying: people do not like to spend because they are loss averse. For example, the pain of paying is reduced when consumers use credit cards, because plastic is less tangible than cash.

Making an initial choice

The retail banking market is complex. With nearly 4,000 different mortgages and over 250 different credit cards available, consumers find it difficult to choose a product. When faced with a large array of options consumers typically ‘set and forget’—choosing a ‘good enough’ product, then disengaging from the market.

In a meta-analysis on cognitive overload, four key factors were identified which had an impact on consumers' cognitive load: choice set complexity, decision task difficulty, preference uncertainty, and decision goal¹¹. High complexity can dull competition, as rivalry between firms is weaker when consumers are confused. recent economic theory suggests firms “have incentives to intentionally confuse their consumers by spuriously differentiating their products or by using complex price schedules...price and product complexity can be used by firms to soften the level of price competition in markets¹². Obfuscation leads to both frustration and mistaken choices at the consumer level and overall higher prices at the market level.”

Preferences in banking are typically clear (consumers want low fees, good features and service). However, decision task difficulty and choice set complexity significantly influence consumer engagement. The effort of sifting through the range of deals on offer is compounded by the fact people tend to do better on recurring everyday choices than on infrequent major decisions¹³.

In the United States, the Credit Card Accountability Responsibility and Disclosure (CARD) Act¹⁴, was significantly informed by behavioural insights. The CARD Act aimed to enhance fairness by making the rates and fees of credit cards more salient and transparent for consumers. Since the application of the CARD Act, credit card companies in the US have been forced to decline transactions over the credit card limit and cannot charge the relevant fee unless consumers explicitly opt in to allow for such transactions.

The CARD Act requires banks to include two important pieces of information in the monthly statement: how much the consumer should pay each month to pay the bill completely in three years and the savings compared with paying only the minimum payment.

Consumer inertia is significant

Even if consumers understand the choices available to them, switching products is generally difficult. Research has found the most common reasons Australian consumers cite for their inertia in banking are “too much hassle”, “too complex”, “too time consuming” and “not worth the effort (because all banks are the same)”¹⁵. Hassle broadly encompasses searching for the right product and taking steps to switch. This is made more difficult because many bank products are interlinked. For example, a mortgage may be linked with an offset account and a transaction account; or a credit card may have direct debits linked to a transaction account.

¹¹ Chernev et al. (2015)

¹² Kalayci (2015)

¹³ Zeckhauser (1986)

¹⁴ Credit Card Accountability Responsibility and Disclosure Act (2009)

¹⁵ White and Yanamandram (2004)

Presentation of information is important

A key element of improved financial decision-making is making information simpler to understand. The UK Behavioural Insights Team has tested a range of credit card disclosures and the impact on consumer comprehension. In an online framed field experiment, simplifying disclosures into Six Key Facts or Four Key Facts, in conjunction with presenting costs in pound values rather than percentages, led to a significant increase in consumer comprehension. Results showed a 16 per cent increase between the standard application page and the Six Key Facts and a 21 per cent increase between the standard application page and the Four Key Facts presentation¹⁶.

A field study from the US looked at whether disclosures can change borrowing behaviour in payday lending¹⁷. They found when consumers were shown the dollar cost of interest paid, they were 5.5 percentage points less likely to borrow from the payday lender in the pay cycles following the intervention.

BETA has examined the effect of improving information for consumers to make better superannuation choices. The best performing behaviourally-informed presentation of different retirement income products improved customer comprehension by 39 per cent¹⁸.

Default review points may encourage behavioural change

Many retail banking products—including mortgages, credit cards and transaction accounts — typically lack a natural ‘trigger point’ to draw consumer attention to fees and features, and present an obvious opportunity to consider alternative options¹⁹.

The lack of trigger points is compounded because there is very little ‘pain of paying’ for mortgage or credit card payments. A number of studies show payment methods low in salience—such as credit card or direct debit—effectively anaesthetise individuals from the psychological pain of paying. The ‘pain of paying’ can be different for different payment mechanisms, with direct debit (usually associated with mortgage payments) coming in at the very bottom in terms of salience²⁰.

The UK Competition and Markets Authority has suggested prompting consumers to review their banking products “at times when they may have a higher propensity to consider a change”²¹. In practice, this could involve mandating firms encourage consumers to review their affairs periodically, underpinned by behavioural insights on when consumers will be receptive to the message.

¹⁶ BIT (2018)

¹⁷ Bertrand and Morse (2011)

¹⁸ BETA (2017)

¹⁹ Hartfree et al. (2016)

²⁰ Soman, D. (2001)

²¹ CMA (2016)

Greater exploration of when and how to introduce review points could lead to better outcomes for a range of financial products. This, coupled with improved information provision to make salient the consequences (foregone savings, higher costs) of a consumer's product choice, may encourage greater switching.

Larger scale behavioural change will likely be the result of a series of changes to choice architecture and regulation to make it easier for consumers to make good financial decisions.

Richer vein 3: Personal wellbeing

Improving personal wellbeing is complex

Personal health and wellbeing are strongly linked to values, social norms, expectations, preferences and beliefs. Many Australians' physical health outcomes are improving—life expectancy continues to increase and many indicators of mortality are improving. However, the traditional ways of managing health, which have focused on diagnosis and acute treatment, appear less suitable for modern issues such as obesity and type 2 diabetes. National rates of overweight and obese Australians have increased in recent decades, up from 56 per cent in 1995 to 63 per cent in 2011-12.²² There is also increasing demand for additional mental health services.

Preventative health offers the potential to avoid some of the more serious implications of these diseases. But preventative health measures encounter some of the most common behavioural biases. People can find it difficult to follow through with their good intentions, especially when there is no noticeable payoff in the short term. Health and wellbeing is also a sector where the importance of regular, repeated behaviours is typically more effective than one-off events—i.e. it is what people do every day that counts.

Box 3: Key concepts in health and wellbeing

Present bias: people inflate the immediate implications of their decisions when compared with future impacts. This is linked with procrastination, which can occur because people put off decisions, even those in their best interests.

²² Australian Institute of Health and Welfare (2017)

Box 3: Key concepts in health and wellbeing

Status quo bias: people prefer things to stay the same by doing nothing or sticking with a decision made previously. Their status quo may also become their default choice.

Hyperbolic discounting: a tendency for people to choose a smaller-sooner reward over a larger-later reward as the delay occurs sooner rather than later in time.

Social norms: signals of appropriate behaviour in group settings indicate the behavioural expectations or rules within a group of people.

The health system itself may also be subject to behavioural biases. The behaviour of hospital staff, doctors, health care providers and policy professionals are influenced by a complex mix of regulations, conventions, education, practice and personal experience.

Service delivery informed by human behaviour

Understanding human behaviour can increase the efficiency of the health system by changing the way services are delivered. Better communication and simple ways to reduce errors can provide big benefits.

The UK BIT trialled changes in the prescription forms used by doctors in hospitals. Changes were designed to reduce errors, such as asking doctors to circle the correct unit dosage (e.g. microgram/milligram) rather than writing it freehand. A small scale pilot saw improvements in the correct dosage entered (from 95 per cent to 100 per cent) and the correct entries for the frequency of medications (from 11 per cent to 96 per cent).²³

A similar approach in Queensland trialled changing the format of the patient chart for recording vital sign observations. The novel design, which made it visually easier to track deterioration in vital signs, saw medical professionals make significantly fewer errors and respond to acute medical events significantly faster.²⁴ In clinical trials, the charts were associated with an 11 per cent mortality reduction amongst intensive care unit admissions, and a 45 per cent reduction in the incidence of cardiac arrests.²⁵

²³ King, et al. (2014)

²⁴ Christofidis et al. (2013)

²⁵ Christofidis (2016)

Extending behavioural insights across medical administration, the NSW Behavioural Insights Unit saw an almost 20 per cent reduction in missed hospital appointments from using text message reminders. The NSW team have also increased cervical cancer screening rates, by introducing a letter with a section for women to write down the details of their appointment. They estimate 7,500 more women a year will potentially undertake a Pap test. Following the trial, the Cancer Institute NSW changed their 27 month reminder letter to incorporate the findings of the trial²⁶.

Behavioural insights can help to address complex global health issues. BETA worked with the Department of Health to encourage a reduction in the prescription of antibiotics. Australia's Chief Medical Officer wrote to the top 30 per cent of doctors with the highest prescribing rates to provide peer comparison information. This trial saw a 12.3 per cent reduction in prescription rates for doctors who received the letter.

Improving price information signals in healthcare

Behavioural economics tells us the way people think about the financial costs of their health has a significant impact on behaviour. Many health costs are opaque because the patient does not pay for the service, leading people to over-consume 'free' services (such as unnecessarily using emergency healthcare services for non-life threatening issues).

Encouragingly, introducing information about the price of the service—even where the patient does not incur any out-of-pocket expenses—appears to be effective in influencing behaviour. An RCT conducted by UK BIT used text reminders to reduce missed hospital appointments. It showed including the cost of the appointment (to the hospital) in the reminder text was the most effective intervention, reducing missed appointments by 2.7 per cent. UK BIT also found the more specific the cost, the better.²⁷

Better price signals don't only benefit patients. Studies have shown doctors have limited knowledge of medication costs and increasing their knowledge can change treatment behaviour. One study found introducing price signals lead to 30 per cent fewer tests prescribed per patient, with little impact on quality of patient care (doctors ordered fewer *unnecessary* tests, based on an objective assessment of quality of care).²⁸

However, the introduction of a price or price signal does not necessarily lead to better long-term behaviour. In fact, upfront costs may cause people to delay seeking treatment. The challenge is to make the longer-term costs of avoiding treatment more salient, with a greater focus on prevention.

²⁶ Behavioural Insights Unit (2016)

²⁷ The Behavioural Insights Team (2016)

²⁸ Cummings et al. (1982)

Increasing the salience of prevention

Most people know about the role of prevention in ensuring good personal wellbeing. Regular check-ups and activities to remain fit and active can ensure people live healthier lives. But many of these require behavioural change and the adoption of new habits and norms.

Some success has been realised by using commitment devices to help people follow through with vaccination intentions. A well-known US study found prompting people to write down the date and time of their flu vaccination had a 4.2 percentage point higher follow-through rate than just writing down the date, or receiving a reminder email.²⁹

A positive response has been seen in reminders for dental check-ups. In Australia, dental conditions were the second-highest cause of acute potentially preventable hospitalisations in 2015-16. A European study looked at the effect of reminders on scheduling check-ups and found the number of people scheduling check-ups increased from 8.9 to 19.3 per cent by using a postcard scheduling reminder.³⁰

Of course, dental check-ups and vaccinations are sporadic events, so novel strategies may be needed to help people take up more regular preventative health measures, such as eating well and exercising.

The role of friction costs, habits and social norms

One reason people may not be more active in undertaking prevention activities is the social norms and habits associated with these activities. When attempting to influence the social norm, positive incentives can act as a motivator to new habit formation. The Singaporean Government used positive incentives to increase physical activity by providing free activity trackers in a National Steps Challenge. Over two years, more than half a million Singaporeans participated, with indications many previously sedentary participants became active through the challenge³¹.

Behavioural economics has long been associated with attempts to influence eating habits. Early policies were aimed at labelling food, assuming a lack of information was contributing to poor decision-making. But there is little evidence information alone does much to improve diet.³² A meta-analysis focused on healthy eating choices found interventions trialled to date were more effective at reducing unhealthy eating than improving healthy eating or decreasing total eating³³.

²⁹ Milkman et al. (2011)

³⁰ Altmann and Traxler (2014)

³¹ Health Promotion Board, Singapore (2017)

³² Health Promotion Board, Singapore (2017)

³³ Cadario and Chandon (2017)

More promising is evidence suggesting the presentation of food choices, including increasing the inconvenience of selecting unhealthier choices, may make a difference.³⁴ A study in US school lunchrooms found simply making the healthier choices more convenient (students would have to switch to another queue to avoid them) resulted in students selecting significantly healthier foods, with unhealthy foods consumption reduced by 27.9 per cent.³⁵

The same principles were applied to a soft drink trial in Australia. Alfred Hospital in Melbourne reduced the convenience of purchasing sugary drinks by introducing traffic light stickers, changing the placement of drinks to make them less visible and increasing drink prices. The trial resulted in 36,000 less unhealthy drinks sold annually, with consumers substituting to better choices.

Focus on prevention

When it comes to prevention, policymakers can do more than rely on personal willpower. This is because willpower is generally considered finite and can be depleted. Research from behavioural economics suggests it may be useful to distinguish between approaches that modify an individual's cognition (i.e. how they think and frame an issue—associated with willpower) and those that modify an individual's situation³⁶. This suggests policymakers have the opportunity to change the situational context to make it easier for people to exert self-control.

Duckworth et al. nominate situational context techniques including defaults, active choice and planned interruptions to address self-control. They consider a study where enrollment in an automatic prescription-drug-refill program was 32 per cent in an enhanced active-choice condition (which highlighted not choosing the automatic-refill option would require filling the prescription themselves) compared with 16 per cent enrolment when the program required opting in.³⁷

Preventative health and wellbeing frequently involve a choice between upfront 'costs' and longer-term health benefits. People may be assisted by quantifying or otherwise making salient the impact of these choices on themselves in the future. In a series of laboratory studies of savings decisions, showing participants' age-progressed renderings of their future selves led people to allocate up to twice as much money to hypothetical retirement savings accounts³⁸.

³⁴ Downs et al. (2009)

³⁵ Hanks et al. (2012)

³⁶ Duckworth et al. (2018)

³⁷ Keller et al. (2011)

³⁸ Hershfield et al. (2011)

There is the potential to use personalised commitment devices to help people better align short-term decisions with their long-term interests. For example, by scheduling appointments or exercise in advance, or self-nominating penalties for non-compliance. One study saw employees offered an opportunity to forfeit money if they did not visit the gym at least once every two weeks over an eight week period. The results showed those required to forfeit money increase their gym visits by 25 per cent³⁹.

The field of preventative health and wellbeing is large, but behavioural insights offers a range of strategies to assist. While many of these are available for individuals to utilise already, there is also a question for government on the extent to which it can offer support through situational settings.

³⁹ Royer, Stehr and Sydnor (2015)

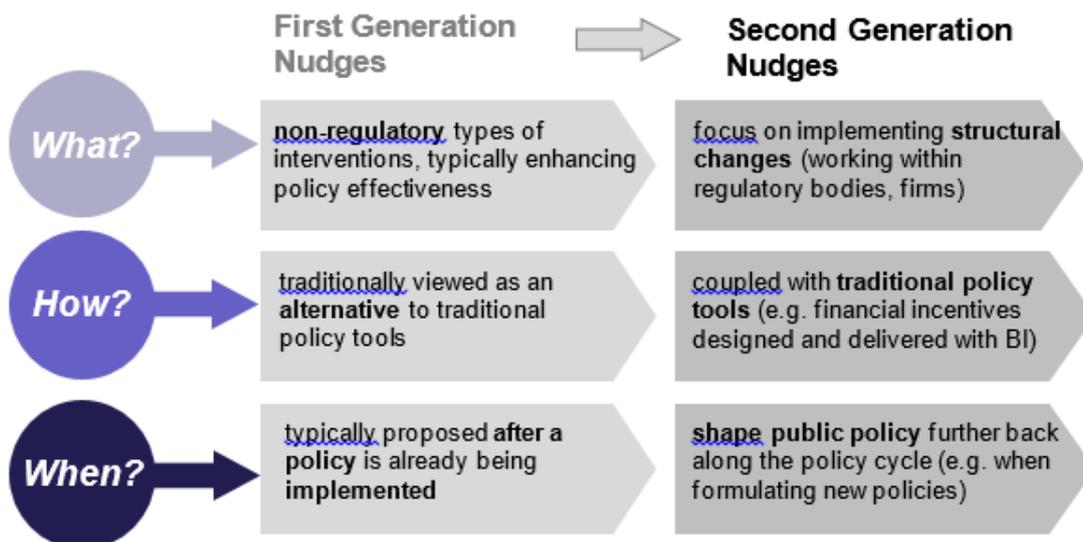
Way forward: a second generation approach

From case studies to better policy—second generation nudges

Behavioural economics has traditionally been applied in public policy at the implementation stage, but it may be more useful to consider its application to wider policy challenges. When viewed along a continuum, at one end are the traditional tools, such as rules and regulations and constraints on market power, illegal conduct and mandatory disclosure. At the other end are nudges, which highlight the salience of information, make choices easier, provide timely reminders or encourage people to pre-commit.

A second-generation approach would attempt to maximise impact by drawing on the appropriate mix of tools as the problem requires. The case studies and research outlined in this paper demonstrate the potential for behavioural insights to add value to public policy by better integrating with other public policy tools. Figure 1 below sets out how this could occur.

Figure 1: First and Second Generation Nudges



Next steps

There is enormous scope to explore the potential of behavioural economics through a 'second generation' approach, focusing on a smaller set of richer veins which offer high value to improve outcomes.

Maximising this potential will require deeper integration of behavioural economics and more systemic adoption of behavioural insights. Deeper integration is likely to involve inter-connected pieces of advice, analysis, projects and randomised controlled trials linking issues together in a structured way.

The case studies and research outlined demonstrate the potential to apply behavioural economics at different stages of policy and regulation. Some interventions work best by targeting the individual (e.g. a text reminder) while others are more effective when targeting the actors or 'market players' influencing an individual's behaviour (regulated information disclosure). The regulation of a sector may also be deemed necessary to mandate certain types of behaviour (e.g. mandatory savings for retirement). Behavioural insights techniques may also be coupled with traditional tools, such as price signals, but in a way which takes into account behavioural aspects such as the timing of price information and how the price is framed.

Across the three areas of richer veins identified:

- applying behavioural insights to consumer choice could lead to systemic change in market regulations. This is likely to lend itself to focusing on ways to reduce cognitive overload and simplify information provision. BETA has already worked with ACMA on the Better Practice Guide for NBN Providers, which aims to make information about NBN plans easier to compare. Government could consider working more closely with regulatory bodies overseeing consumer markets, and consider areas where information provision alone is insufficient to improve market outcomes.
- using behavioural insights to guide Australians to better financial choices could encapsulate the major financial decision making points—saving, use of credit, buying a house and saving for retirement. Overcoming these challenges can be supported by techniques such as framing of messages, invoking social norms and improving financial literacy. This could consider the use of default products in markets with large product numbers where choice is difficult. For example, a behaviourally-informed approach could examine the merits of requiring banks to offer a default low fee credit card.
- much of the studied literature in personal wellbeing appears to be more effective when targeting providers or regulators, rather than individuals. The frequency of these behaviours and the number of choices may mean they are difficult to influence at the individual level. Mechanisms to change the larger systemic choice architecture, including regulation, may be required.

The best uses of behavioural insights will depend on the context of the policy challenge. Behavioural insights tells us decision points, access to information, openness and access to change and regulatory constraints (or opportunities) are important considerations. To maximise this potential will require deeper integration, and more systemic understanding and adoption of behavioural insights. This involves identifying the existing infrastructures, social constructs, incentives and networks requiring disruption to ensure effective, large-scale behavioural change.⁴⁰

Consumer choice, financial decision-making and personal wellbeing represent three areas where there is greater potential to apply behavioural insights to benefit public policy. Pragmatically, interventions should typically be focused on points where behaviour can be observed, and interventions and trials are supported by data, in order to improve the evidence base for the use of behavioural insights.

⁴⁰ Kelly and Barker (2016)

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