Effective Development Programming: Integrating Insights from Behavioural Economics and Social Norms

Ting Jiang and Rachel Marcus¹

22 July, 2015

1. Introduction

Why do people who know the risks of malaria fail to use bed-nets? Why do people engage in corruption despite 'clean up' campaigns? Why have approaches that provide information or encourage people to change their attitudes and behaviour often only led to limited behaviour change?²

In recent years, public policy has started to pay more in depth attention to what prevents individuals or groups from adopting beneficial new practices or abandoning harmful practices, even when they are aware that such changes would be in their own interests. There are often compelling cultural, economic, and political reasons why people do not abandon harmful practices or adopt beneficial practices. For example, resource constraints (e.g., parents who would like to follow advice on child nutrition but cannot afford to), interests in the status quo (e.g., circumcisers who no longer believe in genital cutting but have an economic interest in the practice (Calder, 2012), and the strength of power relations which limit the space some subordinate groups have to change their practices (e.g. where young mothers must defer to their mothers-in-law in decisions over infant nutrition and medical care decisions (UNICEF, 2011). Many behaviour change have been insufficiently sensitive to cultural values and have thus alienated the people whose behaviour they are aiming to change. For example, some of the early efforts to control the spread of ebola failed to offer culturally acceptable substitutes to some of the burial practices that were contributing to the spread of the epidemic (Grant, 2014).

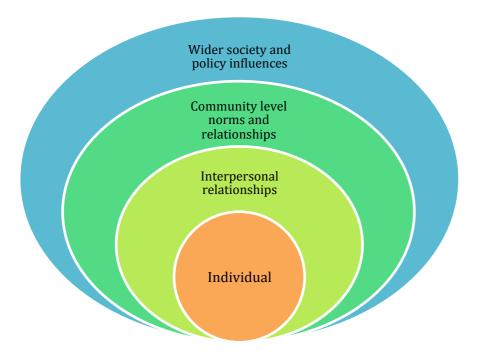
Less well recognised, however, are the ways in which underlying cognitive processes affect people's decision-making and their capacity to change their behaviour. This is starting to change: the 2015 World Development Report focuses on these issues and explores how behavioural insights can contribute to more effective development policy and practice; a growing body of practice in high-income countries seeks to apply similar insights to public policy.

Behavioural and social norm approaches should not be seen as two choices on a menu of options for promoting social change, but rather as complementary measures when relevant. To situate these approaches in relation to the commonly referred to ecological model of behaviour change shown in Figure 1, behavioural economic approaches typically act in the centre, on the individual, while taking into account social motivations for behaviour; social norm approaches are focused at the interpersonal and community levels. Given that they illuminate how human thinking processes affect behaviour, insights from both approaches can be harnessed to contribute to change at any level.

¹ We are very grateful to Ella Page for research assistance and to Caroline Harper and Cristina Bicchieri for comments on previous versions and to Lori Heise for comments on diagrams.

² For example, the following systematic reviews of behaviour change interventions to combat the spread of HIV have all found positive impacts (of varying sizes) on attitudes and knowledge, some impacts on reported behaviour but very limited impacts on biological outcomes: McCoy et al (2009); Medley et al (2009), Paul-Ebhohimhen et al (2008); Ross (2010).

Figure 1: Ecological model: influences on behaviour



Based on WHO (2002)

Behavioural economics approaches have been principally deployed to address cognitive biases and constraints to help people act in ways that they aspire to do, but do not actually do, typically by changing the 'choice architecture' (environmental contexts in which decisions are made) (Thaler and Sunstein, 2008). Social norm approaches focus on how particular social groups' shared expectations may be modified to shift behaviour towards socially desired outcomes, and have been used to address issues such as hygiene and sanitation, management of common resources, and ending practices such as female genital cutting. Still further along the social and behaviour change spectrum lie approaches that aim to change power relations, economic inequalities and deeply rooted ideologies and cultural values; these are the subject of a vast literature that is beyond the scope of this guide. This guide focuses on behaviour change at the individual and community levels but highlights where complementary activities focusing on the economic, political and cultural context are necessary.

Both behavioural economics and social norm approaches have the potential to contribute to self-empowerment; both can be used by governments, businesses, and civil society organisations to try to achieve outcomes they see as desirable. This guide briefly explains the thinking underlying both approaches and their potential for informing public policy and practice. It outlines a framework based on the related insights to help identify the key factors underlying particular practices and highlights some promising avenues and key principles for effective behaviour change interventions.

2. Understanding Behavioural Economics and Social Norm Approaches

2.1 Key Concepts in Understanding Behaviour Change

Neo-classical economics has had considerable influence on policy-making for much of the 20th century. Its model of a "constrained-optimizer" helps policy makers understand how a rational agent is supposed to act

in economic contexts – choosing the option that maximizes self-interests by systematically weighing cost and benefits of all affordable options.

The upside of such a parsimonious model of human behaviour is that it provides straightforward policy prescriptions such as information provision and economic incentives that work much of the time, the downside is that such a streamlined model is inevitably incomplete. While the rational choice model captures the influence of economic considerations, it does not capture the influence of social or subconscious factors that can play a crucial role even in economic contexts. In reality, even if a person has accurate information about his/her options given proper economic incentives, s/he will not always end up choosing the option that maximizes his personal interests, for both good and bad reasons. And not every action reflects the decision maker's deliberative intention.

Behavioural Economics (BE), a sub-discipline of economics grounded in experimental method, has gained traction in past few decades by shedding light on how human behaviour systematically deviates from the rational choice models. While neo-classical economics only focuses on economic and self-oriented incentives (trade-offs of personal material benefits and costs), BE also explores non-material incentives such as psychological rewards, the need to be social, systematic thinking errors (biases) and cognitive capacity constraints. In short, BE tries to show the predictably irrational side of humans (Ariely, 2008). Three main BE principles are discussed more in-depth in this guide:

- 1) Humans think automatically: Humans do not always deliberate, they rely on judgment and behavioural short-cuts to react fast and effortlessly. When they engage in automatic responding rather than acting after careful considerations, small changes in the framing of the decision contexts can have large effects, and shortcuts can cause errors (biases).
- 2) Humans are social: Humans care about both their individual and social identities. Besides material outcomes, they are also motivated by moral and social considerations, above all, the social approval or disapproval entailed in adhering to or breaking social norms.
- 3) Intention-behaviour gap: When implementing decisions, humans face not only budget constraints, but also cognitive capacity constraints like forgetfulness or lack of self-control.

As a result, even when it is desirable to do so, we often fail to act differently to the actions our habitual inclinations or environmental cues prompt us to take (thinking automatically). And for a wide range of contexts, we also try to act in accordance with what is socially prevalent and/or acceptable (thinking socially). Last but not least, even when we are informed and motivated to change, our individual cognitive constraints like weak will-power can still get in the way and create an "intention-behaviour" gap.

Grounded in experimental testing that generates causal evidence, BE insights provide new opportunities for policy makers to make a difference by knowing when to and when not to employ the tool of economic incentives and what other policy tools to employ. Interdisciplinary and evidence-based by nature, behavioural economics also serves as a fertile platform for incorporating insights from other social sciences such as sociology and anthropology, and for bridging scientific research findings and effective programming.

Box 1. Behavioural Economics and Behavioural Science Approaches

Though BE applies behavioural science insights (in particular psychological insights) in studying economic behaviour, it is not the same as behavioural science. Two implications follow:

- a) Since it is only interested in behavioural insights that are relevant to economic behaviour and not other behaviour, it does not cover all behavioural insights that are relevant for programming (e.g., insights on learning).
- b) With the tool of experimentation, BE is keen on discovering behavioural regularities that contradicts neoclassical economics predictions, but it does not refer to systematic and in-depth psychological insights. Hence, it may be better to refer to the original behavioural insights when necessary than BE's incomplete take (e.g., insights on habit change).

What BE adds to other behavioural science insights is the in-depth understanding of economic incentives, inter-personal strategic interactions based on game theory as well as group dynamics like coordination or equilibrium shifts, which tends to be under-explored in programming as of now.

In what follows, we will outline key concepts about human behaviour incorporating both the basic thinking and principles behind BE, as well as relevant behavioural insights for programming that are under-explored in BE.

2.1.1 Thinking automatically and socially

The human mind, though in many ways computational, does not exactly function like a computer. As highlighted in the World Development Report 2015, there are two main noteworthy features of the mind that have been under-considered in policy-making - **thinking automatically and socially.**

Thinking automatically: unlike computers, humans do not always apply complex algorithms that would maximize the chance of an optimal decision – humans' limited lifetime implies a trade-off of time spent in thinking and acting: the more time we spend on figuring out what is the best to do, the less time we spend on acting. To economize decision effort and time, humans make use of fast and frugal mental shortcuts in familiar and repetitive contexts (Gigerenzer & Todd, 1999). We employ a dual thinking system depending on the decisions contexts (see Table 1).

Table 1. The dual thinking systems framework based on Kahneman (2011)

	Thinking inputs	Processes
Automatic (System 1)	External: Information and cues (readily available and salient, i.e., attention-grabbing and outstandingly noticeable) Internal: Triggered schemas, scripts or emotions	Associative, intuitive, implicit, often subconscious processes to generate habitual, scripted and emotional responses
Deliberative (System 2)	External: Relevant information (sought after deliberatively) Internal: Related preferences and beliefs	Systematic, reflective, explicit reasoning to seek the best alternative that best serves one's preferences

While our automatic system is, by itself, sufficient to trigger thousands of fast and seemingly automatic behavioural responses and constantly feed inputs into our deliberative system, our deliberative system tends to over-ride the decision made by the automatic system only when we encounter novel and unusual contexts or when the stake is sufficiently high to make it worth scrutinising decisions carefully.

Automatic system: One of the main breakthroughs in behavioural sciences of the past few decades is the technological advancement in brain science, which allows scientists to uncover more about the automatic processes of the brain. In one neuroscientific study, decisions were largely predicted by brain activities seven seconds before participants were even aware of having made a decision (Soon et al., 2008). Recent findings using the Implicit Association Tests measurement technique have also revealed the strong predictive power of implicit attitudes on explicit attitudes and actual behaviour (e.g.,McConnell & Leibold, 2001). Overall, implicit influence from automatic processes plays a crucial role in preparing for the final decisions we make, even though we tend to under-estimate its influence due to the fact that we are, by definition, less aware of our automatic processes.

Since the automatic system is "lazy", as Kahneman (2011) puts it, seemingly irrelevant factors for the rational choice model of an agent such as environmental cues and choice framing can make a big difference. Many of the BE insights are easier to understand if one understands that most thinking inputs and processes relevant for automatic thinking are rules of thumbs/shortcuts as listed below:

- **Schemas** –perception shortcuts via pre-established mental associations of related concepts (Rumelhart, 1980); also known as mental models; tend to be cultural specific
- Scripts event schemas, typically acquired through socialization
- **Emotions** consist of basic individual emotions (e.g., anger, disgust, fear, happiness, sadness, surprise) and basic social emotions (e.g., embarrassment, shame, guilt, pride, empathy) (Ekman, 1999)
- **Habits** routine behavioural responses prompted by environmental cues, which count for 45% of daily activities (Wood et al., 2002)
- Heuristics rules of thumbs for judgement and decision-making (Tversky & Kahneman, 1974)

It is important for policy makers to understand the mechanisms of the two thinking systems because effective behavioural interventions depend on the system underlying the targeted behaviour. Several implications concerning behaviour follow:

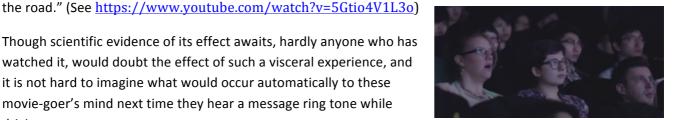
- Successful changes on schemas or scripts matter for attitude change. For example, the Saleema Communication Initiative recognizes the absence of a positive term in Sudan to refer to an uncircumcised woman / girl, despite 30 years of activism to increase awareness of the harm caused by female genital cutting (FGC). A new schema of an uncut girl was created by replacing the word widely used throughout the northern states of Sudan "ghalfa" which has connotations of prostitution and slavery with "Saleema" which means whole, healthy in body and mind, unharmed, in a God-given condition. Information campaigns can fail to change attitudes if they do no not sufficiently take into account rooted schemas as new information that does not fit existing schemas is often ignored or dismissed (Taylor & Crocker, 1981).
- Environmental cues (visual, social) matter as they can trigger different schemas and scripts For example, in an experiment, randomly selected prisoners being reminded (primed with) the identity of prisoners stole more money from experimenters than those without such reminders (World Bank, 2014).

Visceral experiences (based on emotions) matter –they can trigger deep level learning that sticks in people's memory and are easily accessible when acting automatically (see Box 2 for illustrations of application in programming).

Box 2. The role of visceral experience

A multimedia campaign took place in a MCL cinema in Hong Kong (Volkswagen, 2014) in which unsuspecting movie-goers vividly experienced the consequence of texting while driving: while they were half way through a trailer of a driving scene from the driver's perspective, they got a text message (from a location-based broadcaster who can send everyone in the cinema a predesigned message). As they checked their phone, "bang", the car crashed, and left them shocked and stunned, staring at the crashed scene followed by the message "Mobile use is now the leading cause of death behind the wheel. A reminder to keep your eyes on

Though scientific evidence of its effect awaits, hardly anyone who has watched it, would doubt the effect of such a visceral experience, and it is not hard to imagine what would occur automatically to these movie-goer's mind next time they hear a message ring tone while driving.



- Habit change cannot happen by only changing intentions or attitudes: For changing frequent recurring behaviour like habits, changing intention or attitudes has hardly any effect, even though for infrequent novel decisions, changing intention or attitudes is effective to change behaviour (Quellette &Wood, 1998; Webb & Shearan, 2006). For changing automatically carried out routine behaviour, disruptions of old behaviour, for instance, is one of the key principles proposed by Neal et al. 2014.
- Although heuristics achieve fast responses, they do not always hit the nail on the head in all contexts and at all times -biases can systematically arise. One of the most known examples is the heuristic and bias towards the default in judging and deciding what to do. A case that demonstrates this is the striking difference found in organ donation rates in apparently similar countries (Johnson & Goldstein, 2003). While the proportions of organ donors are above 95% in Austria, Belgium and France, the proportions are below 30% in Germany, Netherlands and UK. It is hard to believe that the different uptake rates could have been due to people in the latter being less empathetic towards people dying. As argued by the authors, the sharp divide is likely due to the default effects since in the high up-take countries, everyone is a donor unless registering not to be one (presumed-consent unless one opts out), and in the low up-take countries, nobody is a donor without registering to be one (explicit-consent to opt in). See Table 2 for a summary of common heuristics and biases and programming examples explored in BE literature.

Table 2. Individual heuristics and biases

Heuristics (and biases)	Evidence	Potential policy implications
Status-quo bias: Tendency to do default option (Samuelson & Zeckhauser, 1988)	Save More Tomorrow (SMarT): making it a default to have the contributions to 401(k) retirement saving increased after each pay raise. The initial application increased saving from 3.5% to 13.6% (Thaler & Benartzi, 2004).	Default matters: Make the desired behaviour the default behaviour
Loss aversion: Tendency to be more sensitive to losses than to gains (the heuristic of paying more attention to losses is related to the more survival-threatening feature of negative outcomes) (Tvesky & Kahneman, 1974)	Test scores of students whose teachers' bonuses were presented as a potential loss increased more than those whose teachers' bonuses were presented as a potential gain (Fryer et al., 2012)	Loss framing matters: Reframe gains from desired behaviour to losses from not changing behaviour.
Anchoring effect: Tendency to be more influenced by initial exposure in the immediate environment which serves as a reference point for judgment (Tvesky & Kahneman, 1974)	Judges systematically differ in their judgement of the length of sentence imposed if they are exposed to dice outcomes 3 or 9 right before their judgement (Englich, Mussweiler & Strack, 2006.)	Relative perception matters: Set the right reference point that anchors people towards desired behaviour
Mental accounting: A rule of thumb in order to organize, evaluate and keep track of financial activities (Thaler, 1999)	In gambling, people bet more with credit cards than with cash. By providing people with a lockable container that a household could name after a preventive health product like the mosquito nets, spending on these products rose by 66-74% (Dupas, Karlan & Robinson, 2013).	Labelling matters: Labelling changes the perception, decision and evaluation of what to do with money
Present bias (Myopia): We pay more attention to the immediate gains than to potential future outcomes	Free delivery of fertilizer right after farmers' harvest when they have more cash increases adoption of fertilizer by 64%, equivalent to the effect of a 50% subsidy (Duflo, Kremer & Robinson, 2008)	Timing matters: Procrastination can be overcome by making future outcomes salient at present
Myside bias (confirmation bias): Tendency to interpret information in ways that support prior beliefs (Dawson, Gilovich & Regan, 2002) and failure to actively consider information that conflicts with prior beliefs (Nickerson, 1998).	World Bank professionals, divided by those who support equity ("income should be made more equal") and those who support efficiency ("income gap should be larger to ensure incentives), were asked to interpret the same data on how minimum wage laws raise poverty rates. Their interpretation of the same data was less accurate when the evidence conflicted with their outlooks (World Bank, 2014)	Unbiased deliberation matters: Actively open-minded thinking training can help one search actively for evidence against one's favoured beliefs, plans or set goals and to weigh such evidence fairly when it is available (Baron, 2008).

Deliberative system. Our deliberative system processes decisions differently and resembles more the model of a rational agent who systematically evaluate the outcomes of a choice driven by a set of related beliefs. However, the deliberative system does not always yield optimal decisions. Often, we might have mistaken beliefs about facts and things, as well as about what others actually do and think. Though the deliberative processes do actively search for relevant information instead of only processing available and salient information, it does not always search hard enough. Moreover, as shown in Table 2, it is often subject to 'myside bias' in the search.

Under-activation of deliberation: some of the automatic processing errors (biases) can be overcome by active deliberation through reflecting on the most important goals, gathering evidence to check on beliefs, or searching for better alternatives. However, we do not always make use of deliberative thinking when we should. One main factor behind under-deliberation, is that when we are cognitively overloaded due to, for instance, fatigue, mental stress or resource scarcity, we tend to fall back on the automatic system by using mental shortcuts (Mullainathan and Shafir, 2013). This can account for why unconditional cash transfer is useful in helping the poor make better decisions. We also fall back on heuristics if the context for making a decision is unnecessarily complex. Thus, in line with the principles of the EAST framework (BIT, 2010), it is important to translate complex information into simple/"digestible" and memorable information to facilitate deliberation and accurate beliefs. Contextual novelty can also be created to enable one to "stop and think".

We have highlighted above that **humans think automatically and do not always act intentionally.** The second noteworthy feature of the human mind is its active social antenna during decision-making. As traditionally explored, there can be grounds for preferences over material and value consequences, and distortions to the beliefs of the deliberative system, i.e., beliefs about related facts. What is less explored is how beliefs about the social prevalence and related social approval or disapproval of behaviour affect decisions, which we will briefly explore below.

Thinking socially: As a socially minded species, humans are sensitive to social influence. We often do what others do for three main reasons:

- **Social proof:** what others do conveys information about what is best to do (e.g., follow others in running outside when there is a fire)
- **Social coordination**: following a descriptive norm for coordination's sake (e.g., driving on the left or right) it is mostly in one's interests to follow what others do
- Social governance: following an injunctive norm for avoiding social sanctions when others would disapprove if you don't do what others do (e.g., queuing up like others in the UK, an injunctive norm) but it is mostly in one's interests to deviate from what others do if without social sanctions.

Injunctive norms can be a powerful tool in governing individual deviants' behaviour that undermines the public good in social dilemma situations. Based on game theoretic insights, a social dilemma arises when it is in the individual's personal best interests to deviate from the behaviour that is in the public's best interests, such as the case of energy use or corruption. The temptation to deviate is high in such situations because doing the socially right thing, if most others deviate from it, will place one in a sucker or victim's role.

OPower, for instance, has incorporated BE insights in social norm marketing and successfully reduced energy use by comparing customers' energy use with that of their neighbours with symbols of 'emoticons' to indicate social approval or disapproval (see Figure 2 below).

Figure 2: Use of Emoticons and Comparison of Neighbours' Energy Use (Source: Allcott, 2011)

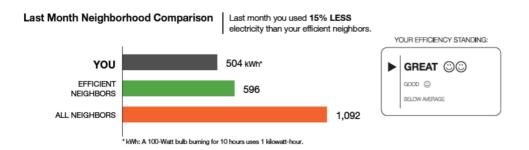


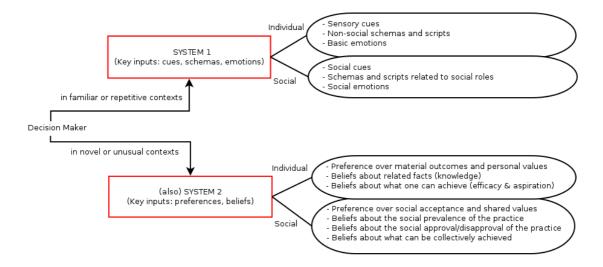
Table 3 provides some more policy relevant examples of "thinking socially".

Table 3. Thinking socially

Heuristics and biases	Related behavioural nudges and impacts	Potential policy heuristics
Follow-the-successful	RCT of inspirational videos (Ethiopia): Those who watched an hour of inspirational videos of how locals had improved their socioeconomic position by setting goals and working hard saved more and they invested more in their children's education six months later. The video also increased their aspirations and hopes, especially for their children's educational future (World Bank, 2014).	Market success stories
Follow-the-majority	Tax letters (Guatemala) ³ : The government trialled different letters to encourage citizens to declare and paid their taxes on time. All letters mentioned the legal consequence of late declaration; one emphasised the fact that most citizens declare their taxes on time, one appealed to people to be good citizens and one emphasised the penalties for noncompliance. Emphasizing that most citizens pay their taxes on time was the most successful letter, which led to a 5.5% increase in tax collected.	Market beneficial social norms (make known positive norm-following behaviour)
Reciprocity& Social image: We care about being fair and reciprocal, as well as the social image of being fair and reciprocal	Californian residents were given the option to sign up for a program that curbs their central air conditioners when necessary on unusually high energy demand days or in the case of an unexpected plant or transmission failure. Sign-up sheets were posted in a communal area near their home, either with their names required or not on the sheets. Yoeli et al. (2013) found that making it public the names of those who sign up triples participation with the impact over four times larger than offering a \$25 monetary incentive.	Observability matters

 $[\]overline{\ }^3 \ http://www.scidev.net/global/policy/feature/behavioural-science-development-policy-innovation.html$

Figure 3 summarizes the insights discussed above of how we think automatically and socially based on Kahneman's dual-thinking framework.



2.1.2 Intention-behaviour gap

Another key concept is the intention-behaviour gap – when people do not follow through their intentions. Important factors that underpin intention-behaviour gaps can be:

- a. **Infrastructural:** the absence services or other infrastructure (e.g., communications technology) that would facilitate carrying through intentions to behaviour.
- **b. Institutional**: barriers created by formal or informal institutional environment, including **social** barriers related to perceptions of what others would think, resistance from those whose interests would be at stake with the change.
- c. Individual (cognitive): cognitive capacity limits, such as forgetfulness or limited self-control.

While institutional constraints like political or legal set-ups tend to be more difficult to address, alleviating infrastructural or cognitive constraints can be more straightforward. For instance, incentivising immunisation in India by both the provision of lentils and metal plates for the participants and setting up a nearby immunisation camp led to a significant increase in full immunisation rates (Banerjee et al 2010). Box 3 discusses insights and examples of nudges, including those that are used to bridge intention-behaviour gaps.

Box 3. What are Nudges?

Thinking automatically, on the one hand is fast and frugal (Gigerenzer & Todd, 1999), but on the other hand, is less logically rigorous and consistent, and can be over-sensitive to subtle contextual details. Hence the design of the choice environment makes a difference. Nudges have become increasingly popular as a public policy tool. A nudge is intended to get people to change behaviour not by coercion, or overt persuasion, but by reframing the decision-making contexts, i.e., changing the choice architecture (Thaler & Sunstein, 2008), so that individuals behave more in line with what is best for their own or societies' best interests. They typically work on cognitive biases that are difficult to avoid, by either alleviating biases (e.g., making desired options the default), or making use of the biases for individuals' advantages (e.g., since loss aversion can be a stronger motive for good behaviour, programmes like "stikK" help you create a commitment device by

taking away your money if you fail to deliver the committed behaviour instead of giving you money if you succeed). Nudges can also help bridges the intention-behaviour gap when understanding and attitudes change do not translate into actions because of forgetfulness, myopia or lack of self-control (e.g., reminders).

The most common criticism of nudges is that they do not enhance agency and are somewhat manipulative. However, nudges can be facilitative rather than manipulative – for example, changing information displays from vertical to horizontal so that they are more easily processed (Deng et al, 2015). Nudges are ultimately built on the assumption that people are making suboptimal decisions and would have preferred the optimal decisions resulting from nudges. It is undeniable that nudges exert psychological influences on decision makers; there is scope for greater transparency in the use of nudging (Hansen & Jesperson, 2013, Loewenstein et al., 2015). Furthermore, they primarily make up for imperfect outcomes rather than upgrading the tools in use by for instance helping acquire new habits or good thinking techniques. To alleviate this, alternative complementary interventions that follow up nudges can be directed more towards helping individuals drop undesired habits, form good habits, become more goal oriented, or more deliberative whenever it is worth doing so.

2.3 Thinking and Principles behind Social Norms Approaches

Much behaviour is motivated by what others do or think. Social norm approaches draw attention to influence of shared social expectations on behaviour, and are based on both recent behavioural science research and a long-standing sociological tradition. The term 'social norm' is used in two main ways in current international development thinking and practice:

- OA tight definition, inspired by Cristina Bicchieri and others, which focuses on rules of behaviour (See Box 4)
- A looser approach, which defines norms as widely shared beliefs and common practices within a particular group.

Box 4: Selected Definitions of Social Norms

'A rule of behaviour that people conform to because:

- 'a) most people in their reference network conform to it (empirical expectation) and
- b) most people in their reference network believe that they ought to conform to it (normative expectation (Bicchieri, 2006).'

A pattern of behaviour motivated by a desire to conform to the shared social expectations of an important reference group (Heise, 2013)

Key insights related to the influence of social norms on behaviour include:

- people comply with social norms largely because of the social approval they gain from compliance, or because they fear social sanctions, such as gossip, shunning, violence or damage to economic relationships if they do not comply (Bicchieri, 2015).
- people can behave in ways that contradict their personal beliefs or their self-interest because they believe others expect them to. Thus, for example, a teacher may use physical or humiliating punishments primarily because s/he believes other teachers expect him/her to do so even if s/he is personally uncomfortable with their use (Mackie et al, 2012).

- norms can often be underpinned by pluralistic ignorance (where people misperceive others' views). This can lead to outdated norms being upheld when in fact many people no longer support them but believe that others do and would frown on or criticise them if they acted outside that norm. For example, Johnsdottir's research on attitudes to FGM/C among the Somali diaspora in Sweden found that many women believed that men strongly supported the practice whereas in fact they no longer did so (cited in UNICEF, 2013).
- people's reference groups are the strongest influence on behaviour: what people similar to oneself members of one's ethnic group, gender, age cohort, religious or geographical community, or people facing the same situation do and think exerts greater influence than people who are perceived to be fundamentally dissimilar. Thus people are more likely to change behaviour if they perceive that others like them are doing so.
- what others do (descriptive norms) is typically a stronger motivator of behaviour than idealised standards of behaviour (injunctive norms). So, for example, people have limited incentive to desist from personally beneficial but environmentally destructive practices (eg forest clearance) if they perceive that most others undertake them.
- norms fulfil a range of purposes for example, some represent a way of managing resource use; others are manifestations of religious or cultural values. Effective behaviour change strategies need to take any underlying purposes of norms into account, and if necessary, promote an alternative way of achieving the same purpose.
- norms do not exist in a vacuum. They are often underpinned by multiple factors, such as cultural or religious beliefs, economic conditions, and the legal and policy environment (Marcus and Harper, 2014; Munoz Boudet et al 2013) and changes in any of these underlying factors can drive norm change.
- **norms are often invisible**: they form part of the fabric of how people think and act (Bourdieu, 1990). They are often so taken-for-granted that people are not necessarily able to articulate them (Young, 2014) (though they can typically recognise when they are being violated).

Box 5: Understanding how norms change: implications for behaviour change strategies

Norms change when a critical mass of people have adopted new ideas and practices and new standards are established. This change can occur through via several routes, such as exposure to new ideas and practices, imitating others, through a mandate from above (eg the law or religious or political leaders), and through discussion and reflection on existing practices and norms. Often practices change first and a community's standards of behaviour catch up subsequently (Bicchieri, 2015; Munoz Boudet, et al, 2013). This typically involves different individuals and groups changing at different speeds and sometimes 'testing the water' with a new norm before completely and permanently changing practices. Because norms are upheld by and disseminated through multiple institutions (eg schools, the media, households, community governance institutions etc.) norms often change more rapidly if new norms are promoted through a range of institutions.

Because norms are often underpinned by several factors (e.g. economic conditions, the legal and policy environment), changes in any of these factors can drive norm change. For example, changing economic opportunities can alter people's perceptions of their interests and can lead, relatively rapidly, to new norms emerging (Bicchieri and Mercier, 2014). Behaviour change campaigns both need to take into account these wider influences on norm change, and may need to be combined with strategies that work on several of these underlying factors simultaneously (Mackie and Le Jeune, 2009; Marcus and Harper, 2014).

Norm change can generate resistance, particularly when new norms challenge vested interests or are interpreted as undermining valued cultural and religious practices (Marcus and Harper, 2014). Programmes aiming to promote behaviour change through changing norms need to engage with individuals and groups who are likely to oppose norm change.

Differences between norm abandonment and norm creation interventions

Typically, promoting abandonment of dysfunctional norms involves dealing with some core beliefs (often cultural) that support an old practice that is deemed undesirable. Hence, it is important to change implicit and explicit attitudes before changing social expectations by, for instance, media campaigns and soap operas that promote the new practice or correct mistaken beliefs. Once people's attitudes have changed, change agents can encourage a change in behaviour.

With norm creation, as in the case of open defecation and handwashing, it may be necessary to correct mistaken factual beliefs before coordinating a shift in behaviour. Because it emphasises gains, rather than giving up an old practice, norm creation is psychologically less demanding in terms of replacing deeply rooted schemas and scripts and practically tends to generate less resistance from people whose interests are at stake. Moreover, the change agents who take the lead in abandoning norms might be different from those who take the lead in following a new norm – the former is much riskier in terms of potential negative social sanctioning for challenging the status quo.

3. Applying Behavioural Economic and Social Norm approaches in practice

This section discusses the implications of behavioural economic and social norm approaches in designing, monitoring and evaluating interventions, with concrete examples like food label design, corporal punishment, handwashing and violence against women and girls, followed by some discussions of the strengths and limitations of these two approaches. This section concludes with some principles for good practice.

3.1 Diagnostics incorporating Behavioural Economic and Social Norm Insights

As we know, successfully identifying the core drivers of a practice is a crucial step towards designing effective interventions. Two main implications flow from behavioural economic and social norm insights:

- Distinguish behaviour that is mainly driven by implicit beliefs and automatic processes, from behaviour that is mainly driven by explicit beliefs and deliberative processes.
- Distinguish behaviour that is driven by social expectations (i.e., identify the presence of descriptive and injunctive norms), from behaviour that is driven by personal considerations.

We will demonstrate the application of a framework that incorporates these two dimensions using the case of domestic corporal punishment (see Figure 4):

1. Is there an intention to change? - Measure knowledge and attitudes and social expectations

A natural starting point would be to find out if parents intentionally practice corporal punishment. If the behaviour is driven by a deliberative preference to uphold the practice supported by explicit beliefs, they should be able to articulate the reasons behind their endorsement of the practice. The popular KAP survey (Knowledge, Attitude and Practice) is a good measure tool for identifying knowledge gaps about the harm of

the practice and feasible alternatives to the practice. For instance, parents might wrongly believe that corporal punishment is the only proper means to discipline kids without being aware of good alternatives. However, such surveys are usually insufficient to find out if the practice is influenced by beliefs about the social prevalence or approval of the practice. In order to find out if parents believe that other parents act the same and whether or not their own family members (or wider community) would disapprove of their not disciplining children with corporal punishment, social expectations related questions should be included (see Bicchieri et al. 2014, p5-6 for a framework of measuring social expectations).

2. Is there an intention-behaviour gap? - Identify both environmental and cognitive constraints
Suppose that parents have no intention to keep the practice and would like to change, but there are
constraints that limit their capacity to act. Besides infrastructural constraints like material resources or
services and institutional constraints in the legal and political domain, behavioural economic insights
highlight individual cognitive constraints like forgetfulness, inattention or limited self-control, whereas social
norm insights highlight social institutional constraints such as power relations or resistance from those
whose interests would be at stake with the change.

3. Is there automatic processes biases? - Identify implicit influences

Implicit influence can be identified as a core driver if corporal punishment is simply a habitual or scripted response: Some parents might have learnt the scripts of parenting from their own parents without ever deliberating over the reasons for choosing corporal punishment over other parenting methods. In this case, they also would not be able to articulate why they do what they do - they would simply perceive it as the natural and normal thing to do.

Even if the practice is driven by a deliberative factual belief such as that there is no better way to discipline a child than that of corporal punishment, it is still helpful to take into account the influence of implicit inputs, like schemas and scripts. For instance, if there is a deeply rooted schema of children perceived as 'owned' by their parents – parents might implicitly believe they can do whatever they like with them like other owned items.

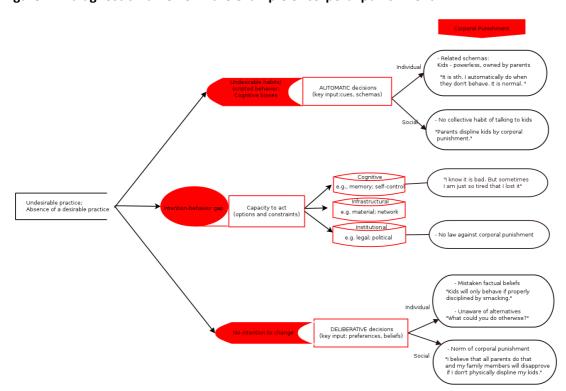


Figure 4. A diagnostic framework: the example of corporal punishment

3.2 Identifying appropriate interventions incorporating behavioural economic and social norm insights

Depending on the level of complexity of the targeted problems, there can be multiple channels of interventions. Nonetheless, it is cost-effective to identify core interventions based on the diagnostics of core drivers. Table 4 lists the 'ABC' channels of interventions ordered from less intentional (automatic processes biases) to more intentional drivers (preferences and beliefs upholding the old practice) with some generic examples of interventions.

Table 4. ABC channels of interventions

Core interventions	Detailed list of avenues	Example of interventions
1. Alleviate automatic processes biases	 Heuristics and biases Habits Schemas and scripts	 - Choice architecture (Thaler & Sunstein, 2008) - 7 principles of habit change (Neal et al., 2014) - Media messaging and entertainment
2. Bridge intention- behaviour gap	Individual (cognitive)Institutional (legal, political, social)Infrastructural	Reminder; commitment deviceLegal change; Social coordination of changeSupply easily reachable supporting materials
3. Create intention to abandon an old practice/adopt a new practice	- Aspirations/efficacy- Incentives (economic; psychological)- Factual beliefs- Social expectations	 - Market success stories - Conditional cash transfer; public praise - Knowledge campaign; experiential learning - Dispel pluralistic ignorance; norms marketing

We now discuss some cases where insights from behavioural economic and social norm approaches have been employed in programming.

1. Heuristics and biases (choice architecture interventions that alleviate automatic processes biases)

Here we will show an example of a facilitative "nudge" intervention for those who prefer to be eco-friendly.

Imagine you are a green Belgian consumer, which of the tomatoes would you judge to be more eco-friendly?

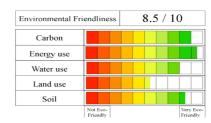


You can try to gather relevant information online to calculate the total impacts and make a deliberate choice. But the truth is that there are too many factors to be taken into account. Most people would fall back on the heuristic (rule of thumb) of "organic and local food is more eco-friendly" to judge and choose

Tomato 1 – the local and organic one, which is a good judgment in most cases but not here as Tomato 1 is produced in a greenhouse and consumes overall more energy than the outdoor grown non-local Tomato 2.

To alleviate this occasional bias, suppose we could replace the default labels by either the raw information label on the left or the one on the right. Which one would you think would be more effective in alleviating the bias?

Transport	100km (truck)	
Production	Open air	
Water use	146 liters/kg	
Land use	0.38 m ² /kg	
Pesticides	0.6 active substance/kg	



Note: as it turned out, while installing the raw information label had little impact on average green consumption compared to the original label, installing the label with an overall eco-friendliness score (0: very unfriendly, 10: very eco-friendly) as shown on the right increased eco-friendly consumption by 5.3% (Vlaeminck et al., 2014).

2. Habit or custom change: examples of sanitation and handwashing

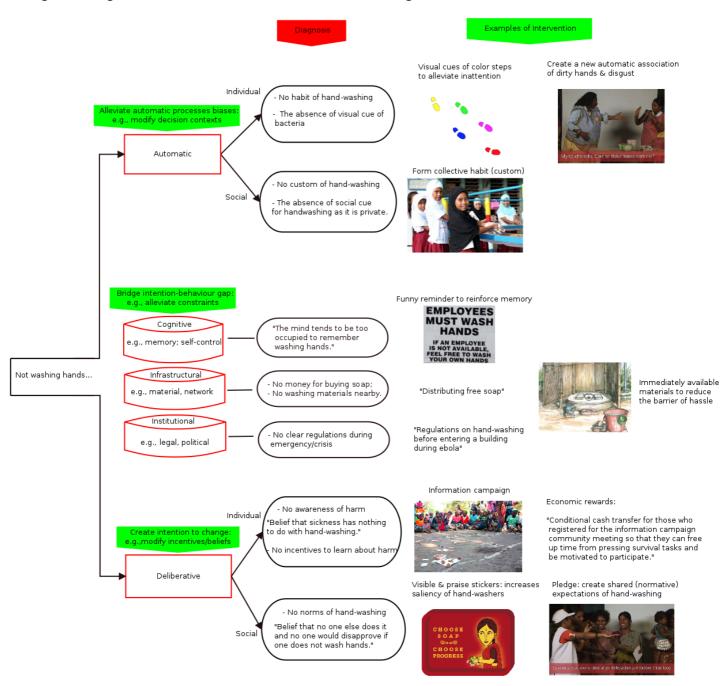
Changing a habit or custom is different from alleviating biases associated with the use of heuristics. The Community-Led Total Sanitation (CLTS) approach incorporates both behavioural economic and social norm insights and recognizes that the practice of open defecation is not merely a technical issue to be solved by subsidizing or building toilets, but it is also a matter of custom. It approaches sanitation from behavioural and social rather than technical and individual/family perspectives. It makes use of some of the behavioural and social insights discussed earlier as follows:

- The use of visceral experience in information campaigns: one of the most talked about behavioural approaches used in CLTS is the "transect walk" through community areas of open defecation. The smell during the walks triggers the automatic emotional reaction of disgust and creates tangible and memorable awareness of the problem, which in turn triggers reasons to change (Cavill et al, 2014). Thus, though factual beliefs are inputs of deliberative thinking processes, the exact design of the information campaign that updates people's factual beliefs can benefit from the insights of "thinking automatically" how the messages are conveyed and framed matter for creating tangible and memorable awareness of the problem.
- The use of social emotions in creating psychological rewards: instead of focusing on subsidies that create economic incentives, CLTS pioneered in creating psychological rewards. For instance, the "Open Defecation Free" certificate for communities with successful changes is designed to create a strong emotion of community pride. The celebration of the community achievement can act both as a reminder and as positive feedback for sustaining the practice. Together with the approach of encouraging communities to discuss and decide on concrete action planning to end open defecation, the use of "community pride" is likely to also positively affect community aspirations and collective efficacy.
- Create beneficial sanitation norms: Traditionally, though some efforts were made to ensure community involvement in the WASH sector, they did not try to change people's social expectations. CLTS include community level discussion to create shared social approval of use of latrines and good hygiene.
 Moreover, it encourages change agents (natural leaders) who emerge from group discussions to take the lead in changing people's expectations about how many others take up the new practice. In some areas

- like West Bengal, all community members pledged and signed in public that they would stop open defecation. The pledges were widely remembered two and a half years later (Cavill et al, 2014).
- **Being sensitive to other related norms:** Community led group deliberation was used to also encourage deeper discussions on what to do with related norms such as sharing toilets, defecating in a room.

Similarly, the SuperAmma campaign has also employed multiple channels of approaches (see Figure 5).

Figure 5: Diagnoses and interventions related to hand-washing behaviour



Behavioural insights were incorporated to address the knowledge gap related to hand-washing and disease, as well as the intention-behaviour gap in implementing hand-washing. Approaches included:

- Use of visual tools and visceral experiences (e.g., triggering the automatic reaction of disgust emotions) to make the links between germ and disease more tangible to ensure effective learning (Leontsini & Winch, 2014).
- **Psychological rewards** (via public praise): a sticker "Choose soap, choose progress" was distributed to families who wash hands with soap to generate the psychological rewards of pride and positive feedback.
- Creating new schemas and scripts that support the new practice (handwashing with soap): videos and community- and school-based skits presented handwashing as something desirable, associated with good manners and success (through an image of a little boy washing his hands transforming into a doctor with white coat and stethoscope washing his hands. They also presented handwashing as a way of avoiding something disgusting (the smell of faeces).
- **Creating a new beneficial norm around handwashing**: through public pledges to wash one's hands after using the toilet and before eating/preparing food.

Evidence drawing on a Randomised Control Trial found that after six months of the combined SuperAmma interventions the proportion of people hand-washing with soap was 37% in the intervention group versus 6% in the control group, up from respectively 1% and 2% at baseline (Biran et al, 2014).

3. Practices that are supported by a set of deeply rooted norms: example of Violence Against Women and Girls

Social norm-based approaches are increasingly being applied to deeply-rooted cultural practices. Rather than attempting to change the cultural values that underpin a practice directly, social norm approaches can offer a script for a new way of behaving that is in tune with other important values or motivations. These new scripts can, in turn, lead to change in values. Social norm marketing approaches frequently aim to dispel misconceptions about how widespread a certain practice is, or how much support there is for a practice. They also commonly aim to inspire people to change, often by framing individual change as part of something bigger (tapping into people's sensitivity to social influence). With deeply-rooted practices, such as violence against women and girls, it is often necessary both to challenge an old norm and to promote a new norm.

Table 5 outlines different norm-related interventions aimed at reducing violence against women and girls highlighting both norm abandonment and norm creation interventions. (Other broader approaches to ending violence against women and girls, such as legal reform, sensitization of the police etc. are outside the scope of this table).

	Channels for Change	Programme Examples	Impacts
Perpetrating violence	Alleviate automatic response biases: - Create non-violent behavioural script, i.e., develop alternative models of non-violent masculinity through group discussion and media modelling	Soul City – Series 4 – modelling non-violent masculinity	14% increase in people agreeing that 'no woman ever deserves to be beaten' after airing of Series 4. Increase was higher among groups with greater exposure to Soul City (Usdin et al, 2005).

	Create intention to change:		A cluster-randomized controlled trial
	- Update mistaken factual beliefs, e.g., raise awareness of associated harm	Raising Voices - SASA! (Uganda): engage men and women in community dialogues exploring gender relations, violence and power	showed that violence against women was 54 % lower in SASA! communities (Abramsky et al., 2014).
	- Update social expectations to dispel pluralistic ignorance, e.g., dispel mistaken belief that 'everyone does it' – present violence as uncommon, deviant rather than normal		
	Bridge intention-behaviour gap: -Create networks of people who commit not to use gender-based violence to mobilize others. -Make use of public pledges to signal and coordinate commitment to change. -Help people develop and practice self-control strategies (often in group setting/ non-formal education)	We Can End All Violence Against Women (India) recruited men and women as change makers on gender equality issues. Change makers pledged to recruit 10 other people who would commit to changing their behaviour (including abandoning GBV) Program H (Latin America and India); One Man Can (South Africa)	77% of people interviewed in the change maker's circle of influence reported personal change as a direct result of their interactions with the change maker and/or the campaign (Rajan et al, 2010). Qualitative evidence of changed practices (e.g., less coercive sex (Pulewitz and Barker, 2006)
Taking action on violence	Alleviate automatic response biases: - Create a script of seeking help when confronted with violence. -Challenge the social script that a good woman tolerates violence for the sake of her family (or honour). - Model intervening to disrupt violence as 'the right thing to do'	Equal Access Nepal: Interactive radio show promoting norm that it is acceptable to seek help and factual information on how to seek help in cases of gender-based violence Soul City, South Africa - TV and radio soap opera with associated print materials. Series 4 had specific storylines on gender-based violence.	Proportion of women seeking help from public authorities increased from baseline to endline: from 5% to 14% for use of courts, from 15% to 28% for seeking police help and from 11% to 17% for use of legal counselling services (Equal Access, 2010). After viewing Series 4, 10% increase in survey respondents who disagree that domestic violence 'is a private affair' and 22% increase in respondents believing that their community does not think domestic violence is a private matter. Some anecdotal evidence of people modelling behaviour seen on Soul City Series 4 - interrupting gender-based violence by banging pots and pans (Usdin et al 2005).
	Create intention to change - Aspiration/self-efficacy: create script of individuals being empowered to challenge or report violence Bridge intention-behaviour gap -Help those who want to help to overcome fear of retaliation: spread models of safe ways of intervening	Bell Bajao (Ring the bell), India: Frame intervening in inspirational way – 'you can make a difference' Bell Bajao (Ring the bell), India: Campaign encouraging men (and women) to ring/ knock on a neighbour's door and interrupt violence when it is occurring	Survey data suggest substantial changes in knowledge, attitude and behaviour with regard to interpersonal violence at individual and community level. Qualitative evidence of effective violence disruption (Breakthrough, 2013 in Michau et al 2015)

Discussion: strengths, limitations and evidence gaps

Applying behavioural economic informed approaches is a relatively new approach in low and middle-income countries, and there is a relatively small, though rapidly growing, range of evaluative evidence on which to draw. Much current work is exploring the potential of insights in this area through experimental approaches (behavioural economists have been instrumental in the drive towards RCT-based evidence). Social norms marketing is also a relatively new approach in international development programming, and has been most consistently used to promote change in health-related behaviour and more recently to challenge gender-based violence (Paluck et al, 2010).

There is growing evidence of successful application of different behavioural economic approaches. Examples include increasing savings by more than 100% in Kenya through the use of psychological interventions (which led to much greater success than economic incentives) (Akbas et al, 2015); increasing tax receipts in Guatemala through social norm based messaging emphasising that most citizens declare and pay their taxes on time;⁴ and SMS reminders to complete a course of malaria medication in Ghana (Raifman et al, 2014). In all of these cases, approaches making use of behavioural insights enhanced the effectiveness of interventions (Kenya) or existing practices (Ghana and Guatemala).

There are also clear examples of success through processes involving deliberation, challenges to existing norms and the adoption of new norms. These include example such as <u>Instituto Promundo's</u> work on helping young men develop more gender-egalitarian models of masculinity, which have been adapted in many countries, and Community Led Total Sanitation programmes discussed in Section 3.1. There are also examples of significant change through making people 'stop and think' as with an initiative in Bogota, where mime artists held up red and yellow cards when they saw people driving dangerously; traffic deaths fell from 1300 per year to 600 per year primarily as a result of this initiative (Singhal & Greiner, 2008)

Because evaluations of behaviour change initiatives in low and middle income countries do not always disaggregate patterns of uptake by socio-economic group, it is difficult to assess whether behavioural economic or social norm approaches are disproportionately successful among certain groups, and whether certain groups are being bypassed. Some indications from rich country experience suggest that behaviour change campaigns have often led to greater change among better-off groups who face fewer constraints to change, and/ or who are exposed to behaviour change messages in a wider range of contexts (Michie et al, 2008).

As we have emphasised throughout this guide, it is important to be clear about the kinds of issues where behavioural and social norm approaches can achieve positive impacts and where complementary measures are necessary. With some exceptions, the majority of issues where behavioural approaches have been successfully applied do not involve significant imbalances of power – they have typically been successful in contexts where individuals are more-or-less free to act but do not do so. They work by encouraging people to adopt a practice that they often want to adopt but have not done so, or to stop engaging in a practice that they wish to abandon. Approaches that encourage deliberation and the creation of new behavioural scripts may have greater potential to transform power imbalances. It must also be recognised that the most marginalised people may not be free to change and that changing norms among more powerful groups is often necessary. (Hence for example, the recent interest in changing norms around masculinity to enhance gender equality ie. encouraging change among the more powerful social group). Furthermore, to achieve

⁴ http://www.scidev.net/global/policy/feature/behavioural-science-development-policy-innovation.html

change in complex or entrenched problems, it is likely that the impact of behavioural and social norm approaches is greatest when they are part of a package of other measures. For example, anti-corruption campaigns that promote new norms of transparent and honest behaviour may be most effective when combined with reforms to increase public confidence in the justice system and which implement anti-corruption laws fairly. More rigorous evidence examining the added value of behavioural, social norm and complementary measures would be instructive.

The majority of documented behavioural interventions in low and middle income countries are small-scale initiatives and there is a lack of detailed evidence as whether they can be scaled up. That said, some data from the US, in particular, indicate the success of some very large scale behavioural economic-inspired approaches, such as the Save Smart programme that made increased savings the default option, and OPower's use of 'emoticons' on energy bills to indicate how customers' energy use compared to that of others in their community (Allcott, 2011). In principle, given that they often focus on one process affecting behaviour, behavioural economic approaches should be easier to scale up than approaches that aim to tackle multiple processes simultaneously.

To date there is little long-term evidence of how far behavioural or social norm interventions have led to sustainable change. This reflects both the short-term nature of many behaviour change activities and the typical timeframe for evaluations. It is notable that hand washing rates 12 months after the end of the SuperAmma campaign had fallen to 29% (from 37%) at 6 months, though this is still a considerable increase over handwashing rates before the intervention. However, the importance of sustaining behaviour change activities, in modified form, if necessary is widely recognised, though not always carried out in practice (Cavill et al, 2014).

There are also concerns, such as whether behaviour change campaigns that tag certain practices as disgusting (e.g., not washing hands, smoking) or create a new social norm around avoiding certain practices may lead to stigmatisation of those least able to change (Voigt, 2011). Such effects can be partially overcome by social norms marketing that emphasises the positive aspects of a new practice rather than the problems associated with the old practice, and in behavioural interventions that encourage people to make small, achievable commitments (e.g., one more smoke-free day).

In addition to the broad evidence gaps outlined above, there are also specific knowledge gaps related to effective programme design. See Box 6:

Box 6: Some key gaps in knowledge for effective practice:

- thresholds for tipping points. We know that once a critical mass of people adopt a new practice, others follow, because they are 'imitating the successful', 'imitating the majority' or because they have adopted a new norm. Most tipping point models are based on diffusion of consumer products: it is less clear with social practices roughly how many people need to change before a tipping point is reached. Different individuals might also have different thresholds for changing their own behaviour depending on their personal attitudes towards the practice and their sensitivity to social norms.
- identifying leaders in spreading new norms: Are celebrities and well known people most influential, or is it peers and family/ local people? People who are very embedded in specific social networks and have lots of connections may be influential, but less open to change. Those who are less embedded may be able to bring in new ideas, but have less influence on the group.

- balance of criticising old/ promoting new practices. Some analysis suggests that positive framings are more likely to motivate change, while other evidence points to the 'shock value' of negative framing. The best combination on particular issues or particular circumstances needs further empirical investigation.

3.3.1 Key principles for applying an understanding of behaviour and social norm change to programming

Ensure programme design is sensitive to automatic thinking processes that may affect the success of an intervention.

The EAST Framework developed by the UK's Behavioural Insights Team⁵ draws on both behavioural economic and social norm insights, and suggests that effective programming involves making behaviour change:

- easy making desired behaviour the default option, reducing the hassle involved in changing, and breaking an action into small, do-able steps.
- Attractive to catch and sustain people's attention, and to encourage them to change (e.g. with incentives or rewards designed for maximum effect). Frequently attractive messages are segmented and targeted to different groups
- social: show that most people engage in the desired behaviour, use the power of social networks
 and encourage people to make social commitments to particular behaviour, so they feel a greater
 obligation to do it
- Timely: Engage and prompt people when they are most likely to make a change and adjust incentives and costs accordingly. Help people plan how they will sustain behaviour change in the longer term.

In addition, effective strategies for promoting behaviour change include the following:

Identify potential allies supportive of change and groups or institutions likely to resist change, and design strategies to bring objectors on board and harness the enthusiasm of those supportive of change.

Tailor messages carefully to specific groups so that they resonate and engage target audiences. Emotionally engaging messages delivered by credible messengers are typically most effective.

Ensure that messages are widely seen and heard, typically via a combination of mass media and interpersonal communication (e.g. through schools and health services).

Ensure that messages are backed up with action to address environmental (infrastructural and institutional) constraints to behaviour change. For example, effective campaigns to promote safe sexual behaviour ensure that condoms are widely available and affordable (KMCC, 2012). Campaigns to promote norms of non-corrupt behaviour may need to be complemented with action to increase public confidence in the justice system.

⁵ A former government department, now privatised.

Box 7: Do No Harm: Pitfalls to Avoid

Stressing a harmful descriptive norm can lead people to adopt that behaviour because what people actually do is a more powerful motivator than injunctions as to how to behave (Bicchieri & Xiao, 2013). This can be partially overcome by adding messages indicating social approval or disapproval of the behaviour (Schultz et al, 2008).

Don't expect immediate results particularly where practices are entrenched and there is no obvious momentum for change. It can take time (years) for exposure to new ideas to lead to change in practice, particularly if the practice is upheld by deep-rooted cultural values, there are economic interests at stake, or change requires certain groups to give up power. All of these contexts are likely to require sustained social change activity.

Refine instead of replace established tools that are adaptive overall. Sometimes norms or habits only require a small degree of change (eg a minor reframing of a norm or a shift in the choice architecture) to promote desirable outcomes.

Don't forget to replace a discredited norm or behaviour with a new norm or behaviour. If people are not channelled towards desirable new norms or behaviour, they may be less likely to abandon the old practice (Paluck et al, 2010).

Don't alienate people by attacking a valued cultural tradition directly. Instead frame a new norm positively (eg focusing on the health, economic or other benefits) and highlight cultural values that are consistent with the new norm.

3.3.2 Key principles for effective monitoring and evaluation of behaviour change interventions

Effective monitoring and evaluation plays a crucial role in generating more evidence about the effectiveness of particular interventions. Here we outline some key pointers to effective M&E of behaviour change:

- Allow enough time to assess whether change has occurred. Monitoring and evaluation activities are often carried out too soon to be able to assess impacts on behaviour, and are forced to rely on data about change in knowledge or attitudes instead. Longer evaluation timescales (with budgets committed over a longer period) and follow-up studies that probe how far behaviour changes have been sustained are vital for more accurate assessment of the effectiveness of behaviour change interventions.
- Use qualitative and quantitative data (particularly experimental evidence) to understand what changes have occurred and why.

An important contribution of behavioural economic approaches in policy design, especially in high income countries, is the use of systematic experimentation using Randomized Control Trials (RCT). There are two main reasons why RCTs are important tools for understanding interventions:

- 1. Common sense/intuition as a shortcut to approach problems can be mistaken
- 2. To increase the cost-effectiveness for scaling up by unpacking the different effects

See Box 8 for an example of insights from an RCT in Kenya that aimed to increase savings among people with low and irregular income.

Box 8: A multi-arm RCT to identify the most effective approaches to promoting savings

Based on previous findings that the effectiveness of financial literacy programs is negligible (Fernandes, Lynch & Netemeyer, 2014), but sending reminder text messages tend to reduce late payment (Cadena & Shoar, 2013), Akbas et al. (2015) hypothesized that the problem of under-saving is related to an intention-behaviour gap created by a present bias that results in the lack of attention paid to future benefits of saving. Partnering with a local savings product provider, Mbao Savings Plan, they systematically tested the following propositions based on behavioural economic insights:

Does it increase saving to...? (text message is also used in 2-6)

- 1. send a text message reminder
- 2. frame the text message reminder as if they came from the participant's child
- 3. offer 10% cash matching of the savings made
- 4. offer 10% cash matching of the savings made framed as a loss instead of a gain (either the 10% cash matching is provided after successful saving or the 10% cash matching is already given before saving is made but will be taken away if saving is not successful?
- 5. offer a higher degree of economic incentive? (20% instead of 10% cash matching)
- 6. give participants a tangible track-keeping object like the golden coin shown in Figure below, and aske them to scratch the coin depending on whether saving is successfully made (scratch around the week number if saving made or below the week number otherwise)?



12 experimental conditions including the baseline treatment of "no intervention" were run to compare the saving outcomes. To show that the answers to these questions are not necessarily in line with our common sense intuitions, a survey of online internet users was conducted (among whom more than 85% has college degree) to predict which interventions is most effective in increase saving. The majority of the participants predict that the treatment with 20% cash matching that is framed as a loss is most effective. What is your guess?

Several unexpected results emerged from the study: different from the majority's predictions, the most successful intervention is the golden coin treatment. Additional economic incentives and different framings did not make a difference (see detailed results below).

- 1. send a text message reminder → more than double the savings
- 2. frame the reminder as if from the participants' kid \rightarrow no significant effect
- 3. offer additional 10% cash matching of the savings made → no significant effect
- 4. offer additional 10% cash matching before saving to be taken away → no significant effect
- 5. offer additional 20% cash matching instead of 10% → no significant effect
- 6. give participants a tangible track-keeping golden coin, and aske them to scratch the coin depending on whether saving is successfully made → more than double the savings

This small-scale RCT exercise shed light on how policies that affect the well-being of millions can benefit from gathering hard evidence on what works and by how much, instead of relying on common-sense assumptions and gut feelings. Its findings can be valuable input for scaling up interventions as programming design can now channel the limited resources to interventions with the best potential - the golden coin tangible reminder and text message reminder -without diverting resources to other interventions that failed in the RCT pre-tests.

In addition to quantitative data on the extent of attitude or practice change, qualitative approaches, such as Most Significant Change can both provide rapid insights into the nature and extent of behaviour changes that an intervention has achieved, the reasons for any changes observed or for the lack of change.

Challenges to Effective Monitoring and Evaluation of Behaviour Change Interventions Challenges Common to Social Research

Question-Behaviour Effect (Wood et al, 2014) – asking questions about a particular behaviour makes people focus more on that behaviour and thus leads to changes. This can affect the reliability of both baseline measures and subsequent impact assessment, but because it acts like a nudge, can also be harnessed as a tool to promote behaviour change.

Social desirability bias. People often exaggerate how far they conform to standards, under-reporting behaviour that is socially frowned upon or illegal, and over -reporting behaviour they perceive as socially desirable, such as sending their children to school or avoiding unsafe sexual practices. **Strategic over/ under-reporting of programme impact** in order to ensure that a programme continues.

Such problems can partially be overcome through careful research design that triangulates responses by asking for similar information in different ways, though mixed qualitative and quantitative methods that provide opportunities to probe findings, by the use of hypothetical questions, scenarios and vignettes rather than asking people to admit to illegal or socially unacceptable behaviour, and/ or by specific techniques, principally used in quantitative research, such as unmatched count techniques, randomised response techniques and matching games (Krupka & Weber, 2013; Mackie, 2013).

Challenges Related to Monitoring Norm Change

To date field experience of monitoring norm change (rather than attitudes or practices, which are commonly used as proxies) is limited. Respondents may struggle to understand questions about people's perceptions of others' expectations (Paina et al, 2014). Asking about how others would respond if people do or do not behave in a certain way can indicate whether a norm is in place – if respondents identify no negative consequences, this suggests that a norm never existed, has weakened or disappeared. There is also experimentation in progress, including the use of vignettes as way to understand people's perceptions of norms and as a tool to assess change (Bicchieri, Lindemans & Jiang, 2014).

4. Resources and Tools

This section outlines key resources and tools for understanding behavioural science/ economics, and social norms for the development, monitoring and evaluation of effective behaviour change activities.

4.1 Understanding behaviour-based approaches to change

Ariely, D. (2008). *Predictably irrational: the hidden forces that shape our decisions. New York. NY: HarperCollins Publishers*. This book applies behavioral economics insights to numerous daily life examples to illustrate the systematic psychological forces that shape our decisions.

Duhigg, C. (2012). *The power of habit: Why we do what we do in life and business.* Random House. A popular book on what habits are and how they can be changed.

Darnton, A. (2008) GSR Behaviour Change Knowledge Review Reference Report: An overview of behaviour change models and their uses, London: Government Social Research. It provides a detailed overview of over 60 models of behaviour and theories of behaviour change. These are derived from 'standard' economic theory, behavioural economics, management science, and social psychology, and many are illustrated diagrammatically. The report also explains key concepts such as 'agency' and its relation to behaviour.

Government Communications Network and COI (2009): Communication and Behaviour Change, London: UK Government. A clear and accessible guide to understanding behaviour change, different models of behaviour change and effective behaviour change communication and programming.

Hansen, P.G., and Jespersen., A. M. (2013): *Nudge and the Manipulation of Choice - A framework for the responsible use of the nudge approach to behaviour change in public policy.* A great reference for understanding how nudges can be applied to both automatic and deliberative decision-making. The authors also offer potential remedies in response to common criticisms of nudges.

Kahneman, D. (2011) *Thinking, Fast and Slow.* Macmillan. A key reference (for general audience) for understanding the dual-process systems (automatic vs. deliberative modes of thinking).

Mullainathan, S., and Shafir E. (2013) Why Having Too Little Means So Much. A great reference for understanding how scarcity of resources affects the psychology and decision-making of the poor (with abundant experimental evidence).

Samson, A. (Ed.)(2014). The Behavioral Economics Guide 2014 (with a foreword by George Loewenstein and Rory Sutherland) (1st ed.). Retrieved from http://www.behavioraleconomics.com. This guide offers a brief introduction to behavioral economics with a rather complete list of popular behavioral economics concepts.

Thaler, R., and Sunstein, C. (2008) *Nudge: Improving Decisions about Health, Wealth and Happiness,* Michigan: Caravan Books. A key reference for understanding ideas related to choice architecture and nudge-related concepts.

Thaler, R. H. (2015). *Misbehaving: The Making of Behavioral Economics.* WW Norton & Company. A comprehensive account of how behavioural economic thinking differs from traditional economic thinking and how we can understand decision making and behavioral change with the new perspectives.

World Development Report 2015: *Mind, Society, and Behavior, Washington DC: World Bank*. This report distils emerging psychological, neuro-scientific and behavioural economic-based evidence on the motivations underlying of human behaviour. It applies insights and draws out the implications of the findings of experimental programmes in a wide range of sectors.

4.2 Understanding social norm-based approaches to change

Bicchieri, C. (2006) The Grammar of Society: the emergence and dynamics of social norms. Cambridge: Cambridge University Press. This is a key reference outlining Bicchieri's operational definition of social norms and how they differ from other collective practices. It covers a wide range of social norms related concepts and key discussions.

Bicchieri, C. and Mercier, H. (2014) *Norms and Beliefs: How Change Occurs.* In C. Bicchieri, R. Jeffrey, B. Skyrms (Ed.). *The Dynamics of Norms (p37-54).* Cambridge: Cambridge University Press. Argue that social norms play an important role because norms can help explain what generates and supports negative practices such as corruption, female genital cutting or child marriage. It explores the role of beliefs in supporting norms, and show multiple ways to enact normative beliefs change before coordinating change of normative expectations in order to enact effective norm change.

Bicchieri, C. (2015) Norms in the Wild: How to Diagnose, Measure and Change social norms. Cambridge University Press. The book provides a clear diagnostics of social norms, descriptive norms and customs, a distinction that is important in order to understand what a practice is and how to intervene to change it. It provides new measures based on the definition of social norm as related to conditional preferences and social expectations, that are more precise than the usual attitude-based ones. Finally, the book analyzes mechanisms for change, and the role different types of trendsetters play in social dynamics and norm change.

Marcus, R., & Harper, C. (2014). *Gender justice and social norms – Processes of change for adolescent girls. London: ODI*. Outlines different approaches to understanding social norms and applies them to understanding discriminatory norms affecting adolescent girls and drivers and processes of change.

Paluck, E.L., & Ball, L. (2010) Social norms marketing aimed at gender based violence: A literature review and critical assessment. New York: International Rescue Committee. This review explains norm change-focused approaches, using examples of anti-sexual violence messaging campaigns. They argue that: contexts with divergence between privately held attitudes and prevailing social norms are fruitful intervention points as social norms interventions can bring norms in line with more progressive private attitudes; interventions should target injunctive rather than descriptive norms and that successful interventions promote positive new norms and are linked with opportunities to act. They present case studies of three programmes aiming to change gender norms and provide examples of simple indicators for monitoring changes in attitudes, practice and social norms.

4.3 Tools to support the development, implementation, monitoring and evaluation of behaviour change interventions

4.3.1 Designing and implementing interventions

Cabinet Office and Institute for Government. MINDSPACE: influencing behaviour through public policy: a discussion document. The acronym MINDSPACE summarises a set of influences on human behaviour and change related to both automatic and reflective behaviour systems: the messenger, incentives, norms, defaults, salience, priming, affect, commitments, ego. Going with the Grain gives examples of how insights from this framework have been applied to issues such as crime reduction. It then proposes a 6Es framework for applying MINDSPACE insights: Explore, Enable, Encourage, Engage, Exemplify and Evaluate.

Behavioural Insights Team (2010) EAST: four simple ways to apply behavioural insights. EAST stands for Easy, Attractive, Social and Timely. Making behaviour change *easy* involves: harnessing the power of defaults, reducing the hassle/ effort involved, and breaking an action into small, easy steps. Making it *attractive* involves bringing an idea/ practice to people's attention and designing incentives or rewards for maximum effect. Making it *social* involves showing that most people engage in the desired behaviour, using the power of social networks and encouraging people

to make commitments to particular behaviour, so they feel an obligation to do it. Making it *timely* involves prompting people at the most effective times, adjusting immediate costs and benefits to motivate action and helping people plan longer-term behaviour to overcome gaps between intention and action.

Michie, S, Van Stralen and West (2011) The behaviour change wheel: A new method for characterising and designing behaviour change interventions, *Implementation Science 6*:42. This wheel depicts sources of behaviour at the centre, interventions in a middle circle and policies in an outer ring. Using a framework of capability, motivation and opportunity, it integrates automatic and reflective aspects of behaviour and provides a typology of different approaches to behaviour change, including policy and programme or project approaches.

Darnton, A (2008) GSR Behaviour Change Knowledge Review Practical Guide: An overview of behaviour change models and their uses, London: Government Social Research

This guide outlines the main models of behaviour change, largely derived from social psychology. It then proposes nine principles for effective interventions which draw on both behavioural models and theories of change: identify audience groups and target behaviour; identify relevant behavioural models; select the key influencing factors; identify effective intervention techniques; engage the target audience for the intervention; develop a prototype intervention; pilot the intervention monitoring continuously; evaluate; and feed back information from the evaluation.

FHI 360 (2004) MODULE 6: Monitoring and Evaluating Behaviour Change Communication Programs Page 10 has a useful flowchart on how to develop an effective behaviour change communication programme.

4.3.2 Monitoring and Evaluating Interventions

Bicchieri, Lindemans and Jiang (2014): 'A structured approach to a diagnostic of collective practices', Frontiers in Psychology 5(1418): 1-13. Offers a structured framework of diagnosis of whether a social norm is a critical factor underlying a practice, and how to measure norms using experiments and vignettes.

Paina, L., Morgan, L., Derriennic, Y. (2014) Piloting L3M for Child Marriage: Experience in Monitoring Results in Equity Systems (MoRES) in Bangladesh. Bethesda, MD: Health Finance & Governance Project, Abt Associates Inc. Reports on experience of monitoring social norm change in a UNICEF programme to eradicate child marriage in Bangladesh. Has detailed recommendations about addressing some of the practical and logistical issues encountered including improving fieldworker training, ways to ensure data quality, improving government buy-in. The report also makes some recommendations for simplifying questions about what the respondent thinks others think, and presents questions that may be used or adapted in other social norms monitoring exercises.

Mackie, G., Moneti, F., Denny, E. and Shakya, D. (2012) 'What Are Social Norms. How Are They Measured?' Working Paper 1. San Diego, CA: University of California, UNICEF/UCSD Centre on Global Justice Project Cooperation Agreement. An overview of different thinking on social norms and suggests research questions/ tools for diagnosing whether a social norm is a critical factor underlying a practice and thus whether norm-change approaches or other types of interventions are warranted.

4.4 Other works cited

Abramsky, T., Devries, K., Kiss, L., Nakuti, J., Kyegombe¹, N., Starmann, E., Cundill, B., Francisco, L., Kaye, D., Musuya, T., Michau, L. and Watts, C. (2014) Findings from the SASA! Study: a cluster randomized controlled trial to assess the impact of a community mobilization intervention to prevent violence against women and reduce HIV risk in Kampala, Uganda, *BMC Medicine* 2014, 12:122

Akbas, M., Ariely, D., Robalino, D., Weber, D. (2015) How To Help The Poor To Save A Bit: Evidence From A Field Experiment In Kenya, working paper

Allcott, H. (2011). Social norms and energy conservation. Journal of Public Economics, 95(9), 1082-1095.

Banerjee A. V., Duflo E., Glennerster, R., Kothari, D. (2010) Improving immunisation coverage in rural India: clustered randomised controlled evaluation of immunisation campaigns with and without incentives. BMJ 340.

Bourdieu, P. (1990) Outline of a Theory of Practice, Cambridge: CUP

Biran, Adam et al. (2014), Effect of a behaviour-change intervention on handwashing with soap in India (SuperAmma): a cluster-randomised trial, The Lancet Global Health, Volume 2, Issue 3, e145 - e154

Calder, R. (2012) 'Grandmothers, Pensions and FGM/C'. *Pathways Perspectives* 7, December Cavill, S; Chambers, R. and Vernon N (2014) Frontiers of CLTS: Innovations and Insights. Brighton: IDS

Dawson, E., Gilovich, T., & Regan, D. T. (2002). Motivated Reasoning and Performance on the was on Selection Task. *Personality and Social Psychology Bulletin*, *28*(10), 1379-1387.

Duflo, E., Kremer, M., & Robinson, J. (2008). How high are rates of return to fertilizer? Evidence from field experiments in Kenya. *American economic review*, 482-488.

Dupas, P., Karlan, D., & Robinson, J. (2013). Expanding Access to Formal Savings Accounts in Malawi, Uganda, Chile, and the Philippines. *New Haven, Conn.: Innovations for Poverty Action*.

Ekman, Paul (1999), "Basic Emotions", in Dalgleish, T; Power, M, <u>Handbook of Cognition and Emotion</u> (PDF), Sussex, UK: John Wiley & Sons

Equal Access (2010) 'Impact Assessment VOICES Project. Reducing the Twin Pandemics of HIV/AIDS and Violence against Women Media & Outreach Interventions'. Lalitpur: Equal Access.

Fryer Jr, R. G., Levitt, S. D., List, J., & Sadoff, S. (2012). Enhancing the efficacy of teacher incentives through loss aversion: A field experiment (No. w18237). National Bureau of Economic Research.

Gigerenzer, G., & Todd, P. M. (1999). Simple heuristics that make us smart. Oxford University Press, USA.

Grant, C. (2014) Ebola-local beliefs and behaviour change, Health Education Advice and Resource Team, Helpdesk Report, http://www.heart-resources.org/wp-content/uploads/2014/11/Final-Ebola-Helpdesk-Report.pdf

Hansen, P. G., & Jespersen, A. M. (2013). Nudge and the manipulation of choice: A framework for the responsible use of the nudge approach to behaviour change in public policy. *Eur. J. Risk Reg.*, 3.

Heise, L. (2013) 'Social Norms. Introduction'. Presentation to Wiki Gender Workshop on Adolescent Girls and Social Norms, April.

Johnson, E. J., & Goldstein, D. G. (2003). Do defaults save lives?. Science, 302, 1338-1339.

Keleher, H. and Franklin, L. (2008) 'Changing Gendered Norms about Women and Girls at the Level of Household and Community: A Review of the Evidence'. *Global Public Health: An International Journal for Research, Policy and Practice* 3: S1: 42-57

KMCC Uganda (2012) Behaviour Change Communication Responses to HIV/AIDS in Uganda: Synthesis of Information and Evidence to Inform the Design of Behaviour Change Communication for the Epidemic. Synthesis Report, Kampala: KMCC Uganda

Krupka, E. L., & Weber, R. A. (2013). Identifying social norms using coordination games: Why does dictator game sharing vary?. *Journal of the European Economic Association*, 11(3), 495-524.

Loewenstein, G., Bryce, C., Hagmann, D., & Rajpal, S. (2015). Warning: You are about to be Nudged. Behavioral Science and Policy, 1 (1).

McConnell, A. R., & Leibold, J. M. (2001). Relations among the Implicit Association Test, discriminatory behavior, and explicit measures of racial attitudes. *Journal of experimental social psychology*, *37*(5), 435-442.

Michau, L., Horn, J., Bank, A., Dutt, M. and Zimmerman, C. (2015) 'Prevention of violence against women and girls: lessons from practice', Lancet. 2015 Apr 25; 385(9978):1672-84

Michie, S., Jochelson, K., Markham, A. and Bridle, C. (2008) Low-income Groups and Behaviour Change Interventions. A Review of Intervention Content and Effectiveness, London: King's Fund

McCoy, S. I., Kangwende, R. A. and Padian, N. S. (2009) Behaviour change interventions to prevent HIV among women living in low and middle income countries. 3ie Synthetic Review 008

Mackie, G. and Le Jeune, J. (2009) 'Social Dynamics of Abandonment of Harmful Practices: A New Look at the Theory'. Special Series on Social Norms and Harmful Practices Working Paper 2009-06. Florence, UNICEF Innocenti Research Centre.

Mackie, G., (2013) General Considerations in Measuring Social Norms,

http://strive.lshtm.ac.uk/sites/strive.lshtm.ac.uk/files/Gerry%20 Mackie%20 General%20 considerations%20 in%20 measuring%20 social%20 norms.pdf

Medley, A., Kennedy, C., O'Reilly, K. and Sweat, M. (2009) Effectiveness of peer education interventions for HIV prevention in developing countries: a systematic review and meta-analysis. AIDS Education and Prevention, 21(3), pp. 181–206.

Munoz Boudet, A., Petesch, P., Turk, C., & Thumala, A. (2012) On Norms and Agency: Conversations about Gender Equality with Women and Men in 20 Countries. Washington, DC: The World Bank

Neal, D., Vujcic MPH, J., Hernandez, O., & Wood, W. (2014) Handwashing and the science of habit. http://whconference.unc.edu/files/2014/11/neal.pdf

Nickerson, R. S. (1998) Confirmation bias: A ubiquitous phenomenon in many guises. *Review of general psychology*, 2(2), 175.

Nguyen, T. (2008) 'Information, Role Models and Perceived Returns to Education: Experimental Evidence from Madagascar', *Working Paper*, Massachusetts Institute of Technology, Cambridge, MA

Ouellette, J. A., & Wood, W. (1998). Habit and intention in everyday life: the multiple processes by which past behavior predicts future behavior. *Psychological bulletin*, 124(1), 54.

Paul-Ebhohimhen, V. A., Poobalan, A. and van Teijlingen, E. R. (2008) A systematic review of school-based sexual health interventions to prevent STI/HIV in sub-Saharan Africa. BMC Public Health, 2008, 8:4.

Pulerwitz, J. and Barker, G. (2006) 'Promoting More Gender-Equitable Norms and Behaviors Among Young Men as an HIV/AIDS Prevention Strategy'. Washington, DC: Population Council.

Pulerwitz, J., Martin, S., Mehta, M., Castillo, T., Kidanu, A., Verani, F. and Tewolde, S. (2010) 'Promoting Gender Equity for HIV and Violence Prevention: Results from the PEPFAR Male Norms Initiative in Ethiopia'. Washington, DC: PATH.

Raifman JRG, Lanthorn HE, Rokicki S, Fink G (2014) The Impact of Text Message Reminders on Adherence to Antimalarial Treatment in Northern Ghana: A Randomized Trial. PLoS ONE 9(10)

Rajan, A., Chakrabarty, S. and Kaul, K. (2010) 'Impact Assessment of the We Can Campaign – India Report. Assessing Change'. Oxford: Oxfam International.

Rumelhart, D. E. (1980). Schemata: The building blocks of cognition. In; RJ Spiro/BC Bruce/WF Brewer (Eds.): Theoretical Issues in Reading Comprehension.

Samuelson, W., & Zeckhauser, R. (1988). Status quo bias in decision making. Journal of risk and uncertainty, 1(1), 7-59.

Schultz, P.W., Nolan, J., Cialdini, R., Goldstein, N. and Griskevicius, V., (2007) 'Research Article: The Constructive, Destructive, and Reconstructive Power of Social Norms', *Psychological Science*, 18 (5): 429-434

Sen, G., Ostlin, P. and George, A. (2007) 'Unequal, Unfair, Ineffective and Inefficient Gender Inequity in Health: Why It Exists and How We Can Change It'. Final Report to the WHO Commission on Social Determinants of Health.

Singhal, A. and Greiner, K. (2008) 'Performance Activism and Civic Engagement Through Symbolic and Playful Actions', *Journal of Development Communication*, 19 (2): 43-53

Soon, C. S., Brass, M., Heinze, H. J., & Haynes, J. D. (2008). Unconscious determinants of free decisions in the human brain. *Nature neuroscience*, *11*(5), 543-545.

Taylor, S. E., & Crocker, J. (1981). Schematic bases of social information processing. In E. T. Higgins, C. A. Herman, & M. P. Zanna (Eds.), Social cognition: The Ontario Symposium on Personality and Social Psychology (pp. 89-134). Hillsdale, NJ: Erlbaum.

Thaler, R. H. (1999). Mental accounting matters. Journal of Behavioral decision making, 12(3), 183-206.

Thaler, R. H., & Benartzi, S. (2004). Save more tomorrow™: Using behavioral economics to increase employee saving. *Journal of political Economy*, 112(S1), S164-S187.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. science, 185(4157), 1124-1131.

UNICEF (2011) Gender Influences on Child Survival, Health and Nutrition: A Narrative Review, New York: UNICEF

UNICEF (2013) <u>Female Genital Mutilation/Cutting: A Statistical Overview and Exploration of the Dynamics of Change.</u>
New York: UNICEF

Usdin, S., Scheepers, E., Goldstein, S. and Japhet, G. (2005) 'Achieving Social Change on Gender-Based Violence: A Report on the Impact Evaluation on Soul City's Fourth Series'. Social Science and Medicine, 61: 2434-2445 Voigt, K. (2011) "If you smoke, you stink." Denormalisation strategies for the improvement of health-related behaviours: the case of tobacco', in Daniel Strech, Irene Hirschberg and Georg Marckmann (eds.), *Ethics in Public Health and Health Policy: Concepts, Methods, Case Studies*, Amsterdam: Springer

Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological bulletin*, 132(2), 249.

WHO (2002) World Report on Violence and Health, Geneva: WHO

Wood, C. Conner, M., Sandberg, T., Godin, G. and Sheeran, P. (2014) Why does asking questions change health behaviours? The mediating role of attitude accessibility, *Psychology & Health*, 29:4, 390-404

Wood, W., Quinn, J., & Kashy, D. (2002). Habits in everyday life: Thought, emotion, and action. Journal of Personality and Social Psychology, 83,1281–1297.

Xavier, G. Karlan, D. Zinman, J (2010)"Put Your Money Where Your Butt Is: A Commitment Contract for Smoking Cessation." *American Economic Journal: Applied Economics* 2: 213-35.

Yoeli, E., Hoffman, M., Rand, D. G., & Nowak, M. A. (2013). Powering up with indirect reciprocity in a large-scale field experiment. *Proceedings of the National Academy of Sciences*, *110*(Supplement 2), 10424-10429.

Young, H. P. (2014) 'The Evolution of Social Norms', *Department of Economics Discussion Paper* 726, Oxford: University of Oxford